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**Workplace design strategies within business organisations:
Perception, power and the bottom line.**

Arnold Craig Levin

Harrow Business School

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Workplace Design Strategies Within Business Organisations:

Perception, power and the bottom line.

Arnold Craig Levin

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Workplace Design Strategies Within Business Organizations: perception, power and the bottom line

Abstract

This thesis uses critical theory as an approach to examine and shed new light on two areas of workplace design strategy. First, how much of the decisions to adopt workplace design strategies are influenced by the perceptions of the value of these strategies by those within the business organizations that are responsible for developing them; and second, that once adopted, these same individuals shape the perceptions of those stakeholders who are the recipients of these strategies in order to gain support and buy-in for these same strategies.

The thesis first examines the various areas of organizational life that are touched by and inform workplace design strategies: strategy, organizational design and workplace design. Focusing on workplace design, the thesis traces the history of this relatively new field to uncover the roots of many of the factors that have helped shaped perceptions regarding workplace design strategies. Then, using fourteen business organizations, the thesis goes on to evaluating decisions regarding these strategies through the perspective of structuration theory.

The literature review suggests a gap in research focusing on the complexity of this decision making process, and the role perceptions play in forming one's sense of reality which in turn creates the foundation for valuing first the role of workplace design strategies within business organizations, and then in which strategy to ultimately adopt. The existing literature focuses primarily on the roles of workplace design strategies in enabling organizational culture and often accept as valid, without any evidence based research to support it, that these strategies are the correct ones to adopt. The research also uncovers that much of the

workplace design strategy process has been determined without this evidence based research to support it. If this is the case, then how are these decision made, and what informs these decisions, if not research? This thesis fills that gap. Through structuration theory, decisions are deconstructed in a manner previously ignored. Critical theory opens up areas of review such as the role of power and control, and managing meaning, that provide new insights into the decision making process.

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1. Introduction

This chapter will review the background and influences of this research and how this informed the research methodology used in developing the thesis. It will describe the design of the research, showing the connections between the chapters, which culminate in an analysis of the interviews, and the study organisations, and its final summary and conclusions. This chapter will conclude with a discussion of the aims of the research, and its value proposition: what contribution the research will provide to both business organisations and the workplace design profession, two interrelated stakeholders in the workplace design strategy process.

1.1 Background

This research has at its core, a number of influences, some interrelated, others from diverse perspectives. The most prevailing influence has been observations and reflections developed over a period of forty years of professional practice in my working with a broad range of business organisations in developing workplace design strategies as well as in implementing design solutions for their respective workplaces.

Over this time, I have worked with many visible business organisations (Financial Group: a fictitious name for a financial services firm interviewed for this thesis, a Global Entertainment Organization interviewed for this thesis, Airbus Industries and Johnson & Johnson, to name a few) only to realise that there exists a wide disparity in the way these organisations viewed and developed workplace design strategies. Some expressed value in utilizing these strategies while others saw little merit other than the quick fix of using it as an aid to house workers. In between, were a vast assortment of perceptions. At the same time, primarily over the past ten years, there has been a wide array of writings on the design of the workplace focusing on discussions of workplace design strategy. While

there were great differences on the part of business organisations in perceived value and execution, on the design practise side there seems to be general agreement that there is a connection between the design of the workplace, and organisational success (I will disuses this in much more detail in the Literature Review, Chapter 2).

What I came to see as a missing component in all of this was a critical view on the part of the proponents of workplace design strategies in terms of assessing what and why business organisations chose the paths they did, and what the appropriate responses should be by design consultants. Missing also was a critical perspective on the part of design organizations in the strategies they were often proponents of. What came to be termed 'Alternative Workplace Strategies (AWS)' seemed to be viewed by design consultants as always the 'right' approach whereas those strategies more conservative in approach were usually positioned in a positive a perspective. There seemed to be an overt acceptance of the former without much debate or analysis as to its true merits nor in questioning the value of any workplace design strategy that on its surface seemed to promote collaboration at its core.

Three secondary influences in the form of writings by Neal Leach (1999), Reinhold Martin (2003) and Alexandra Lange (2005) served to shape some of my thinking about workplace design strategies from this different perspective. While I will go into the contribution of each of these authors in more detail in the Literature Review chapter, it is worth noting here where their influences intersected with my perceptions of some of the critical issues stemming from the gaps in knowledge that I was perceiving.

Leach in the *Anaesthetics of Architecture* (Leach. 1999) draws a picture of a profession that has been so caught up in its own myths and preoccupations with aesthetics and form that it has lost sight of the roots of modernism as a means of contributing to a better society through architecture. This loss of direction had an influence on business

organisations that came to associate the design of the workplace as an atheistic endeavour, which only served to marginalise the operational value of the utilisation of the workplace.

Both Martin (Martin. 2003) and Lange (Lange. 2005) produced PhD dissertations that explored the backgrounds of the early years of workplace design (1950-1965) through the important post war buildings that were designed and built for the leading business organisations of that time. These writings provided insight into some of the subtler influences that stemmed from these designs that further served to shape client perceptions. These writings opened my thinking to observe definite gaps existing in the writings and research on workplace design strategies.

All of this has provided the impetus for exploring what influences shaped decisions concerning workplace design strategies. Once this perspective of identifying what gaps in knowledge potentially existed, other areas became open for examination: it is not organizations that make decision on workplace strategies but individuals within these organizations. The existing literature often removes the human factor from these decision issues and places attention entirely on the 'organisation' as if it were a decision – making entity. Even Martin's work (Martin. 2003) takes the perspective of the 'military industrial complex as an entity taking on a life of its own, with certain powers of control and influence. What the study reveals is the human factors relating to these decisions. Additionally, and critical to this research, it became apparent that many of the decisions pertaining to adopting workplace design strategies are far more complex than the prevailing literature and thinking may suggest. In reviewing the literature one comes away with the impression that there are two camps of thought: conventional strategies are incorrect and alternative strategies are the only correct and beneficial course of action. One either chooses an enlightened path or continues on a course that will take the business organization back in time to the dark ages of Taylorism.

As a result, my attention was directed to researching and developing an understanding of the perceptions held by those individuals responsible for developing workplace strategies for their organizations and how in fact they influenced decision making, and subsequently, how these perceptions in no uncertain way, play a part in influencing the workplace design strategies that each organisation adopted. In developing this research, Critical Theory provided the perspective of examining overt strategic decision making, and understanding underlying influences that could provide better insight into those factors that have up until now not been taken into consideration in understanding the role of individuals through their perceptions and influences in shaping our workplaces through the decisions that they make, or in some instances, the decisions they choose not to make. The insight that this perspective allowed was to see the role that these forces affecting both individuals within organisations had on strategy, as well as this role on organisations themselves as enabling self-perpetuating entities.

1.2 Research overview

The data that has been collected in this research is the result of both the interviews with individuals from the study organizations, as well as data that have been provided by the interviewees during and after the interview sessions. This data is in the form of power point presentations, white papers, brochures and books. The study organizations were for the most part chosen with two criteria in mind. First, that they represented a diversity of business types and industries (i.e. finance, professional service, government, etc.). Second that in order to examine and study influences on decision makers within these organizations, I would need access to those individuals at the highest levels within their respective corporate real estate groups that represented the organizational resource responsible for overseeing workplace strategy decisions. The fourteen

organizations participating in this research met these criteria. Furthermore, the research was limited to these fourteen organizations due to data saturation. Starting the research with twelve organizations I added two more to test the quality and diversity of the data I was obtaining. With the two additional organizations I found consistency in the responses to As a result I became confident that adding to the interview field would not yield any new information or revelations and would only become repetitive. Creswell writing in *Qualitative Inquiry and Research Design* validates this approach by noting that in using an ethnographic approach to research a small number of historically comparable cases of specific 'actors' can often accomplish the necessary research (Creswell. 1998). (See Chapter 4 for detailed description of research design).

The research has resulted in several themes (discussed in Chapter 5) and identified significant gaps in the available knowledge on workplace strategy decisions and perceptions. While the themes become important in some of the conclusions and lessons from this research (I will discuss this in Chapter 5), it is the gaps that hold some of the more interesting issues and which potentially possess the most long-term value resulting from this research. The most fundamental gap involves the way in which workplace strategy decisions come into play and are ultimately approved. Rather than workplace strategies being the result of strategic thinking and organizational linkages within organizations, other external influences serve to initiate and inform these decisions and directions. In other words, rather than being the result of research on both the strategies themselves, their connection to their respective organizations and the potential affect on these organizations, workplace strategy decisions are, as evidenced in this research, the result of reactions to financial drivers and perceptual decision making. They are often the product of irrational decision making as Brunson notes (1987, 1989). It is this lack of research that has created a vacuum in the workplace strategy decision process. These gaps and the

resulting research uncover two important and often overlooked issues in the field of workplace design strategies:

1. The pivotal role of individuals within these organizations in shaping workplace design strategies and the 'human factors' such as perceptions that becomes integral to this.
2. The basic lack of critical analysis on the part of both business organizations and design consultancies in reviewing and ultimately deciding on a particular strategy.

1.3 Aims + objectives: value proposition

This research looks at those factors that influence workplace design strategies in a way that will provide insight into underlying causes which have previously not been explored. As such, it looks at factors that have not been considered on both sides of workplace design strategy implementation process. Taking the two issues observed at the beginning of this chapter (the lack of critical analysis in forming workplace design strategies, and individual factors that influence the process) the value proposition becomes the creation of a broader means of viewing and ultimately understanding the many facets of workplace design strategies, both in its inception and in its execution. Further, by developing this awareness and exposing the gaps and disconnections, the hope is that workplace design strategies can play a more pivotal role in contributing to the success of the organization.

Current workplace design strategy writing does not develop theories. In fact, the opposite has been the case. The writings that have influenced the strategy development and design directions of some of the most widely published workplaces have been extensions of conventional management theories, and have served to validate conventional management thinking.

The value of this research is to:

- Question the basis of how workplace design strategies are developed.
- Demonstrate how perceptions that inform workplace design strategies by both practitioners and clients are crafted through political and agenda motivations.
- Demonstrate how these factors in their totality actually serve to diminish the role of workplace design strategies by minimising its evaluative potential while serving to mask agendas, thereby continuing the status quos of questionable management theories.

Using critical theory to examine these phenomena, it is further hoped that a different picture will emerge of the way current workplace design strategy decisions have been offered by design consultants, and adopted by business organisations. By uncovering the underlying influences that inform and influence decision makers within business organisations, a different paradigm may be developed that will allow both parties to influence design strategy decisions in a more effective way, resulting in better decisions and in particular more meaningful and effective workplace design strategy decisions.

I look to the view of Starkey and Maden (2001) who note that the primary usefulness of management research lies in the development of fundamental ideas that might shape thinking and not necessarily in the solutions of immediate managerial problems. Given the current state of workplace design strategies, being able to shape a more meaningful way of thinking about the problem would serve well to take the value of workplace strategies to a new and more meaningful level.

Section A: Data + analysis from secondary sources

2. Literature review

2.1 Introduction

This chapter will review the body of work that has been written about workplace design strategies with the intention of demonstrating where a gap in knowledge currently exists, and also where these works can be used as departing points for both this research and future work in the field. Much of what has been written and put into practice concerning workplace design strategies has been based on supporting current management theories rather than engaging in critical discourse on the nature of the relationship between these strategies and workplace design strategies. It will review issues pertaining to the practice of design, in order to understand how this practice over the short course of its existence has contributed to as well as influenced perceptions, often in unintentional ways.

Further, it examines the context of workplace design and defines the concepts and terminology that is used in both the field study cases from the interviews, and the analysis. It examines the history of workplace design to better understand the frames of reference within which business organisations operate, and which are the basis of the research question and objectives. It then goes on to explore the various concepts and approaches used by design consultants and business organisations in establishing workplace strategies and design directions. This is an overview to provide some context and meaning to my research and its findings that follow.

The convergence of the elements explored here have had a effect on today's design of the workplace, and subsequently has had an effect on shaping and informing perceptions, which in turn has a recursive effect on

the use and role of workplace design strategies. The role of the architect in the design of modern architecture, and the approach to the design of the workplace resulting from both have all in their own ways played significant though unexamined roles in shaping perceptions. Ironically the, work of Taylor and Scientific Management proves to be one exception in undergoing some form of critical analysis as it has affected generations of workplace design strategies. In addition, the shifting role of those within the client organization also had a significant part in shaping perceptions and in executing strategies informing the design of the workplace.

As I will discuss in this paper, the work of Scientific Management had an affect on the thinking of the architects of the modern movement, who in turn had significant roles in shaping post war corporate architecture, which resulted in the design of the workplace within these structures. The effect can be seen in both the way architects adopted particular theories of design and ultimately in the very theories of the design of the workplace itself. The third element to be examined was the changing role of the 'champions' of corporate design., The shifting of the role of the corporate visionary from the corporate president to the creation of a whole new profession of 'facilities management.'

The primary literature review looks at two areas: workplace design and organizational design. The review demonstrates a substantial gap between making a case for the potential connection between workplace design strategies and business models as a means of facilitating organizational success. While there are many works on workplace design that attempt to show the importance of this connection, the role of workplace design is relegated to branding and support of organizational culture, with very little existing that attempts to directly link the two. More importantly, very little exists that discusses the reasons for this disconnect, especially as it relates to perceptions of designers and of clients. Furthermore, the importance of what shapes and influences these perceptions as the basis for understanding the historical and current state

of workplace design strategies within the business context are also not discussed and are for the most part ignored.

Workplace design strategy,' as used throughout this research, refers to the way in which a particular approach to the design of the workplace can be seen as a series of decisions and patterns that affect the present and future use of the physical workplace. I believe that this view aptly defines workplace design strategy and serves to fill a gap in definition within the workplace design literature as has been discussed in the literature review.

None of the texts explicitly defines workplace design strategy. As will be demonstrated in this research, and as seen through the interviews with the case study participants, the design of the workplace within an organization very much reflects that organization's intent and actions, not only as they represent its physical assets, but through its beliefs and organizational attitudes.

Organizational design, as used throughout this research, refers to what Nadler and Tushman define as "*decisions about the configuration of the formal organizational arrangements, including the formal structures, processes, and systems that make up an organization.*"(Nadler and Tushman. 1997).

2.2 Background, context + evolution

Workplace design as a professional focus is relatively new as a practice area within the design profession. For the purposes of this research, I will be using the term designer and architect as interchangeable. The term will represent the professional responsible for the development of the design of the workplace as it relates to that place that houses people engaged in work. Workplace design strategy as used in this study refers to the approach taken for the design of the workplace. Using the definition of 'strategy' as a plan, it creates the context or direction that a particular design for the workplace is to follow. It represents the aspirations of the

client or occupier of that workplace, and the recommendations and design directions proposed by the clients design consultants.

Workplace design strategy has as its roots the work of Frederick Taylor, (see figures 1 and 2 for a time line survey of the progress of workplace design strategies from Taylor to the present) the modern movement in architecture and the rise of corporate and industrial America after the Second World War.



Fig. 1 Workplace Design Strategy Survey

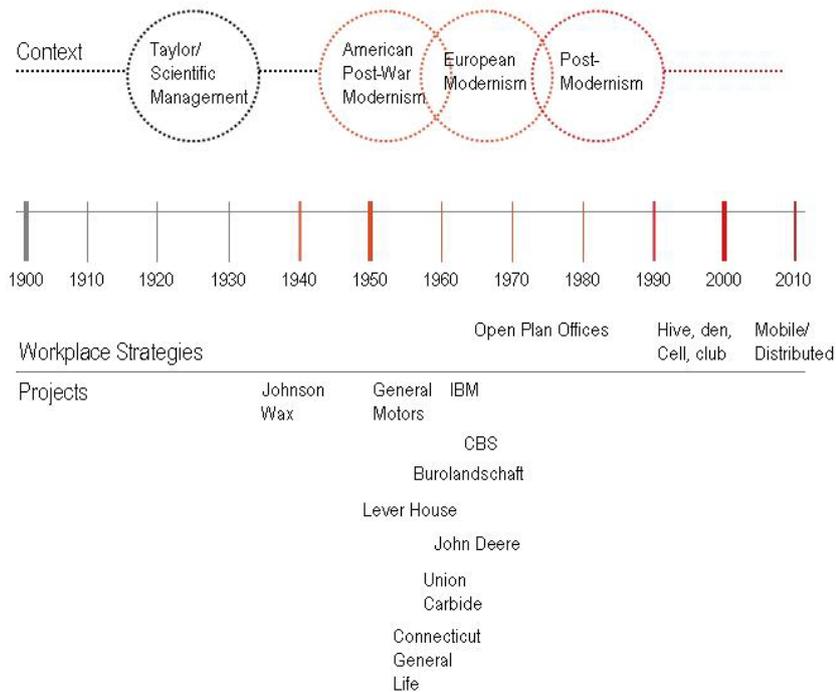


Fig. 2 Workplace Design Strategy Time - Line

Another integral component in this mix is the role of decision making from the organizational side as viewed through the organizational decision chain. As I will discuss, this chain has dramatically shifted from the early days of post war corporate office design to today's landscape consisting of a more complex body of decision makers. In this chapter I propose to examine these three areas of influence with linkages to current practices of workplace design, and, more importantly, to the influencing of perceptions regarding the use and value of workplace design strategies within business organizations. These roots have created the environment that has informed much of present day attitudes and perceptions concerning the design of the workplace and the role of workplace design strategies.

2.3 Taylor, Taylorism + its legacy on workplace design

While current office design can be traced back to factory work, it was not until Frederick Taylor and his Scientific Management theories that any meaningful attention and correlation was made to a 'theory' and execution of a planned workplace. While his work was for the most part concentrated on industrial situations, "it also seemed suitable for office work, especially when 'information technology' such as typewriters, calculators and telephones invaded the office environment." (VanMeel. 2000). Robert Kanigel relates the story of William Leffingwell who applied Taylor's scientific management to the office, "*experimenting with typists and clerks the way Taylor had with machinists and shovelers.*" (Kanigel. 1997). He goes on to point out that one of the journals supporting scientific management theory, System: The Magazine of Business went on to become Business Week. (ibid). Further adding to the early relationship between Taylor and the office, after visiting Taylor, Edwin Gay, the first dean of Harvard's graduate school of business, introduced 'industrial organization' to the business school curriculum. (ibid). VanMeel further links the two by pointing to the office design concept of '*large open floor spaces with orthogonal arrangement of desks, all facing the same direction (that of the supervisors).*' (VanMeel. 2000).

The primary concept behind scientific management was the creation of order (Guillen.2006). Taylor's work concentrated on studying efficiency and productivity within the factory setting and resulted in his Principles of Scientific Management, first published in 1911. His work involved time and motion studies to create better efficiencies. The term 'Taylorism' came to be associated with Frederick Taylor's work on efficiency, a component of his scientific management theory (ibid). Indeed Taylor in his introduction to The Principles of Scientific Management refers to the need for the country to confront this very issue:

“...we have but vaguely appreciated the importance of ‘the larger question of increasing our national efficiency’” (Taylor. 1911)

Scientific management was based on the application of scientific methodologies to discover the most efficient working techniques for manual forms of labour (Hatch. 1997). Its efforts to promote efficiency, and explore practices that would enable efficiency within the manual labour workforce, influenced the factory practices of Henry Ford and his creation of the mass production assembly line, later to be known as Fordism (ibid). Fordism, alongside of Taylorism, came to be associated with much of the planning practices in post-war American workplaces. As we will see in the discussion concerning the relationship between Taylorism and modern architecture, both Scientific Management and Fordism both equally captured the imagination of ‘modernist architects’ (Guillen 2006). Guillen points to Taylorism as being fundamental to the mass production line efficiency that was developed by Ford. (ibid). Both stressed efficiencies in the workplace, and while they were geared towards the manual labour pools of their day, they struck a compelling cord with both architects and management gurus that followed in the 1950’s and early 60’s.

Guillen sets out three objectives of his treatise: the losses the country is encountering due to inefficiency across a wide spectrum of activities; the remedy to these inefficiencies lies in systematic management; and that the basic fundamentals of scientific management can be applied to a wide spectrum of human activities including the *‘work of our great corporations, which call for the most elaborate cooperation.’* (Taylor. 1911). He summarizes the critical components of what constitutes scientific management as science over ‘rule of thumb;’ harmony; cooperation over individualism; maximum output; and the development of each ‘man to his greatest efficiency...’(ibid).

The five principles of Scientific Management involve (Morgan. 1997):

- Shifting responsibility for the organization of work from the worker to the manager.
- Using scientific methods to determine the most efficient ways of executing work.
- Selecting the best person to perform the job.
- Train workers to be efficient.
- Monitor the performance of workers to ensure that the appropriate work processes are being followed.

Morgan, in discussing Taylor, goes on to point out that his (Taylor) approach to work efficiencies influenced the type of assembly line manufacturing that would later be developed by Henry Ford and termed Fordism. The two, became synonymous with all that was associated with the impersonal, efficient and anonymous office design of the last half of the twentieth century.

His affect on management and in particular American management appears to be profound. Robert Kanigel in his study on Taylor and his legacy of efficiency points to what Jeremy Rifkin wrote in *Time Wars* that Taylor “*made efficiency the modus operandi of American industry and the cardinal virtue of American culture;*” and that he (Taylor) “*has probably had a greater effect on the private and public lives of the men and women of the twentieth century than any other single individual.*” (Kanigel. 1997).

While regarded as highly controversial, most of the texts refer to Taylor’s work as being equally highly influential (Morgan. 1997). This influence went beyond his intended research and as Morgan states, “provided the cornerstone for work design throughout the first half of the twentieth century, and in many situations prevail right up to the present day. Many critics argue, and as I will demonstrate below, that Taylor’s influence goes beyond even twentieth century management theories. That Scientific management indeed has affected both the course of modern architecture, the design of the modern workplace and has had a far reaching impact on

perceptions of the value of both modern architecture and more relevant to this research, the value of workplace design strategies.

The view of the office as a factory with its neat rows of cubicles or workstations, and rows of private offices surrounding the perimeter of the floor space is the result of what Morgan references as a demonstration of the systematic application of Taylor's five principles which led to the development of 'office factories.' The early post world war two offices clearly were an evolution of these theories, where the clear distinctions between management and clerical workers was very much the same as Taylor's dividing work tasks into specialized components. These office factories consisted of a work environment where 'people performed fragmented and highly specialized duties in accordance with an elaborate system of work design and performance evaluation.' (Morgan. 1997).

As to the relationship between Taylor and office design in the U.S. Van Meel reflects that '*American office design and its underlying Tayloristic ideology left a strong mark on European offices*' (VanMeel. 2000) though he equally points out that Europe was less taken with Taylor's theories than the Americans thus pointing out that European office design was not just copies of '*their trans-Atlantic counterparts*.'(ibid). The exception to this is the U.K. where VanMeel in his study demonstrates a closer alignment to their U.S. counterparts (ibid). This relationship between U.S. and U.K. planning approaches is one of the primary reasons behind the choice of study groups for the field study conducted as part of this research (more concerning this in Chapter 4).

2.4 Modern architecture + corporate architecture

The rise of modern architecture and its relationship to the design of the corporate landscape was greatly informed by the work of Taylor, and subsequently had great influence on the design of the new corporate work

environment. The role of design philosophies based on technology, modularity and flexibility, coupled with the ways in which architects practicing approached the design of corporate architecture helped shape the architecture and its interior workspaces. In discussing modern architecture and particularly how it relates to the corporate architecture that developed in post war America, it is not intended to portray the movement as universal. As simple and straightforward as modernism may appear, in application and theory there are many complexities. There are many instances within modernism that could refute some of the contentions that I make in this study. However, as modernism and modern architecture relates to corporate architecture after the second world war, beginning in America and extending to Europe (primarily in an American form in the UK), the perspective discussed here offers a valid view of the role of modern architecture in shaping and influencing workplace design in decades following this period.

Mauro Guillen in his work on Taylor and Modern Architecture (*The Taylorized Beauty of the Mechanical*) makes the case that modern architecture is '*the child of industry and engineering.*'(Guillen. 2006). However, as great as the advances of twentieth century building technology and engineering advancements that led to further design and building capabilities allowing for design possibilities that previously were not possible, Guillen makes the connection between Taylor's work and the rise of modern architecture.

One can look at every phase of architectural history and grasp the creation of new 'movements' as the result of new technologies. Just as the use of the new materials such as steel at the end of the nineteenth century allowed architects such as Sullivan to create the first 'high rise' structures of the time, leaving behind the heavy load bearing exterior partitions for the non structural facades that would eventually evolve into the glass curtain walls of the 1950's, advances in new forms of building technology (mass production, lighter materials) and engineering (the

ability to span greater distances without significant structural obstructions) led to much of what we refer to as modern architecture. A link between this historical perspective and the infusion of Taylorism is the work of Sigfried Giedion (1888-1986), an architectural historian who greatly influenced through his writings the architects that practiced modernism. In an early work, *Bauen in Frankreich*, he drew attention to developments in French architecture of the nineteenth and twentieth centuries, referencing the influence of new materials and construction technologies. In that work, Giedion defended the thesis that the most important contribution to modern architecture was in the access to iron and glass structures, along with concrete. These technologies, he claims, informed what he termed a 'subconscious' of architecture which became manifest in modern architecture. (Heynen. 1999).

Giedion further makes reference to the influence of materials and technology in another work, *Befreites Wohnen*. There he speaks of the openness, lightness and flexibility that is associated with the new modern movement in architecture. He points to these key elements as taking on the character of '*rationality, functionality, and industry, experiment.*' (ibid).

The architect Ernest May who was a key figure in the early modern architectural movement in Europe, and who was involved in the CIAM (Congress Internationaux d'Architecture Moderne) draws the connection of modernism and Taylor in a paper published in *Das Neue Frankfurt*: pointing to the potential conflict between the industrialized processes of construction and the principles of Taylorism 'in the use of space' as being a rational response, and the so called rationality of society which also was one of the central tenets of modern architecture. (Haynen. 1999).

This potential conflict is evident through the writings and philosophies of modern architecture. On the one hand lies the role of technology, flexibility and efficiencies, all referencing Taylorism; while on the other hand is the role of modern architecture as a response to the social

conditions of its time (at least the time of the early inception of modern architecture.)

Particularly as practiced in Europe, modern architecture was informed by the political environment of its time. While on the one hand, there was the use of technology and materials to further the ideals of modernism, the ideals were politically influenced and motivated. Peter Blake, an American architect practicing during the rise of modern architecture, as well as an editor of *Forum* (an architectural journal) writes:

“The modern movement in architecture was, above all else, fuelled by optimism. LeCorbusier, Mies, Gropius, Wright, and all the others were convinced that they had a chance to make a better world – to create a more beautiful, a healthier, a more egalitarian environment in which free people could live and work and learn and enjoy themselves.” (Blake. 1993)

This dichotomy again is raised by Blake in discussing the modern movement being ‘a *politically radical commitment to enhancing the human condition*’ and referencing Marcel Breuer’s belief that ‘*architecture is shaped by a great many things – function, technology, economics, sociology, politics*’ (ibid). For Blake, the treatise of his book consistently comes back to the concept that modern architecture, and the ‘movement’ it represents, is fuelled and shaped by radical politics. (ibid). Those who espoused the linkages between technology, efficiency and the human condition became blindsided by the potential incompatibilities of these two drivers. They were unaware of the negative connotations Taylor brought to the world of workers while favouring this same philosophy as it played out in defining the modern movement in architecture. This inconsistency among what should have been a potentially obvious conflict represents phenomena that repeats itself later on in the modern movement. The imagery suggested by the coming together of technology and engineering would take over the meaning of what philosophically was at the roots of

modernism. Image became everything. Architecture being a visual and image oriented endeavour, it is easy to see how this tendency could be facilitated. Neil Leach refers to this as the 'anaesthetics of architecture.' It represents the situations where function sifts from reflecting reality to '*masking and perverting reality.*' (Leach. 1999). Guillen ascribes to Taylor a secondary influence, one that is no less important: "*Modernist architects read about scientific management, thought of buildings as machines, embraced the ideas of waste reduction and order, used such notorious efficiency techniques as time-and-motion study, collaborated with industrialists and firms, and strived to turn architecture into a science driven by method, standardization and planning.*" (Guillen. 2006)

While the visions of Taylor did not take form in architecture until the last half of the twentieth century, its seeds were planted before the Second World War. There is some debate whether this Taylorisation of modern architecture was universally accepted both in the United States and Europe, or whether it had its roots first in one of these countries. While clearly rooted in the US where it was founded, Scientific Management derived its context from ideas about equality and team spirit derived from the great upsurge in the American interest in human relations within the workplace. (Duffy. 1998.). These concepts on workflow from both Taylor and the experiments on productivity emanating from the Hawthorne studies all stem from the US prior to and just after the First World War. (ibid). VanMeel believes that Taylor's ideas were 'taken up with less enthusiasm and faced more resistance' in Europe due to European business culture being less modern and rationalized than in America. (VanMeel. 2000). While this relates more to the effect of Taylorism on the European workplace (which will be explored in greater detail in the next section) than on modern architecture, Guillen argues that the first architects to '*fully grasp the significance of the industrial era, of the new methods and materials it offered, were European.*' (Guillen. 2006). European architects employed what they learned from American industrial

construction techniques and from Scientific Management and developed them further into *'their ultimate aesthetic consequences.'* (ibid). However, Guillen distinguishes European modernism from their American counterparts through their ability to take these principles and utilise them in a more unconstrained and independent manner. (ibid).

Guillen points to what he refers to as the 'surprising, even disquieting' fact that the most influential European architects who espoused art as part of their architecture, became eager proponents of a Tayloristic model of architecture, reflecting an engineering-based perspective. (ibid). He cites what he calls three levels of 'enthusiasm' for Taylorism and Fordism exhibited through these architects architecture: *"First, they exhibited a technocratic ideological approach to problem solving inspired by the principles of neutrality, efficiency and planning. Second, they worked for firms that were deeply committed to scientific management, endorsed and used the most important scientific management techniques in their architectural projects, and took part in organizations promoting the diffusion of scientific management. And third, they reinterpreted scientific management in aesthetic terms."* (ibid).

Le Corbusier, embraced Taylor and scientific management. While, according to Guillen, Le Corbusier was *'horrified'* at first at Taylor's vision, *"...it did not take him long to see in engineering a possible return to order by applying the scientific principles of analyses, organization, and classification."* (ibid). With Le Corbusier, it is easy to see the potential for linking his theories of architecture with Taylor. His references to architecture as a *'machine for living'* (ibid) makes the transition an easy one to understand as well as to view the transition. One can see the three levels referenced above as being embraced by both the individual proponents and practitioners of modern architecture (Gropius, Breuer and Le Corbusier), but also through the larger 'corporate ' architectural practices that held a far reaching influence on the actual construction of modern architecture transcending the corporate organization.

The approach to planning through neutrality, efficiency and technocratic ideology, is seen through the work of SOM, the American architectural practice most associated with the rise of modern corporate architecture. The second level is evidenced through the actual practice of firms such as SOM, and has become the basis for many architectural firms' practice methodologies. And the third is seen through the rationalization of Taylorism in aesthetic terms as expressed in Le Corbusier's embracing of Taylorism. This extends to most architectural practices where efficiency and technology in the name of flexibility and other potential user benefits were translated into and rationalized as aesthetic endeavours. It becomes easy to understand Leach's view of anaesthetics when we look at these rationalizations as both a '*decontextualization*' and '*abstraction*' of the original context of modernism (Leach. 1999).

While the embracement of Taylorism by modern architects seems at odds and conflicting with the social ideals rooted in modernism, Guillen points to the agreement between scientific managers and the modernists in their technocratic approach to industrial and social problems (Guillen. 2006). They saw the use of Tayloristic ideals as a means to achieving the social goals and remedies that modern architecture sought and believed in. Guillen raises the conflict in perspectives through pointing to the differing theses behind the rise of modernism. These two views are expressed in those proponents who view modernism as a result of social and political conditions rather than material or intellectual ones. The view of the political condition being the motivator, it was industrialization that these same social and political conditions were a response, in part, to industrialization. (ibid). The other perspective focuses on the material conditions that were created by industrialization, and that modern architecture is in essence an ethical art 'only intelligible historically in light of the ideals of those who designed the buildings (Guillen quoting Peter Collins). (ibid). What sets apart these two theses is the rejection of technological determinism as an explanation for this rise. (ibid). My

contention is that both theories play homage to Taylor, whether deliberately or as an unintended result of an aesthetic philosophy, and that no matter the cause, the result took on a meaning that reflected the views and beliefs of scientific management.

The areas in which Taylorism exhibited itself in modern architecture took form through standardization and modularity as a means of achieving efficiencies. This pursuit of standardization and modularity became an aesthetic and theoretical obsession that came to preoccupy the architectural profession in its advancement of an aesthetic ideal. While Guillen argues that modernism in architecture was more than just an aesthetic proposal and that it included ideological and technical elements (ibid) these very elements formed the aesthetic underpinnings of a good part of modernism, especially in its formative years, both prior to and just after the Second World War. A result of this aesthetic ideal was the planning grid of the buildings and the curtain walls enclosing the workspaces within. In the very spirit of the essence of architecture, it is evidenced in a three dimensional manner, as experienced both in plan and elevations (planning and exterior components). This fascination was both with the result of technology and engineering methods and the processes represented by these methodologies.

He goes on to point out the so-called fascination by architects with regularity, continuity, and speed of machinery, technology and mass production as being the '*last affinity between modernism and scientific management.*' (ibid). This '*machine*' aesthetic was not the result of happenstance or 'an idea whose time had necessarily come,' but the result of very specific economic, political and social conditions of the time, with inspiration from Taylorism and Fordism (ibid) bringing together the two theoretical perspectives and their connection to scientific management.

Guillen notes that both the architectural historians Giedion and Hitchcock reference that industrialization and new materials and production processes were adopted by 'pioneering architects to revolutionize design.' (ibid). Giedion, Guillen points out, took on the view that technology '*drove*' *changes in design.*' (ibid). The early modern architects (Gropius being among them, who eventually fled to the US thus becoming one of the influential players in linking European- influenced modernism infused with Taylorism to the US) in Europe actively sought to diffuse the principles of scientific management with the construction industry (ibid). The connection between the practice of modern architecture, and the industry producing the means to construct the very same architecture served to institutionalize scientific management with the design and construction industry. Guillen points to this institutionalization as not only serving to formulate a new architectural aesthetic, but to reconstruct the entire industry and profession internationally (ibid).

Guillen's thesis is that the negative views and connotations of Taylorism are mitigated and lessened when viewed in light of its very real connections and ties to the aesthetics of modern architecture. While he points to this fact as potentially '*startling*' if not being a '*bizarre*' phenomena to some, scientific management indeed was a significant contributor to an aesthetic order embodied by modern architecture. He hopes that this will put aside the view of scientific management as resulting in '*seamy, unpleasant, or stultifying outcomes*' and calls for a '*reconsideration*' of scientific management when viewed through this lens. (ibid).

My contention is that rather than seeing this linkage between the aesthetics of modernism and Taylor and scientific management as minimizing the negative perspectives of scientific management, its complicity actually has served to create and further a negative perception of the value of design within the actual occupiers of architecture. That because of the convergence of these two areas, its far-reaching results

are more problematic than possibly realized or considered. That is, that rather than celebrate Taylor's contribution to modern architecture as Guillen suggests, it is this very contribution that has extended the negative aspects of Scientific Management to the physical and visual as manifested in modern architecture.

As discussed above, the architectural manifestation of Taylorism is seen in the planning concepts of the buildings that house corporations (the structural module that in many respects creates the basis for interior office planning; and the infrastructure module, ceiling and lighting systems, based on the building module) and the exterior cladding systems, also linked to the building module that dictates interior partitioning and planning concepts. The office form can be seen in either the skyscraper or the suburban corporate office in the post World War Two periods. In this respect, the move towards standardization was further along in the US than in Great Britain. Reinhold Martin, in his PhD thesis, on this post war period of corporate architecture reflects that *'by the mid 1950's efforts to standardize and coordinate the dimensions of construction materials and assemblies had been underway for some time in the United States. The most common point of reference was the experiment in so-called 'modular coordination' performed in Great Britain with the Hertfordshire school construction program in the late 1940's and early 1950's.'* (Martin. 1999).

Martin's PhD thesis evolved into a book, which examined the historical and theoretical relationship between architecture, graphic design, technology and their relationship with corporate America in shaping and influencing the corporate architecture of the 1950's and 60's. While focusing on the relationships regarding the so-called 'military industrial complex,' much of the discourse details the beginnings of the relationship between corporate architecture and Taylorist planning and execution. It underscores the manner in which design was initiated, influenced and executed. The approaches that design firms use today, along with the

perceptions, assumptions and expectations of clients today are readily traceable to this formative period of corporate architecture. The focus of examples during this time period are a result of the building boom just after the war, and provide rich examples stemming from a stock of buildings created for the first time around the actual user as occupier, rather than as speculative office buildings designed and built for a nameless potential renting client. This time in history saw a convergence of many factors impacting this development and while the building type most associated with modularity and efficiency was the skyscraper found in the newly developing cities, the face of suburban American was equally being transformed with an influx of corporate headquarters' design and construction.

This great mass of building [1950-1964] was seen as a golden age for business architecture (Albrecht and Broikos. 2000). It was a confluence of activities and influences, partially economic but also coinciding with American architects' 'love affair' with European modernism. This new image being formulated was most mirrored in the *'lightweight metal-and-glass membranes'* being attached to *'steel skeleton frames, displacing masonry and terra cotta'* as the architectural aesthetic (ibid).

While focusing on corporate architecture as a manifestation of the American military industrial complex, Martin's work uses the influx of systems thinking and infrastructure as fundamental to his thesis: *"Its [corporate architecture] defining epistemologies coalesce into an organism that operates on the model of a total if pliant system. Within this system architecture acts as a conduit for organizational patterns passing through the networks of communication that constitute the system's infrastructure."* (Martin. 1999).

As mentioned previously, this was greatly evidenced through the steel frame and planning grid, creating a modularity and implied flexibility, also serving to become, as Martin notes, the image of this military industrial

complex. (ibid). Martin compares this architectural imagery with William Whyte's *Organizational Man* (Doubleday. 1957), thereby serving to link the architecture of this period with the Taylorist imagery of the literature of the time. Martin goes on to compare three seminal works of the period: General Motors, designed by Eero Saarinen; IBM and Bell Laboratories, both designed by Skidmore, Owings & Merrill (SOM). At multiple levels, he attempts to link and draw comparisons between the imagery of the designed works and the technological and efficiency oriented methodologies employed in the design of these headquarters. In the very process of so doing, Martin points to the evolution of these methodologies as being reduced to imagery. In essence, the technology becomes the corporate image, also serving to reinforce Leach's contention of the anaesthetics of architecture, whereby function becomes image, which in turn becomes reality (Leach. 1999)

When Martin points to the 'regulating' role of architecture (Martin. 1999). This role takes on both the technology and efficiencies of scientific management through the design of the building 'skin' to the execution of this modular efficient architecture, in both deed and imagery serves to order not only the architecture of these facilities, but the lives of those within.

For his part, Martin identifies and uses Taylor, in much the same way as Guillen does (though with a more conspiratorial perspective and with a less generous view towards his contributions) to connect the varying layers of these interrelationships (efficiency, modularity, technology, imagery). Martin takes the view that these non-human elements did not take '*command*' but served to create and enable the organization to take '*control*.' (ibid)

Martin's work leaves no doubt as to the role of technology and modularity as exemplified through the curtain wall of modern architecture: "*On the outside, the new physiognomy of the office was registered in the curtain*

wall.” (ibid). To show the depth and level of influence of this approach, he discusses the work of architect Richard Roth (Emery Roth & Sons), who though never considered at the same aesthetic level as Saarinen and SOM, was influential in his contributions of perfecting the design and use of the curtain wall. This perfection took the design of the curtain wall with its inherent modularity, which took the form *‘of a highly organized aesthetic and technological systems into which units of space were to be integrated’* (ibid) and extended this into the *‘standardized components’* of office partitions, lighting and furniture. (ibid). To illustrate the extent to which this design philosophy permeated the profession, Martin uses as an example an article written in the architectural journal, *Progressive Architecture*, in November 1957, wherein its editors devoting an entire issue to modularity; and quoted at length from architects such as Mies van der Rohe, Walter Gropius, Richard Neutra and Frank Lloyd Wright *‘on the desirability of standardized modular construction methods’* (ibid). Nothing could have lent more credibility to this methodology to a profession obsessed with being associated with the *‘masters’* than the endorsement of these architects.

This way of thinking about modern architecture, and how it related to the design of corporate architecture became institutionalized during this period. This institutionalization went beyond the imagery of the architecture, extending itself into the organization. *“Hundreds of office buildings in the decades following the war did attain the nearly complete fusion of aesthetic techniques advocating modular coordination with...”* “this image began to weld itself onto the internal organization of the corporate entity itself. (ibid).

The *Organizational Complex* (Martin. 2003) examines this imagery and its interplay with the internal organizing elements of the architecture and the clients who occupy this architecture. The expression of the structural systems, which, as Martin says were *‘celebrated since the nineteenth century,’* were reduced to a parti [an architectural term denoting a

designed method] of a gridded pattern as it related to the integrated patterns of the building module. (ibid). Additionally, the distinctions between science, technology and art were blurred as architects perceived them as one entity. (ibid). This relationship and to a certain extent, obsession, with the grid and building modular, saw its way from the building skin into the building itself and subsequently, the office interior. What began to occur according to Martin was the function of the building skin becoming more than imagery of modernity. These skins, by creating a transparency to the spaces within, served to expose those organizations. Martin notes that this transparency, rather than dissolving institutional power '*along with the heavy partitions of the early twentieth century office,*' extended this power to a '*more advanced level.*' (ibid).

While the architects of this period were focusing on the design parti of the grid and the modular expressed through the curtain wall, the buildings themselves became synonymous with each organization's corporate image. (ibid). It was through the Union Carbide Corporations headquarters, designed by SOM, where Martin notes, '*controlled, flexible, modular integration was advanced most decisively.*' (ibid). In the Union Carbide project, the skins gridded pattern gave way to the interior office cells, forming a flexible matrix. The interior layouts were regulated by a thoroughly integrated lighting, air conditioning and partition system. (ibid).

Saarinen's General Motors headquarters created maximum flexibility through unified systems that '*could be extended and layered at will.*' (ibid). Here we can see the relationship between the tectonic efficient modularity of the building architecture with the use of that architecture as the embodiment of corporate image. Martin compares Saarinen's role with GM to an advertising agency (in this case to GM's agency run by David Ogilvy) in that by finding a unique solution, Saarinen '*bestowed statuses and improved the image*' of his client. (ibid).

Another phenomena of this period, was what Martin terms the 'genealogical' relationships of many of the buildings being designed. What Saarinen made use of at GM, SOM applied to the Connecticut General Life Insurance Company and later to the United States Air Force Academy. This can also be seen in what appears to be an almost incestuous relationships between both architects and clients of this time. Alexandra Lange notes (Lange. 2005) that all of the parties involved in the corporate architecture of this time were engaged in social relationships. Referencing a dissertation "Building Cultures by Designing Buildings" by Wesley Janz, she highlights the connections and interrelationships. Janz's dissertation actually charts these relationships through university, private club and governmental council affiliations. (ibid). Lange cites the business and design networks as creating '*strong and multiarmed nodes in what developed during this time as a highly intergrated approach to the design of corporate America.*' (ibid).

This modular grid drove the planning modules of this time. As rigorous as this grid was to the building exterior, its use in planning the building was equally rigorous. As a result, planning concepts that eventually followed for the offices contained within followed this grid as a departure point. What this explains is the precedent for planning strategies, or workplace design strategies that evolve from a geometric and aesthetic basis, rather than one grounded on any particular business process. In demonstrating this point, Martin (Martin. 2003) examines Saarinen's work on the IBM headquarters. A review of the design thinking behind his design concepts also exposes the interrelationships between the many facets of the facility: the building grid and the interior office spaces: "*Planned on a four foot by six foot grid oriented horizontally, the interior of the curved bar at IBM was composed of a repetitive series of modular bays distributed around secondary corridors. Along each corridor was a row of twelve foot offices and opposite a row of twenty four deep laboratories, all divided by movable steel and glass partitions.*" (ibid)

What begins to be seen is that with all good intentions, the focus of attention by architects was first and foremost, the building façade. This became a symbol of the technology and efficiencies from Taylor. The curtain wall became the point of departure for design. This focus honed modernism's focus on surface skin combining visible transparency with the minimalist degree of construction details. (Wright. 2008). In Martin's PhD theses (Martin. 1999), the precursor to his book *The Organizational Complex* (Martin. 2003), he contends that this façade based imagery served the dual purpose of organizing space into '*an open ended and flexible matrix*' and also to work off of architecture's capacity to '*build images*.' The buildings exterior surfaces became the embodiment of the corporate image. (Martin. 1999.). The power of this imagery was one of the visual over real substance. While predicated on flexibility and modularity, full modularity as Martin points out was never fully realized in the United States. However, what was achieved according to Martin, in the dozens of modular based office buildings designed and built following the Second World War, was the '*nearly complete fusion of aesthetic techniques advocating modular coordination with the extant of technical means for achieving it*.' This imagery carried itself into the corporate entity itself through the exterior imagery and the design of the corporate office, as I will explore in the next section. (ibid).

To a very real extent, the curtain wall served to represent linkages at various levels, most of them unintended. As I discussed previously, the obvious linkage to an interior planning module, which subsequently served to link the imagery of the building with the organization. The other linkages are, again as previously discussed, between Taylor and Scientific management and the role of architecture in being the result of its philosophy, and the embodiment of its meaning. By creating the dichotomy between art and technology, in its execution, it served to create linkages. In some respects, architecture became the function of the organization: "*In all cases, on all sides of all of these pairings,*

organization – as the agent of a new, horizontally equilibrated organicity – effected a conjunction where there might otherwise have been opposition: art opposed to science, technology opposed to nature, human opposed to machine. All of these were turned into linkages that were themselves linked up to the network of networks that we have called the organizational complex. And architecture was integrated into this complex precisely – and only – to the extent that it fulfilled the organizational imperative. But this asymmetry, in which architecture becomes a function of organization, should not be mistaken for a deterministically hierarchical disposition of unequally weighted terms...” (ibid).

2.5 Architecture + education

While the role of Taylor is unequivocal, one needs also to look at the education of the architect to understand some of the factors that helped to not only influence the architects of this period (as well as future generations of architects) but to those factors made acceptance of, and acquiescence to, Taylorism as a seemingly natural consequence.

The ability and inclination for modern architects easily to accept Taylorism in such an uncritical manner can best be understood when viewed in light of architectural education and practice. The values emphasized in design schools and the practices where many graduates found themselves, contributed to and gave life to the architectural conditions discussed above. In many respects, the critical application of architectural knowledge, and the benefits that it could have provided to clients was blurred in the architect's pursuit of efficiencies and technology as a means of giving 'meaning' to a particular aesthetic. The reference above in the discussion by Guillen representing architects' enthusiasm for Taylorism and Fordism highlights where scientific management was embraced, endorsed (Guillen. 2006) and indeed contributed to the framework informing architects' work. As Guillen points out, there existed a

correlation between scientific managements focus on the analysis of tasks and individual performance, and the modernists desire to redefine the different artistic and technical aspects of the architect's job (ibid).

Another factor to be mindful of was the connection between architectural practice and architectural education, especially in the time period under discussion. Architectural education in late nineteenth century American took a direction similar to that of office practice. (Kostof. 1997). In both instances, one can attribute the receptive condition of both education and practice to a shift in perception regarding the value of architecture as a purely aesthetic endeavour or one of acceptance of technology as a driver. Kostof in *The Architect* makes reference to a work by Nikolaus Pevsner, *Pioneers of Modern Design* first published in 1936, where Pevsner demonstrated the connections between artistic hostility toward the machine technology in 1850 and its acceptance after 1900 as impacting the profession. (ibid).

The result of this shift in thinking is seen in the important educational institutions that shaped the architects who were responsible later on in designing post war modern corporate architecture. The Bauhaus, which was founded as a crafts school, shifted direction under the leadership of Walter Gropius to become a centre of experimentation in linking machine technology and modern design theory. (ibid). In describing this view of education and design, the use of similar language to that used in explaining the rationale behind the post war corporate headquarters is striking. The use of words such as 'scientific' and 'rationale' resonates with the terms of both scientific management earlier in the century, and in the modern architecture of the decades to come. Kostof describes the direction of the Bauhaus as having a 'new order and a new visual language, in which *'scientific' experimentation would discover the 'objective' facts on which would be based 'rational design.'* (ibid). Gropius' theories of design were in part based on *'a rational basis of design.'* (ibid). Gropius in the pursuit of this rational design, expressed the need for

finding a scientific language of design that would be independent of ‘*subjective human variables*’ (ibid).

While it can be argued that the role Taylor and the acceptance and incorporation of scientific management as an influence in modern architecture was different in Europe than in the U.S. this argument is weakened when one looks at the ideas of Gropius and his transition from a leader of the very European Bauhaus to both an educational leader and practitioner in the U.S. His perspectives on architecture, and modernism in particular, were very much influenced by scientific management. In an essay written in 1954 published in *Architectural Forum*, he lays out eight major ideas on creating, what he termed, a ‘*solid architecture*’ (Eight Steps Toward a Solid Architecture). It should be noted that this essay was directed towards an audience whom Gropius saw as the ‘*young men of the profession.*’ (Ockman and Eigen. 1993). Among the eight steps are:

- Design buildings to accommodate the flexible, dynamic features of modern life – not to serve as monuments to the designer’s genius.
- Make better use of science and the machine to serve human life.

In reflecting on the use of the machine as a language for modern architecture, Gropius states that “*The machine and the new potentialities of science were of greatest interest...*” and that in retrospect he found that his “*period has dealt too little with the machine, not too much.*” (ibid)

Taking over as head of Harvard’s school of architecture, Gropius went on to influence generations of architects. Along with Gropius, came numerous Bauhaus architects, fleeing Nazi Germany prior to the war, most of who shared a similar sensibility towards modernism and would be instrumental in changing the course of modernism in America. Kostof notes that: “*With the arrival of Gropius at Harvard University in 1937, and the immigration to America of others who had been associated with the*

Bauhaus, the new European ways were established as it were overnight, and their supplanting of the old methods became only a matter of time." (Kostoff. 1997).

The role of architectural education can be seen as influenced on two fronts: the philosophy of the architectural school; and the process of architectural education. Unlike many professional schools, architecture as it is taught is very often influenced by a philosophy (tacit and subtle) driven by the dean of that school. Given the influence of many of the European modernists in the American University system, it is easy to see the perspective of modernism as prevailing. A view of technology and science as a means of achieving architectural ideals is prevalent. The role of technology, and planning systems, translated architecturally as modularity, is used to create efficiencies in buildings. The university architectural studio resembled both the studios of the firms to which graduating architects would find themselves and was reflective of Taylorist thinking: *"Like the architectural office or the atelier on which it was based, the studio represents the social context in which design problems are confronted and resolved."* (Cuff. 1992) but while the visual connection exists between education and practice, there is also a cloistering of students from the realities of the profession, where philosophy becomes prevalent and the pursuit of an architectural parti (a term used to connote a design philosophy) supersedes the view of those who are to occupy architecture. Cuff in her analysis of the profession refers to this gap between school problems and practice as also resulting in unintended consequences, resulting in a paradox between design needs of education, and design needs in practice. (ibid).

Viewing a typical studio, one can visualize the offices of any of the Taylorist or Fordist models of previous years. Conversely, a disparity between practice and education can be seen in the actual ways in which architectural education are structured. Noting the ancient and medieval traditions of education where idealism and pragmatism, the creative act

and the craft discipline were inseparable, Alan Colquhoun points to what he calls the conscious search for the unity of the architectural act as being the main preoccupation of architectural education. He sees what was then a new tradition in architectural education as a *'fractured condition of architecture that the whole modern movement reflects.'*(Ockman and Eigen. 1993).

The studio system of architectural education in effect, creates an architectural culture that extends to the work studio. Cuff describes this culture where each practitioner undergoes the metamorphosis from layperson to architect within a frame created by the surrounding social milieu of practice. (Cuff. 1992). This culture embodied the practices of scientific management, in both the theories promoted and in the ways the offices were structured. The fact that the office practices involved in these large headquarters design projects were in themselves large, enabled them to take on the actual forms of scientific management in the actual practice of architecture. In order to respond to the demands of the size of the projects being commissioned and their complexity, architectural practices grew with increased personnel as well as diverse skills. (Kostof. 1997). This led to a structure that separated the stages of work by skills (design, production, and engineering) as well as the separation of decision making from the work itself. Architectural practices took on the form of specialization. (ibid). SOM, the architects of many of those post war headquarters projects was an excellent example of this specialization, where in order to service the projects at hand, they provided every kind of professional service within a single entity, expanding the traditional service offering of architectural design, structural and production services, to interior design, graphics as well as presentation and engineering services. (ibid). Kostof in his survey of the architectural profession, demonstrates that the architects of post war America *'came to terms with industry and commerce.'* This was at, what he describes as a cost to the

profession in terms of ethical responsibilities and individuality. The architectural office increasingly resembled business. (ibid).

It is a culture expressed in the physicality of the architecture, the language of the profession and, the perspectives contributing to the design analysis that architects brought to their projects. The cross-referencing of the machine, technology and scientific methodologies became intertwined with the modern movement at every level. Konrad Wachsmann, a collaborator with Gropius, writing "On building in Our Time" listed several visions of the development of building in the future. Among them were:

- *"Science and technology bring forward problems whose solution requires exacting studies before final results can be formulated."*
- *"The machine is the tool of our time. It is the cause of every effect manifested in the social order."*
- *"Buildings should develop indirectly as a result of the multiplication of cells and elements, in accordance with the laws of industrialization."*
- *"Modular systems of coordination, scientific methods of experimentation, laws of automation, and precision influence creative thinking."*

(Ockman and Eigen. 1993).

Architectural culture is promulgated through the symbolisms and rituals of the architectural office. In the case of practice, symbolism is made real through rituals that involve architects and developing consistent ways of working with clients. These rituals also extend to the ways in which architectural ideas or concepts are generated. (Cuff. 1992). A critical component contributing to this culture is the way in which architectural schools teach design without reference to practice (Duffy. 1998.). Duffy cites an almost indifferent attitude on the part of schools of architecture towards the teaching of practice, which extends to an indifference towards

learning from other professions and their influences on their educational programs. Likewise, he extends this argument towards the changing perceptions and expectations of clients, which he believes are also being ignored. (ibid).

One could also understand the embracing of scientific management from the perspective that modernism was as much a reaction to the classic tradition of architecture as it were a movement striving to see the problems of the world and architecture as a means of resolving those problems. But whichever view is taken, modernism's aesthetic of the machine is symbolized through an imagery of pattern and modularity. And while this new aesthetic is far different than that of the classical tradition, it was just as authoritative in its dogma. (Ockman and Eigen. 1993). In seeing modernism as a reaction from classicist past, there still existed an ability to create a reality from the aesthetic and the theories that could equally have been read in just the opposite manner. The language of architecture and modernism was the means whereby architects became anaesthetized to a potential alternative reality. In writing on changes resulting from modernism, the architect Matthew Nowicki describes the differences in meaning between the architectural term 'module' and 'modular.' He sees them as two very opposite concepts. Whereby the module is a rigid discipline subjected on a plan, replacing the free plan, and a modular plan is the opposite of the free plan. He reflects that the same words of differing generations of architecture have opposite meaning. (ibid)

This role of language in developing and carrying on the culture of architecture becomes pivotal in the architects' training and in the work environment in which they reside and practice. Dialect becomes part of the rituals of the office, resulting in a power structure that governs behaviour. (Cuff. 1992) in a professional world of visual imagery, the verbal expression of that imagery is very much part of that culture and governs behaviour and practice internally (practice and theory) and

externally (architectural design and approach to seeing what the problem is). (ibid).

2.6 Architecture + practice

One of the faults of architects as discussed by Leach (Leach. 1999) is their ability to be desensitized by the pursuits of their imagery. The fact that these architects who were very much in the vanguard of a movement in architecture, well respected and influential could be also so oblivious to the unintended consequences of their actions is symptomatic of much of the problems of architecture as a profession. In many respects, Gropius embodied this contradiction between his beliefs in the 'machine' and scientific management as a means to achieve social betterment. As such, he replaced the pursuit of this social betterment from a moral philosophy to science. Gropius saw this as a '*spiritual revolution*' aimed at the '*satisfaction of the human soul,*' based on a new condition of modern space and one fuelled by science and the machine. (Kostof. 1977). What appear to be contradictions in the thinking and actions of Gropius and many others of that period were indeed not really so. What I will discuss in the following chapters are how these very real contradictions resulted in unintended consequences of establishing practices and perceptions that have had long lasting repercussions on the design of the workplace. While one can, potentially, dismiss a seemingly conspiratorial view of Gropius' impact on future generations of architects and users of design, the evidence of a consistent anaesthetic perspective is seen throughout Gropius' career. After the original design of the Pan Am Building in New York City was announced to much displeasure both for its design and destruction of Park Avenue as a major New York streetscape and to Grand Central Station on top of which it was to be built, Gropius lent his name to a redesigned version that was no better in reversing the faults of the first design. When questioned as to why he would lend his name to

such an enterprise rather than denounce the proposal as so many of the architects and architectural critics of the time had done, his rationale was that if he did not, then someone of a lesser quality most certainly would. Gropius believed that by creating a '*monumental modernism*' he could use that aesthetic to mitigate the problems of the rationale for the building itself. (Gissen. 2005).

The breadth of the movement, and the universality in which scientific management permeated the profession and the architecture of post war American headquarters was not accidental or serendipitous. Another factor of the time was the relationships, work and more importantly, social, between the architects and patrons. These relationships according to both Guillen and Lange extended beyond '*national boundaries*.' Guillen points to three types of relationships that fostered this transference; apprenticeship, collaboration and attendance at the same educational institutions (Guillen. 2006). While Lange, described the relationships of these individuals within the social networks of clubs and governmental institutions (Lange. 2005), Guillen traces the personal contacts between the architects, and the industrialists or scientific managers and architects, to create a '*template of modernist architecture*.' This '*template*' extended across Europe and the Americas. (Guillen. 2006).

While these factors demonstrate a certain universality of the movement, in order to understand the contradictions between much of the theoretical backgrounds of modernism and its embracing of scientific management, one needs to view the profession of architecture as a whole as somewhat founded on contradictions: form versus function; business and art. However, it should be acknowledged, I do mean to claim through this narrative that modernism, and the development of the modern movement was universal in its shifting of theoretical ideals. What I describe here, is limited to a specific though extremely influential group of architects that pursued a certain strain of modernism. Sarah Williams Goldhagen writes in an essay Coda: Reconceptualising the Modern (Goldhagen and

Legault. 2000), that in its complexity, modernism consisted of a great variation of agendas and forms and that the form described in her research, which she terms 'Mid-Century Modernism represented a mainstream perspective. She does however, believe that these varied strains are held together by a common language, based on industrial technology and the employment of industrial materials and production techniques that enabled the separation of structure from skin. (ibid) . It is within this commonality that the potential exists for the existence of contradictions across Goldhagen's strains.

Cuff describes these contradictions as '*inherent*' to the profession, contradictions that created philosophical dilemmas from its earliest days. (Cuff. 1992). However, what occurred in the course of the modern movement were not a recognition of these contradictions, but a blurring of the boundaries and a manipulation of meaning that I believe had far greater consequences than intended, and which I will discuss in later chapters as it relates to the organizations studied as part of this thesis. These consequences are evidenced at two levels of participants: the architect and the occupier or client. The notion that architecture is about problem solving is refuted by Cuff who questions this belief. Her research finds that decision-making or problem solving is subordinate to sense making. This very different interpretation is important to understanding these unintended consequences in relation to this study in that as Cuff says: "*The notion of sense making implies a collective context in which we most make sense of a situation, inherently social, interpret it, and make sense with others through conversation and action in order to reach agreements.*" (ibid).

If, then, contradictions are blurred, and meaning 'managed' or anaesthetized, then one's ability to make sense of architectural situations, to see them as they really are, becomes problematic.

2.7 British perspective

Since a component of this research involves an examination of U.S. and British organizations, especially as they relate in comparison to each other, it is important to view attitudes and approaches to modernism as it relates to the architecture of the U.K. I have previously discussed transatlantic differences regarding adoption and influences of Taylor. Juriaan van Meel, in his study of the European office and differences between European countries, discusses the cultural differences between the U.S. and Europe as the primary reason that Taylor's ideas about scientific management were less readily adopted in Europe than in the U.S. was that European business culture was rooted in the high status culture of European business. During the period during which Taylorism was influencing American architectural thinking, the U.K. business organization was still based on a hierarchical culture. (van Meel. 2000.) (ironically, as the study reveals, there appears to be a reversal in cultural differences between the U.S. and the U.K. Where once hierarchy dominated British organizations, there now seems to exist a far less hierarchical structure than in the U.S. as evidenced in part by attitudes towards entitlement. American workers in this study were far more steeped in the perception that they were entitled to certain types of office space based on position, in contrast to their British counterpart.)

Van Meel's research identifies differences between each of the five study countries (the U.K., France, Germany, Sweden, Italy and the Netherlands) but particularly between the U.K. and the other four countries. He states that '*in terms of office buildings, it is clear that the British office situation bears little resemblance to that of the rest of Europe.*' (ibid). He goes on to find more commonality between the U.S. and the U.K. than with those countries '*across the Channel.*' (ibid). The reasons for this reside in good part to the influences of American architects doing work in the U.K. and the large quantities of American business organizations doing business there that retained those architects especially in the earlier period of

headquarters building. What van Meel terms '*the British context*' is well suited, he believes, to the American way of working.

His study uses three office components (floor plan type, workplace type and urban setting) and four national context components (market conditions, labour relations, culture and government regulations) for the basis of his comparative analysis. In most of these areas, there are strong similarities and compatibilities with the U.S. office context compared with the other European countries. On the national context front, market conditions are very much aligned with the U.S. in that the market is driven by developers and high rents as in the U.S. Under labour relations, shareholders dominate over labour unions. Culture tends to be hierarchic, strongly individualistic and with neutral ways of interacting. And governmental regulations are no more stringent than in the U.S. (ibid). At every level of comparative inquiry, building conditions are similar between the two countries. One of the primary differences, as we will see in the discussion of workplace design strategies, is that the approach to workplace strategy makes use of far more open and dense applications of workstations in the U.K. than in the U.S. All of this is important to note as a contextual factor when viewing and examining the narratives and findings of the case study organizations.

While European modernism embraced early on the ideals of technology and modularity in architectural theory, different post war conditions between the U.S. and the U.K. created more favourable conditions for seeing these theories built on a larger scale earlier in the U.S. Post war America was ripe for creating the economic and business environment for a surge in building whereas the U.K., devastated by the war and in far greater economic desperation, was not as robust an environment for corporate architecture. Many of the efforts on the part of modernism was focused on residential and urban infrastructure building. However, in the areas of workplace strategies, the U.K. was more open to embracing research in the early design stages than the U.S.. Despite this however,

modernism was far later in gaining a foothold in the U.K. than in the rest of Europe. Post war conditions did much to create the climate whereby modernism's vision would take hold and prevail. But according to Guillen, 'in spite of being the birthplace of the Industrial Revolution, the machine aesthetic and modernism failed to capture the imagination of British industrialists. (Guillen. 2006). To a large extent, this condition prevailed up to the 1980's in terms of office architecture. Frank Duffy writing in *Architecture & Commerce: New Office Design in London* (Murray. 2004), reflects on the state of architecture in London, comparing occurrences in that city with those of New York. While New York was witnessing the epitome of post-war modernism in the form of Lever House by SOM, the Seagram Building by Mies van der Rohe, and Saarinen's CBS Headquarters, "*London in the late 1960's in all these respects was backward, small-scale and provincial.*" (ibid). Duffy points to the bleakness of the architecture of the time, and the non-existence of workplace design. (ibid). The 1980's witnessed a reversal of this condition, largely due to the influx of American business organizations and architecture. From a 'low base of office quality' in the early 1980's London advanced rapidly due in part by this infusion of American practice, and in part by shifting economic trends and environments.

2.8 The design of the modern workplace

These developments in modernism and modern architecture, created the physical and theoretical environment for the workplaces contained within. Workplace design, as viewed through the corporate work environment was influenced through two distinct tracts involving Taylor: modern architecture and the architects who practiced modern architecture and the direct influence on the workplace through design strategies infused with Scientific Management. As much as the rise of modernism in architecture is a convergence of several factors, some planned, others unintended, the

development of the modern office within these structures, and in many instances, spurred on by these structures, tells a compelling story of eternal influences (scientific management), changing visions of work, power and technology, to name only a few.

Tracing the history of the American office, and the rise of the '*modern*' office after the civil war, Albrecht and Broikos write of the advent of what we now refer to as '*the company*.' A result of this new entity was the creation of a new level of bureaucracy in the form of middle management. (Albrecht and Broikos. 2000). Early innovations such as the Modern Efficiency Desk developed in 1915 for the Equitable Assurance Company's new Manhattan headquarters had an effect on modern office culture. (ibid). These desks were arranged in orderly rows reflecting the theories of standardization and rational science equated with scientific management and Taylor. (Ibid).

With post war corporate architecture and the simultaneous influences outside of the office environment of work culture portrayed in books such as *The Organization Man* and films such as *The Apartment*, continued to reinforce the Taylorist image and vision of the American workplace. (ibid). The workplace as an environment of efficiency and productivity was a natural extension of the modular approach expressed on the building exterior. The post war workplace was a result of the architects' carrying through the theoretical and aesthetic tenants of flexible systems and the prevailing business theories based on scientific management that the most efficient way of working was to have perimeter window walls reserved for private offices, with rows of open desks filling the centres. Taking theoretical perspectives from Taylor, organizations believed that people worked efficiently in ranks of desks, very much the way factory work was arranged during the Second World War. (ibid). At the same time, the architects' obsession with technology and modular efficient building systems created the interior environment well suited to the efficiencies of the desired workplace. With their modular lighting, ceiling

systems and partition systems, the framework was created whereby the modular of the desking system was well placed and coordinated. There were strong and evident linkages between exterior architecture and interior architecture. Much of the ideas of flexibility, particularly as they related to the office spaces was influenced by approaches to post war housing, which were based on open, flexible space. Martin notes the similarities between SOM's and Saarinen's designs for post-war housing and the corporate headquarters buildings they were designing. (Martin. 2003).

The images reflected in many of the post war modern corporate offices reflected both the systemization of the workplace as evidenced by the modular ceiling systems coupled with the modular partition systems, and the rows of neatly aligned desks. SOM's Union Carbide Building in New York is a good illustration of the convergence of systemized architecture and Taylorist theory coming together in the workplace (Fig.3)

But one can look back further at Frank Lloyd Wrights SC Johnson Administration headquarters to see earlier examples of Taylorist influences on workplace design. The distinguishing difference in this photograph is that the systemized modular engineered building components are absent due to the technology available of the period (1938) (Fig. 4). I believe that these images, coupled with the theories behind them, had an indelible affect on shaping perceptions of workplace design strategies for decades following. These images of the open '*rationaly*' designed workplace were prevalent everywhere in the discourses of the practitioners of the modern movement. Mies van der Rohe wrote in 1923 that the office building should be viewed as a '*house of work, of organization, of clarity, of economy.*' *Within these buildings should be 'bright wide workrooms, easy to oversee, undivided except as the organism of the undertaking is divided.'* (Guillen2006)



Fig. 3 Union Carbide Headquarters, 1960 SOM

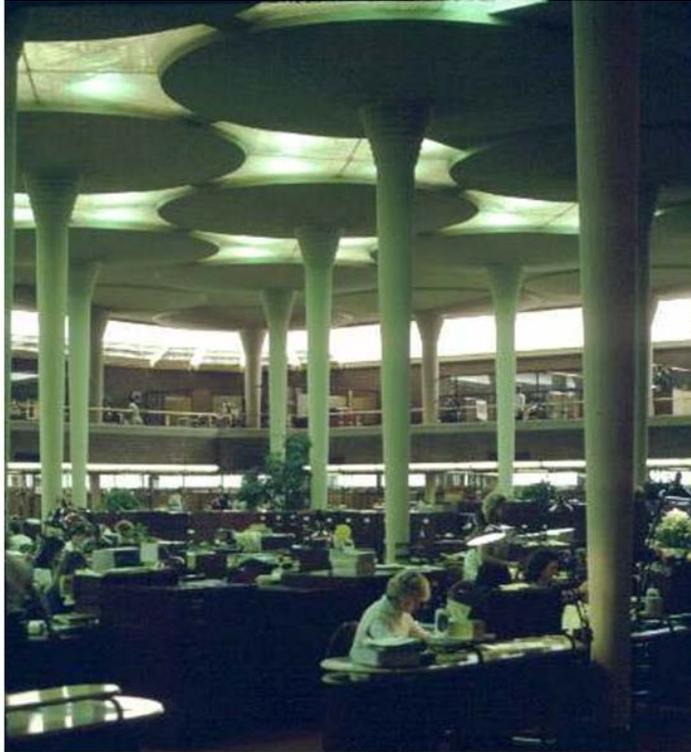


Fig. 4 SC Johnson Administration Building, 1939 Frank Lloyd Wright

These new modern headquarters facilities of post war America created a strong connection for those architects, between the design of those buildings and the ‘organizational’ language of the interior systems within. Architects design and are taught to design by developing a ‘*language*’ for the concept based on a particular ‘parti’ or conceptual theory. It is how designers are taught to think about design. It is a conceptual framework that goes back to the architectural teaching methods of the Ecole Des Beaux-Arts in France (Kostof. 1977) and has not been updated to modern practice. As a result, architects often tend to design in plan. That is, they design according to an ordering system based on a grid that emanates from the plan. Kostof writes about this holdover from the Ecole teaching methodologies: *‘this intensive study of the plan as essentially a diagram of space was important, and I still tend to ‘read’ a building from the plan and in my mind construct from it a conception of the spaces.’* (ibid). So, it is easy to understand how this way of thinking transferred the

Taylorist designs of the building's architecture, to the designs of the interior building systems and to the actual designs of the planning concepts of the workplace. Viewing all of the components of the architecture, both exterior and interior as interrelated and part of this systems approach is important to understanding the framework from which these buildings and workplaces were designed. The bringing together of the buildings systems from module to mechanical distribution means became in large part, the focus of design: *"during the 1950s the expanding use of structural bays resulted in organizational systems that were affected by the thickness of the secondary floor structure and by the horizontal distribution of mechanical systems...In the climate controlled 'office landscape' of the 1960's these innovations in technical, structural, and energy systems gave rise to the universal suspended mechanical system"* (Abolos & Herreros. 2003) To a certain degree, this system approach to design was an obsession on the part of architects, and has contributed to a design mindset where the design of the system overpowers design for occupiers (people).

The theme of consistency in message and meaning is one that resonates throughout architectural discourse. It moves the architect to take the architectural elements and themes of the exterior and bring them into the interior. Saarinen, the architect of Deere and the CBS headquarters facility studied in Alexandra Lange's PhD dissertation (Lange. 2005), discusses this interrelationship: *"I've come to the conviction that once one embarks on a concept for a building, this concept has to be exaggerated and overstated and repeated in every part of its interior, so that wherever you are, inside or outside, the building sings with the same message."* (ibid).

The concept of modularity as a means to support a vision of flexibility was a central factor in the planning of the office interior, and a concept that architects seized upon to support the notion of consistency between the buildings exterior architecture and the approach to the interior. Equally,

the concept seen in the efficiency and functionalism of these buildings exterior designs was also carried through into the design of the workplaces. It was a natural progression of a design concept, and went well with architectural thinking concerning unity of design concepts.

In a study of Eero Saarinen's Administrative Centre for Deere & Company (Fig. 5) located in Moline Illinois, the sociologists Mildred and Edward Hall point to the efficiencies and functionalism that were evident throughout the facility. They describe the multitude of ways that this is evident, from the buildings cooling systems to the use of a monochromatic colour scheme intended to create a seamlessness between the buildings interior and the exterior. The partition system that was used to form the offices within the workspaces consisted of movable partitions to allow the facility to be responsive to changes as the organization grew. (Hall and Hall. 1975). The building module was based on the size of a desk, which was the determining factor of the amount space any employee would have. (ibid).

Writing on the evolution of space planning in the workplace, Abalos and Hereros reference these characteristics of the early designs of the workplace, citing the creation of a universal model of design based on Taylorist concepts. Reflecting the Halls' observations, they discuss those same examples of climate control, modular standardization and 'uniform alignment of workstations' as 'constituting' the standard modern office. But they also allude to the inherent flexibility of these concepts as being only hypothetical. While the architects of these facilities valued the



Fig. 5 John Deere Headquarters, 1964 Eero Saarinen

geometric modularity of office planning as providing maximum flexibility, the authors believe that by fixing desks in a geometric configuration to an anchored spot, *'functional space remained dependent on the external'* components of the buildings architecture, thereby negating the argument of flexibility. (Abalos & Hereros. 2003).

Not only were the architects of the modernism creating workplaces based on scientific management, there was a perspective on the part of some architects of the time that those occupying the workplaces were ardent supporters of modern architecture as a result of the efficiencies and rational designs. (Guillen. 2006). Again, the perspective on the part of architects that workers would embrace modernism as a natural event is another example of Leach's anaesthetics' of the architectural profession which would also contribute to shaping and affecting perceptions later on.

Post war workplace design was very much associated with the early writings on office management theory. Writing about Peter Drucker's *The Concept of the Corporation*, (1946), Gwendolyn Wright connects Drucker's management theories based on what he (Drucker) termed the rational model of centralized management and decentralized operations housed in a *'social institution.'* He envisioned, according to Wright, an

institution where “*individuals and business units would identify themselves as interchangeable parts in a corporation’s large scale, standardized yet more flexible system.*” (Wright. 2008). She goes on to make the connection between this perspective of business management and workplace architecture by allowing that the architects of post war modernism ‘*synthesized these goals with new kinds of office buildings based on the subtle distinctions of a statistical sublime.*’ (ibid). There existed on the part of many of the architects, in their attempt to connect the precepts of modernism (the potential of architecture to solve social problems) the rationale that by incorporating Taylor’s theories as the basis of the design of the modern workplace, workers would be empowered thereby eliminating the historical class friction between workers and management. To this end, they indeed viewed themselves as ‘*social reformers*’ through the results of their designs. (Guillen. 2006).

As the architecture of post war America defined in many respects modern architecture in a corporate setting, so that same period, and the office spaces within those structures, helped to define workplace design, both in terms of aesthetics as well as strategy. Alexandra Lange focused on four examples of this period, which she used to define that period. These headquarters projects were CBS, Connecticut General, Deere & Company and IBM (Figs. 6, 7, 5 and 8). Her study serves to illustrate a number of forces converging during this period that she believes contributed to the formulation of the modern American workplace. (Lange. 2005).



Fig. 6 CBS Headquarters, 1965 Eero Saarinen



Fig. 7 Connecticut General Life, 1957



Fig. 8 IBM Research Building, 1957-1961 Eero Saarinen

The thesis highlights five elements that represented post war American corporate modernism: the role of the Presidents or CEOs in shaping the architectural vision; the choice of architects as a result of relationships and networks; the role of these headquarters as representing and shaping

the image of the organization; the role of this period in creating what would become the Facility Management profession; and the creation of the office design profession.

2.9 The role of Presidents or CEO's in shaping the architectural vision

In sharp contrast to decision making today, and who is involved and who ultimately makes decisions regarding workplace design strategies, the leaders (Presidents and CEOs of many of the most pivotal workplace headquarters projects) were not only the primary movers of the design strategies of their headquarters, but were intimately involved in the macro and micro decisions leading up to creating those strategies. More critical to this research, was Lange's findings that these CEOs perceived the 'need to invest in design during this period.' (Lange. 2005). Her research focuses on Frazar Wilde of Connecticut General; William Hewitt from Deere; William Paley and Frank Stanton from CBS; and Thomas Watson Jr. from IBM.

Clearly, the two most important factors influencing these corporate leaders were shaping their organization's image, and attracting and retaining workers and clients (in this regard, they share similar goals to many of the more progressive looking organizations in my study). These leaders viewed modernism as the vehicle through which to pursue these objectives. (ibid). Supporting this thesis, Lange points to the writings, speeches and published interrelationships of these individuals with their architects. Discussing the CEO of Deere, Lange makes reference to the fact that he (Hewitt) implied through a certain Board proceeding that the new Administrative Centre was 'his plow works' and that the board had given him direct charge of the company's future, which his architect, Saarinen, had embodied in the new headquarters project. (ibid). She further uses Hewitt to demonstrate involvement in the intricacies of his

project. Through a letter revealing the relationship between Hewitt and Saarinen, Lange points to Hewitt's *'physical engagement in the project.'* She goes on to support this through pointing to Hewitt's engagement through his testing, tweaking and selecting of all of the furniture, finishes, and forks in a mock-up of the finished headquarters, and that he 'insisted on choices for every one. (ibid). An excellent example cited was Hewitt's statement: *"I measured the vertical distance from the top of the seat to the top of one of the armrests and it was 5 ¾". I have just made the same type of measurement on the desk chair in which I am now sitting and the distance in 8 ½"...This makes me feel somewhat concerned that a lower armrest on the new chair might not be satisfactory in the long run."* (ibid).

IBM's Chairman, Watson, was equally vocal and involved in his project. Commenting on the relationship between design and the enabling of the organization, Watson discussed IBM's mission as providing tools to manage data. He viewed design as a means of enabling this, and voiced a connection between the visual and the institutional: *"Even the way an organization is designed can determine whether it is ugly or beautiful. If it is well designed, it can respond to the future. It can change its form and it remains competitive. But if it is rigidly designed and inflexible, an industry can go out of business within a few decades."* (ibid)

Watson also voiced his perceptions on the need to improve the quality of design within IBM at various levels including architecture, typography, colour and interiors, and as he says, across *'the whole spectrum.'*(ibid). This level of perception and involvement is far different by comparison to the CEO counterparts in many of today's organizations, and as evidenced in the firms participating in my research. Lange references a quote from Watson's daughter, reinforcing his (Watson) linking design to organizational success. In it, Watson's daughter claims her father paid very close attention to IBM's appearance. It was, she believed, a factor to his success. She believed that her father understood even earlier than most American business leaders, the importance of image to a

headquarters project. He used design to provide an image of solidity, which raised the morale of workers, and won customers, at a time when IBM was *'hanging on by its fingernails.'* (ibid).

Watson provided design vision to all of the architectural projects within IBM. He created corporate policies that affected design. One key element was his insistence on 'outdoor awareness' in all of IBM's facilities. This became a guiding principal.

It should also be noted that part of this involvement, and recognition of the value of design, these individuals surrounded themselves with the design thought leaders of the period. Each of the studied projects retained the highest acclaimed architects. In the case of Watson, he actually imbedded design thought leaders within IBM. Watson brought on the architect Eliot Noyes as in-house purveyor of design. Noyes was considered the 'curator of corporate character'. He also became pivotal to the implementation of much of quality of design at all levels (architecture, interior design, and graphic design) within IBM during this period. Lange references his ability to retain the best architects for the particular project as one of his (Noye's) greatest contributions. (ibid). But central to all of this success, was Noye's easy access to Watson (ibid), an asset that shifted after this period. Lange refers to a quote from Noyes relating the importance of corporate design programs beginning with a personal relationship 'between an architect or designer and an executive. (ibid). This relationship was also deemed critical from the architect's viewpoint. Lange quotes Bunshaft of SOM as being critical about work on a particular IBM project. Among his complaints was *'he was unable to make personal connection with Watson, his ultimate client,'* having been forced to interact with committees instead. (ibid). Again, this ability to have access to the organizations visionaries is a critical area that my research points out to be missing in today's organization.

2.10 The choice of architects as a result of relationships + networks

Selecting the architect for these projects during this period was the result of networks of personal, social and business relationships. This is in sharp contrast to today's selection process which while varying from organization to organization, in general relies on the issuing of 'Request for Proposals' (RFP's) involving submission by the architectural firm of scope of services and associated fees and interviews. In the case of workplace design, these interviews rarely are longer than sixty minutes.

On the educational side, these networks were led by Harvard's Graduate School of Design, led by Walter Gropius. Gropius was influential with furthering these relationships through the architects that taught at Harvard, and those that he knew and could introduce to the visionaries of those organizations. (Lange2005). The next of these '*nodes*' that Lange refers to were institutions such as the Museum of Modern Art in New York City. The Museum of Modern Art was comprised of board members representing the '*wealthy captains of industry.*' The networking around these institutions was influential in the selection of architects. Often this networking involved the so called '*captains*', while other occasions involved the interrelationships of these architects who served on these Boards. (ibid). The intertwining of these networks, and networks within networks, was instrumental in the quality of the architects chosen for these important commissions.

The choice of Saarinen to design the CBS headquarters (Fig. 6) was the result of its Chairman, Stanton, getting to know the architect through the building committee for New York's Lincoln Centre, which Stanton was a member of. Saarinen designed one of the buildings in that complex. Stanton also had relationships with SOM's Bunshaft, having travelled with him in Europe. (ibid).

2.11 The role of the corporate headquarters as representing + shaping the image of the organization

For all of the organizations studied in Lange's thesis, creating and portraying an image representing that organization was of primary importance. Each design was a conscious effort and decision on the part of the Chairman to make a statement. Design was more than window dressing, but a conscious contribution to the built environment. Each of these projects represents an investment in what Lange terms '*good will*' to the communities in which they are situated. (Lange. 2005) These projects, though the lens of their Chairmen champions became an expression of the personality of the organization. (ibid). The thesis that good design represented the '*good will*' of the organization was a concept repeated through each of the studied companies. This transmission of '*good will*' saw these buildings as '*modern Medici's*', giving back to their communities by creating a landmark building, and a better workplace for employees. (Lange. ibid).

In getting Deere's board to approve commencing the project, the Deere chairman argued that the project would raise the company's profile, and raise the bar for architecture in the area in which the headquarters would be situated. To do this, he chose an architect that would equally gain as much coverage as his previous projects, the TWA terminal at Kennedy airport, Bell Labs and IBM. (ibid). The Halls' study of the Deere facility (Fig. 5) describe one of Deere's chairman's (Hewitt) main objectives in building the facility as improving the image of the company both to the local community and the '*world at large*,' an objective the sociologists believe he succeeded in. (Hall and Hall. 1975)

In the case of Lever House (Fig. 9), the role of the curtain wall, that same element symbolizing modularity, technology and rationality of Scientific Management, also symbolized the product of the company housed within. Lange references this project as symbolized by the tower, as well as the

others as serving as ‘a trademark, a billboard’ creating a symbol of ‘its inhabitants.’ (Lange. 2005). Lever’s public relations director exclaimed that the new headquarters building was better than an advertising campaign in promoting the company. (ibid).



Fig. 9 Lever House, 1952 SOM

Connecticut General’s headquarters (Fig.7) was expressive of its corporate style through the buildings design, (ibid) whereas with the CBS headquarters, the company’s Chairman, Stanton, well understood the potential for design to symbolize a company, having almost attending Yale for architecture but switching to Ohio Wesleyan where his PhD dissertation compared aural and visual transmission’s effectiveness. (ibid).

2.12 The inception of facilities management

One of the most profound results of this period was the end of the corporate leader's involvement in the development and design of their buildings. This end and the subsequent rise of what was a new profession, the 'facility manger' and a new entity within the organization, the Real Estate Corporate Department (RECD). The role of this entity is clearly evidenced in all of the groups studied in my research. While each of the facilities described in Lange's research demonstrate the important linking element of the organizations leader as visionary and champion of their projects (a contributing factor cited in my research through the studied organizations), the end to this role and the creating of RECD is equally important in understanding the contemporary perceptions of workplace design strategies within the corporate entity.

This shift was realised at IBM in the mid-1960's. Up to this time, IBM was a model of using design to better the work environment and create a corporate image all under the stewardship of its Chairman. It was Watson however who despite his previous involvement in all of IBM's facilities projects, decided on the creation of this new unit. This followed a shift in thinking about facilities brought on by numerous situations. Central to this thinking was the appearance that these headquarters, and in the case of IBM, their headquarters in particular were appearing costly and an extravagance. This was coupled by the costs being generated by the aggressive building projects underway to accommodate IBM's growth. As a result, IBM approached the problem through two avenues. The first was by making use of what was called 'package builders,' contractors that could produce buildings in a mass produced way and deliver them quickly. The perceptual ramifications of this were IBM becoming suspicious of the natural high cost of any '*non-supermarket*' architecture. (Lange. 2005). The other venue was through the creation of an RECD group, which not only was the first of its kind, but also became the corporate model of the resource within the organization changed with

implementing real estate, architecture and workplace strategies. In essence, this group assumed the responsibilities that these Chairmen had taken on for themselves. The area within this responsibility that became the most open to politicization was the role of 'champion' and visionary. As the interviews that follow indicate, this role remains pivotal in realizing successful workplace design strategies, and has not been replaced with the advent of RECD groups.

H. Wisner Miller, IBM's first head of RECD noted a change in the '*pendulum*' concerning the change in attitude within IBM towards architecture. (ibid). Much of the attitudes towards design, while somewhat affected by the sheer magnitude of the building projects underway and planned, were exacerbated by cost issues associated with design decisions of many of the prominent architects that IBM had retained. The '*breaking point*' noted by Lange was in the design of an IBM components plant in upstate New York by the noted architect Paul Rudolph in 1965. The project was over budget and the design not particularly 'loved' by those within IBM. Noyes who was responsible for hiring Rudolph, was accused by Chairman Watson of '*having bad judgment.*' Watson felt that the mistake was in retaining what he (Watson) referred to as an '*expensive architect.*' In turn, Noyes maintained that he had no control over costs once a project was underway. (ibid). Within the decision making processes, Watson's attitude shifted from believing that he had to prove internally and externally that IBM was up to date, to ensuring that the company did not look '*monumentally wealthy.*' (ibid) this feeling was carried over by Miller who had made remarks in an article that he believed architects '*had begun to serve themselves and not IBM.*' (ibid). By creating this entity, Watson according to Lange, gave architecture its own bureaucracy. This bureaucratic structure distanced the retained architects from the IBM division that was the actual client. It also served to make Noyes' role as advocate more difficult. (ibid).

This view that the value of using gifted architects was in image making was both true and unfortunate. It is a perception referred to in Neal Leach's treatise on the Anaesthetics of Architecture where he refers to this obsession with image making by architects as not only a shift from their modernist doctrine of using design to solve social issues, but also a problem for the profession (Leach. 1999). It is a viewpoint held by many of the architects who have been positioned in that area of elite designers, known for their signature designs. It is a dilemma that plays out in through two dichotomies. On the one hand, these modern corporate entities sought out these architects, well known for their aesthete approach to design precisely because of what they could do for these organizations in terms of defining a strong image and creating a place for these organizations within their communities. On the other hand, these very same architects viewed themselves as 'artists' using their architecture as an art form. At some point in time, as organizations continued to grow and the need for fiscal governance became an issue on the corporate agenda, a conflict would be inevitable. James Russell writing in the catalogue to the exhibit Design and the American Office (Albrecht and Broikos. 2000) recognizes this pattern: "Architects see themselves as pragmatic artists. Among themselves, architects talk about transforming the mundane necessities of factory life or office work to a higher cultural plane. To business clients, architects describe their skills in terms of problems they can solve and present their art as a powerful means to enhance business efficiency. But architecture advances in the hands of those driven by a personal aesthetic, if not a psychological agenda. The business client quickly recognizes this and often recoils." (ibid)

The '*golden relationship*' between what could be referred to as the high-design architects and corporate America, was coming to an end. To a large extent, these architects neglected to recognize the importance of cost to these growing organizations, and all of this culminating with American business organizations accelerated growth, made for a

predictable conflict. It was however, this perception of the lack of care regarding costs associated with good design on the part of the architectural profession has had long lasting repercussions extending to this day. The role of design and quality architects being associated with high costs resulted in decades of mediocre design due to the fiscal mindfulness of future organizations. This perceptual paradigm shift began with IBM but extended throughout post war American corporations. Lange points to the view that good business began to outrank good design within the organizations mindset. What was referred to as good will through strong architectural statements was being replaced with good will through economy.

No longer did the Chairmen and family members of these companies control the architectural vision of the business. This responsibility was transferred to 'career executives.' Through RECD divisions, this executive was the Facility Manager. What Lange's research points to is that in each of the organizations studied, perceived excellence in design matched periods of corporate growth and innovation as these companies came into their own right. Additionally, the quality that derived from these designs was *'strictly proportional to the closeness between a company's design conscience and its CEO.'* (Lange. 2005). As the 1970's approached, the end of family management of American corporations resulted in the professionalization of the top tiers of organizations, which Lange credits as being one of *'the chief causes of the demise of a broad, social, long-term corporate vision...there was identification between man and company that gave the designers both an advocate and a subject.'* The result of this is greater generic buildings. (ibid).

However, what Lange concludes in her thesis for this period of design and architecture as being a 'high point' for the corporation and architecture should also be seen as a low point in that it paved the way for the degraded perception of the value of design within the fabric of the workplace through the commodification of design (ibid) . It indeed

represented a high point and the beginning of the end of high level championing. It also forms the background for the shift in paradigm from architecture and design being an integral component of the organizations resources. The very same preoccupation and reliance on form, materials and image that served the post war American corporation so well, also created the climate for its demise in that by not framing any connections between architecture and workplace design to anything other than image, its association with high costs proved inadequate justification.

2.13 Creation of the office design profession

This was clearly a period (1950-1964) that spawned new professions, resulting from the modern movement converging with post war American architecture and corporate headquarters design. In addition to the advent of the RECD group and the Facility Manager, the interior office design profession was also defined during this seminal time frame. Prior to this period, architectural firms focused solely on the design of the building and any ancillary public spaces associated with that design (i.e. building lobbies). There were exceptions earlier such as in the planning of office space in the newly completed Rockefeller Centre in New York. The office-planning firm of Reinhard and Hofmeister planned prototypical offices for the Centre. But here, as in other similar cases, the planning was for an 'imagined' client since it was rare prior to the 1950's for most major corporations to occupy a single building, and one that they owned. (Martin. 2003). Office planning at that time was relegated to conceptual planning for potential tenants; a job which most design architects did not want to involve themselves with. As these architects and their firms tackled the new headquarters projects, their systems approach coupled with their champions' (the CEOs) vision of a complete building representing their corporate image, both inside and out, architects began to see the need to control how the design of the interiors and the

workplace matched the facilities architecture. As discussed above, the focus on creating a modular approach to the design of these buildings, carried into the systems approach to the interiors. The module created the system of planning that offices and open work areas were centred on. That same module created the framework for the ceiling systems, which equally affected the design of the lighting systems. The entire building was seen as a unified entity.

Many of the projects cited in Lange's thesis made use of furniture that was designed by Florence Knoll, who along with her husband founded Knoll International, one of the first manufacturers of architect designed furniture and focusing on furniture, both office and residential that supported the modern movement. At this time, Florence Knoll headed up a separate division within Knoll focusing on interior design. In the case of Connecticut General (Fig. 7), SOM worked on the basic space planning, viewing it as a natural extension of their work on creating a consistent modularity. Florence Knoll was brought in to create the 'interiors' both through furniture and finishes. Lange refers to the relationship between SOM and Knoll, pointing out that in the mid 1950's SOM did not have a department focusing on interiors. Equally, the furniture manufactures supplying furniture for offices was lagging behind the period's architectural approach. At best they were providing custom designed and built furnishings, which were costly when used on projects of the size of these corporate headquarters. Knoll filled this gap on the furnishings side, but Florence also credited this period with '*stimulating architects interest in the corporate interior.*' (Lange. 2005).

Also up to this time, it was non-architectural professionals who were involved in developing the space requirements for the project and the planning strategies for implementing these (this portion of work would later be termed 'programming' by the architectural profession that eventually adopted this service as part of their scope). With Deere (Fig. 5), it was the consulting firm of Booz, Allen & Hamilton that developed the

requirements from which Saarinen designed the interior spaces. (ibid). At a more advanced level, the European office concept of 'landscape' office design, or 'Burolandschaft' (Fig. 10) was developed by a German management consulting firm and not a design or architectural firm.



Fig. 10 Burolandschaft

2.14 Workplace design strategies + workplace design

Up to and through post war modernism and the surge of corporate headquarters design, it would be easy to classify most if not all of the workplace design strategies as being based not only on the theories of Taylor and Scientific Management, but on Fordism. (For a summary of workplace strategy definitions see Fig. 11). Comparing Wright's SC Johnson Administration Building built in 1939 (Fig. 4) with its rational and

orderly rows of desks with its 1950's counterparts at Lever House or Connecticut General (Fig. 9 and 7) one sees very little substantial difference in planning strategy. One could go back even further to Wright's Larkin Building in Chicago in 1906 (Fig 12) and see similar strategies employed. Based on this, it would be fair to say that through the post war surge in American headquarters projects, the predominant workplace strategies employed were based on Scientific Management and Fordism.

| Strategy | Definition |
|---------------------------|---|
| Conventional | Hierarchical based, where work settings are assigned based on an individuals title or position within the organization. It can be either all enclosed or cellular offices, or a mixture of cellular and open work settings. |
| Open plan Fig. 13 | A work setting strategy that incorporates open work areas that are comprised of either cubicle (a panel based furniture system) or a bench - type setting that typically has a minimal screen dividing work settings, or no screen at all. |
| Burolandschaft Fig. 10 | A work setting strategy where furniture is primarily in the open, and positioned based on work processes and relationships of individuals to each other as they relate to work. This was a workplace design strategy that preceded panel based furniture systems as was free-form and organic in its application. |
| Activity – based | A non - hierarchical workplace design strategy where work settings are assigned based on what an individual does rather than who they are. Often individuals change work settings during the course of a day to accommodate a particular work mode they are engaged in. |
| Mobile / distributed | A workplace strategy where workers can work from anywhere: the office, home, a clients office or a café. It also includes the concept where workers can work from anywhere within the facility or at other facilities of the same organization. |

Fig. 11 Workplace Design Strategy Definitions



Fig. 12 Larkin Building, 1906 Frank Lloyd Wright

This view connects the ideology of Scientific Management being proposed with the architecture of this period with its conclusion within these buildings. The ease with which Taylor's Scientific Management was translated into American office design reflected the developmental level of American business after the Second World War, as well as technological advances beyond structural advances first brought to bear in the U.S. with the advent of air conditioned offices. Interior spaces were no longer dependent on workspace locations as close as possible to perimeter walls with operable windows. With sealed curtain walls, the floor plates of these new post war buildings could be deeper and make the open rows of desks seem much more '*natural*.' (VanMeel. 2000). American strategies towards space planning employed what Duffy termed '*number crunching, form filling, mechanical, tied unwittingly to the turn of the century scientific management of Gilbreth and Taylor*.'" Most importantly, there was no interest in examining or understanding the behavioural patterns of the corporate cultures of the organizations that were being designed and

planned. (Duffy. 1998). Additionally, the module controlled the workplace design strategy (Abalos & Herreros. 2003).

This explains many why the Scientific Management or Fordist strategies of workplace design were not that common in Europe. Van Meet attributes this to one of the factors cited above (the European business market not being as well developed at that point in time) and to European business culture not being as '*modern*' and '*rationalized*' as their American counterparts. (VanMeel. 2000). However it was towards the end of zenith of this post war headquarters boom (1958-1968) that strategies towards workplace designs shifted in focus from the U.S. to Europe. Various sociological strains were bearing on the technological advances occurring in American office design. Issues of worker satisfaction and performance, common components of Scientific Management, were being brought to new light through the completed designs of American offices and the beginnings of new office construction in Europe. In Europe, additional factors concerning social welfare policies calling for greater equality among employees, with less emphasis on status and authority along with greater voices by staff on management issues resulted in some very different approaches to workplace design strategies. (Albrecht & Broikos. 2000).

One of the most important of these, and the one that equally had an affect on American office design strategies, was an approach developed by the German management consultancy The Quickborner Team. At the basis of their strategy was the importance of communication among workers. Basing much of their strategy on the management theories of Mayo and McGregor in the United States, they stressed the importance of 'human relations' within the workplace. Information between workers no longer had to take place vertically from boss to worker, but along functional lines. The second component of their strategy was the need for flexibility. They believed that the modern office needed to accommodate rapid organizational change. And the third component was accommodating the

growing needs of information technology. (VanMeel. 2000). This was 1960.

The strategy was based on planning the workplace on the basis of close communication and workflow efficiencies. Private offices were eliminated in favour of better teamwork and staff participation. These planning strategies were fluid, reflecting the webs of networks deriving from work group communication analysis. (Albrecht and Broikos. Eds. 2000). Despite its difficulty in acceptance in the U.S, the strategy resembles some of the strategies being discussed today on network analysis as developed by Karen Stephenson (Stephenson. 2004, 2005). Soon after it's unveiling in Europe, there was much attention in the States regarding the strategy. (Fig. 10. I can remember one of my first projects when I entered the profession in the early 1970's, planning spaces based on this very concept).

This workplace design strategy was known as Burolandschaft (Fig. 10) or office landscaping. The entire basis for the concept was centred on the flow of paper. Workstations were redistributed according to the different way in which paper flowed. The strategy reduced time through reducing travel distances. The strategy was seen as 'temporal' in that every time a change in paper flow occurred, a change in layout occurred accordingly. The primary goal according to its creators was versatility. (Abalos and Herreros. 2003). Its strength as a strategy was that it depended, according to Duffy, on what actually happens in the office and not on what people think happens. (Duffy. 1998). However, while it intrigued many American design firms, it was also controversial. (Albrecht and Broikos. Eds. 2003).

Part of the criticism in the US revolved around the lack of privacy, noise distractions and, probably more to the point, its lack of status through the elimination of private offices. While open office workspaces were common in American workplaces, these spaces were reserved for clerical and

administrative workers. Managers still had private offices. (ibid). Even Duffy, who had originally written of its merits when originally unveiled in the 1960's, found Burolandschaft to be lacking in a piece written in 1975 (Duffy. 1998).

Duffy's assessment and concerns with the office landscaping strategy can be viewed as an early critique of many of the current approaches to workplace design strategies. The packaging of workplace strategies is a consistent theme in the executions of all of the workplace strategies later discussed and involves the managing of meaning on the part of those implementing these strategies, but also serves to create the environment within the design profession for an absence of critical thinking and evaluation. But in its non-Fordist approach to office planning, Duffy also points to Burolandschaft's reliance on scientific management thinking as it incorporated planning concepts maximizing organizational communications and systems thinking. (Duffy. 1998.).

While office landscaping did not gain momentum in the U.S., a reworked form did. (Albrecht and Broikos. Eds. 2000). Workplace design strategies took on the form of a more orderly approach to office landscaping (often referred to as open plan, Fig. 13). Another factor during the 1970's that sifted attention away from office landscaping and towards a more 'rational' rigid approach was the increased use and reliance of technology.



Fig. 13 Open Plan Work Settings

What did catch on in America was the notion that through the adoption of an open work environment based on rows of furniture based workstations, less space was being used than in the more conventional office based strategies. Additionally, these office landscapes were cheaper to construct and to rearrange. However once technology drove the need for increased wiring, rearranging of workstations became less of an issue. (ibid). Over the next decade, as open plan offices caught on in popularity, driven not by Burolandschaft's workflow strategies but for reductions in real estate costs, the workplace design strategies became increasingly focused on regimented ranks of cubicles. (ibid).

The 1970's, according to Russell, witnessed the beginnings of two divergent workplace design strategy directions. First was the separation between American and European strategies and the second being the awareness on the part of American facilities managers that the office facility was a profit making asset that should be focused on resale or sublease. As a result, the focus shifted from designing and constructing buildings that reflected specific corporate values or enabled work

processes, but on creating facilities that were generic based for maximum resale appeal and which could be produced at the lowest cost to ensure greater profit. It was the 'dumbing down' of workplace design strategies. (ibid). However, this also created an interesting dichotomy. On the one hand, the strategy of adopting an open plan work environment would result in reduced real estate costs, but on the other hand the firmly rooted belief in the American workplace of entitlement regarding workspace allocations was a direct though rarely acknowledged contradiction that resulted in the use of greater amounts of real estate.

The divergent views between American and European organizations focused on the European strategy of window access and fresh non – conditioned air. This led to a far more robust and innovative approach to workplace design strategies on the part of Europeans. (ibid.) Another fundamental difference centred on the areas of entitlement discussed above. Real estate was from the start, a far greater expense in Europe than in the US. As a result, Europeans confronted the need for occupying as little real estate as possible while accommodating the needs of its workforce. An overall acceptance of the realities of real estate costs and the need for organizations to minimize real estate costs also resulted in less belief in individual entitlement when it came to workspace designations than with their American counterparts.

The 1980's in America saw very little innovation in the use of workplace design strategies. It was a period spent primarily in refining open plan workstations, making them more efficient and more capable in transferring the overwhelming quantities of cabling required to enable the technology that was becoming a dominant force in the workplace. Workstation panels went from mobile easily assembled and resembled furniture components to wire laden fixed components that became inflexible through the cost of not only moving panels, but disconnecting and reconnecting wiring and all of the infrastructure construction associated with this endeavour. These interconnected workstations were based on a

computerized network rather than organizational networks and in fact were planned regardless of the actual networks based on flows of information (Abalos and Herreros. 2003). All of this coincided with the managerial theories prevalent within businesses. A pivotal component of this was the massive downsizing of organizations and the move to downsize. (Albrecht and Broikos. Eds. 2000). The theories of Edwards Demming and the early writings of Tom Peters along with Michael Hammers 'reengineering' theories further eroded the view and perceptions of the value of workplace design strategies. Rather than use this point in time of economic downturn as an opportunity to make the workplace enable business through being both efficient and effective, efficiencies won out as a means of implementing this 'reengineering. '

By the late 80's however, a convergence of writings and trends began to affect many organizations use of workplace design strategies. There was the research of certain workplace design strategists such as Michael Brill and his organization BOTSI (Buffalo Organization for Social and Technological Innovation), Franklin Becker of Cornell University's Workplace Studies Program and probably most importantly, Francis Duffy and his London based firm DEGW. (ibid). These individuals and their organizations brought new and innovative thinking and research about the use of the workplace and design strategies to the forefront of a design industry that prior to this time primarily focused on creating so-called well designed image laden containers for efficient and downsized workplaces. There were also a group of business organizations that seized on this research as opportunities to rethink their approach to the workplace. For the first time since Taylor and Scientific Management, there was a body of research available and strategic thinking that could be applied to workplace design strategies.

At the same time, certain macro business conditions created the timely environment for businesses to assess their use of the workplace and be influenced by this research. These conditions included the accelerated

ability of organizations to use technology far differently than ever before: primarily in the use of the Internet and wireless technology. The growth of the internet created an influx of start up businesses based on a whole new way of engaging customers and clients, thus seeing a phenomenal amount of instantaneous businesses being created (the '. com boom). Wireless technology allowed for certain designers and businesses to envision a workplace where workspaces needed to no longer be tethered to a panel system. Work could occur anywhere within and outside of the workplace. Coupled with this new technology and start up growth and growth within existing organizations taking advantage of this new technology was the need to create 'places' for a vast quantity of people to work. Along with this came the need to attract and retain these individuals. But along with this period of extraordinary growth came the realization to minimize costs through the use of real estate holdings. Duffy discusses the conflict between an organizations internal organizational factors and external real estate forces. It points to the situation in the U.S. where despite what he terms 'the enormous fertility in organizational ideas, external real estate factors have tended to dominate' workplace strategies. Business organizations have viewed buildings as commodities over objects of use (Duffy. 1998.). This is not surprising considering a report by the Brookings Institute, a Washington D.C. based think tank. The report, focusing on intangible sources of value within business organizations clearly makes the case that it is indeed sources derived from intangibles that contribute the most to creating value. The report goes into great detail to address the shifting perceptions regarding physical assets such as office buildings as having increasingly little or marginal value whereas intangible assets such as knowledge are the real drivers of economic growth. (Blair and Wallman. 2000.). The report further states: *"Human investments have come to be seen by many corporate executives as a source of competitive advantage, and research over the last 10-15 years confirms that investments in innovative work practices...in areas such as training, job design, selection, staffing,*

employee involvement, labour management cooperation and incentive compensation positively impacts firm performance.” (ibid)

This is a theme that extended from this period on through the next economic downturn following both 9/11 and the .com bust. Again, the convergence of these two factors of growth and minimizing real estate portfolios created the possibilities for new forms of workplace strategies to be developed and embraced by many organizations. From the published research it is difficult to ascertain if these workplace design strategies were being implemented for what they could potentially contribute to enabling an organizations business, or if reducing real estate costs was the driver. Were those more forward-thinking forms of workplace design strategies a way of reducing real estate costs while hopefully enabling secondary needs of a growing knowledge based workforce through attraction and retention. This research has shown that of those organizations adopting these new forms of workplace design strategies, cost was the driver and that without it's cost effectiveness, these strategies may well have never been adopted.

Among the research and ensuing workplace strategies that evolved during this period, has been the research of Francis Duffy and his colleagues at DEGW. It started with Duffy's pivotal doctoral dissertation at Princeton (Duffy. 1974) that examined the relationship between the physical environment, the office layout, social groups within organizations, and the office organization. From that research came an understanding of the connections between the workplace and organization, the need to integrate research into design methodology and a means of analysis that positioned workplace design strategies in a new context for design and business organizations through the use of a model developed by Duffy that distinguishes between the types of business organizations such as highly bureaucratic and highly interactive; and highly bureaucratic but low in interaction. This thesis developed into an analytical model that proved highly effective and influential in analyzing organizations and making that

elusive connection between workplace design strategies and organizational design.

With this as a backdrop, the workplace design strategies that evolved extend to a broad spectrum ranging from the 'conventional' or open plan approach, to conventional with components of what could be described as innovative approaches, to the more radical of which 'alternative workplace strategies' (AWS) (Fig 14) would be a primary example. What remains the most critical influences on workplace design strategies are in the areas of the ever present need to minimize costs; the influence of knowledge workers as the base of the workforce; and technology. Whether acknowledged, intended or not, these factors all play in varying



Fig. 14 AWS (Alternative Workplace Strategy)

degrees depending on the organization, on an organizations approach to workplace design strategies .

As the realization that knowledge workers formed the competitive mainstay of current organizations, issues involving the type of workplace design strategies that would enable this form of worker, along with of environments that would support HR efforts in worker attraction and retention, led to new emphasis on organizational culture as a basis for much of the workplace design strategies. Beginning with the .coms where

offices employed widespread use of open plan workspaces with lower than usual partitions, amenity spaces became synonymous with cultural branding. All of these offices employed large, primarily open 'Starbucks' types of café, catering to a workforce that went beyond the traditional nine to five workday. Some also included play areas, incorporating such features as rock climbing walls and foosball games. All of this was an attempt to both define a culture and encourage long hours of dedicated work. Yet for all of its reliance on creating a culture through its architecture, most of these design strategies failed to connect in any meaningful way to an organizations' business model or design. In many respects, designing for a specific branding or visual culture was a substitute for designing for the primary purpose of creating form. This represented a more substantial attempt at connecting to the substance of an organization, but was a distant attempt from meaningful connectivity and had similar overtones to Leach's anaesthetics of architecture, where the former preoccupation of form over meaningful solutions as the focus of design was replaced with the symbolic coffee bar. In a way, it is also reminiscent of Duffy's concern over the so-called packaging of office landscaping.

Technology, and wireless communication enabled another important area of workplace design strategies. Termed 'alternative working' or 'alternative workplace strategies,' these initiatives focused on employing technology to enable mobile working. It began as 'hoteling' or 'hot desking' where office space no longer designated for workers, but was provided on an 'as needed' basis. Workers would report to an office concierge, much like in a hotel (thus the term 'hoteling') where a workspace would be assigned. One of the first instances of this, and probably the best reported were for the California based advertising agency Chiat/Day (fig. 15). Hoteling strategies were adopted in both their Venice California and New York facilities, but were abandoned within a year (Albrecht and Broikos. 2000). In its truest forms, these strategies rely partially on changes to the

perceptions of what work is and where work actually takes place. It offers challenges to the predominate view of office planning strategies (Abalos and Herreros. 2003) while providing a profound change in work patterns, the use of offices and real estate, as well as the first substantial challenge to scientific management as a basis of workplace design strategies. For those organizations that have adopted this form of strategy, it also provides substantial savings in real estate costs, a criteria not lost on those organizations that participated in this research.



Fig. 15 Chiat / Day Advertising, 1994 Gaetano Pesce

Workplace strategies in Europe, displayed similarities and differences. Adoption of Taylorist mythologies was less prevalent in Europe than in the U.S. Construction of new headquarters facilities, which formed the basis of much of the strategies in American workplace thinking, had occurred earlier in the U.S. than in Europe, due in part to economic conditions in both regions following the second world war. Governmental legislation and worker rights were also a greater source of influence in Europe than in America. Focusing on the UK which is part of the basis of field study analysis in the organizations examined, some important defining characteristics to note involve the fact that while modern UK office design revolved around a building infrastructure similar to that of the U.S.

(VanMeel. 2000), reliance on open planning strategies of various types was pursued more aggressively in the U.K.

In a paper published in a Cisco case study book entitled *Connected Real Estate*, Frank Duffy points to experiments in the European workplace strategy of *Burolandschaft* as being the first departure in Europe from the dominant American model of workplace strategies. (Duffy. 2007). A research study conducted by Barber, Laing and Simeone, and published in the *Journal of Corporate Real Estate* provides some statistics that help define some of the subtle differences in approach and acceptance of certain workplace design strategies. The paper cites the universal pressure on organizations to reduce real estate costs along with the changing nature of work and technology infrastructures as making new ways of working more feasible than ever before (Barber, Laing and Simeone. 2005). In comparing the average square footage allocated by level of worker between the U.S. and Europe, the shifts to lower quantities is greater in Europe, primarily at the professional level. In the U.S. there was a one percent change downward, compared with ten percent in Europe. Similar results appear with technical staff (3% in the U.S. and 11% in Europe); Administrative staff (2% in the U.S. and 12% in Europe); and with secretarial staff (4% in the U.S. and 11% in Europe). Again, while the trends are similar, the percentages of acceptance differ regarding adopting emerging work styles. In the area of telecommuting, the research shows over 50% adoption rates in Europe, compared to under 30% in the U.S. Hoteling figures for Europe are 34% while their American counterparts report under 10% adoption. The areas of collaboration are closer, with European adoption leading at 55% and the U.S. at 38%. All of these statistics are for 2008. (ibid).

Many of these factors (the unacknowledged relationship between Taylorism and Modern Architecture; and the edging out of IBM's Watson from design decisions and his replacement with the first facilities management group) have all contributed to affecting perceptions. They

are for the most part results of unintended consequences, a factor of Structuration discussed in Chapter 4 and used to analyze the study organizations in Chapter 6. Important to this research is that this review begins to uncover a view of factors informing perceptions of workplace design strategies that for the most part have not previously been recognized and which form the focus of this thesis.

Within this survey of the evolution of workplace design strategies, the next step is to examine it's affect on workplace design. Much of the literature on workplace design falls into three categories: photojournalism, process of workplace design and strategies, or making the case for connecting workplace design to business objectives. From the previous section on workplace design strategies, there is often a blur between those works focusing on the design of the workplace and the strategies that these works represent. These works include a wide array of photo essays with such titles as *New Offices* (Montes. 2003); *The 21st Century Office* (Myerson and Ross. 2003); *The Office: Designing for Success* (Crafti. 2004); and *New Workplaces For New Work Styles* (Zelinsky. 1998). They focus on the assumption that offices designed in a certain way will assist in transforming office culture and management styles. They do not connect the changes brought about to the office through office design with changes in organizational design. They take the position that creating innovative workplaces that foster creativity, interaction and new modes of working through the actual physical design of office space, will lead to transformation of work practices for the most part without any evidence being submitted. The absence of any correlation between organizational design and workplace design in the organizational design texts is mirrored here in the design texts. Nowhere is the connection made that there may be a need for organizational transformation beyond the efforts of workplace design in order to achieve success. It is as if the notion of organizational change does not exist within the lexicon of workplace strategy writing. The converse is also true where within the literature field

of organizational design one comes away with the impression that organizational design exists within a vacuum rather than within a workplace setting. Enormous power is given to the role of design in creating workplace transformation. As made famous in the movie *Field of Dreams*, 'if you build it, they will come' seems to embody an attitude on the part of the design profession that discounts participation of other areas of organizational design in creating this transformation. Part of perceptions here includes those of the design professional and its effect on both workplace design strategy formation and on developing client perceptions. Nor do they question if the client shares these perceptions and beliefs.

A number of works attempt to state the case of workplace design as being fundamental to business or organizational strategy. Dr. Susanne Knitel-Ammerschusber's *Architecture: The Element of Success* (Knitel-Ammerschusber. 2006) makes the important linkages between corporate architecture and business objectives. In one of the few works that goes beyond just connecting corporate culture to workplace design, she makes use of actual case studies to demonstrate how architecture and workplace design strategies should be linked. She cites a study conducted in 1998 and 1999 in Germany that developed four theories of integrating corporate architecture into corporate management (which is the reverse of what many of the works on workplace design strategies attempt to do, where the linkages are on integrating corporate management into corporate architecture). These core theories focus on:

1. Corporate architecture is itself not an element in management methods, but it can serve as an indication for their successful implementation.
2. Corporate architecture does not implement management methods per se, but in many areas it can serve as a tool for their implementation.

3. Together with subordinate design parameters, the four design fields derived from management methods (people, structure, system and style) display interfaces with the design fields and parameters derived from corporate architecture and should consequently be considered in relation to one another.
4. If corporate architecture is to effectively support the management methods in question, it must be viewed as an integral element of company management and be given a methodological foundation.

(Knitel-Ammerschusber. 2006. Pg 27).

My study further shows the gaps in thinking by business organizations as it relates to workplace design strategies. As discussed later in this chapter, works by Galbraith (1995) and Nadler and Tuschman (1997) use similar theoretical management methods to explain organizational design methodologies, but fail to make the connections in Knitel-Ammerschusber's work. Putting the methods described into practice, Knitel-Ammerschusber describes this methodology as "management by architecture." She frames this method as a strategic tool for an organization's management, linking it to corporate culture and strategic objectives from the start of a project and continuing through its translation into the actual act of architecture. (Knitel-Ammerschusber. 2006.). She uses this to offer the perspective that this management by architecture methodology has the advantage of being well suited to both architecture and business administration, pointing to the similarities of linguistic parallels within both fields (ibid.; see also Levin. 2001). 'Management by architecture' is an architectural tool that Knitel-Ammerschusber defines as a methodology to enable both the architect and the business organization to define project objectives, and analyze management methods enabling the architect to develop conceptual parallels between corporate

management and architecture, resulting in designs that are based on these same parallels (Knitel-Ammercusber. 2006).

David Hansen's *Reshaping Corporate Culture* (2005) is more typical of a genre of architecture/workplace design works that make the case for architecture shaping or reshaping the cultural aspect of an organization through visual and planning principles. The author, the architect of the works described in the book, describes his firm's design process for formulating design strategies as being 'immersed' into the culture and vision of the organization for which they are designing. He cites 'listening and observing specific strategic goals' as being fundamental to generating '*uncommon solutions*' (Hansen. 2005). It is an approach echoed through the book, using as examples many corporate headquarters projects, but not defining in any more specific or analytical terms the methodologies or the corporate strategies being designed for. This in no way suggests that these goals have not been attained (indeed, various quotes from the actual clients of these projects attest to this success: "*David's guidance and concern for the total workplace environment created an office workplace that has resulted in achieving our organizational goals in recruitment, employee productivity, retention and our ability to change and grow with our customers.*" (Hansen. 2005.) but as a work on reshaping corporate culture, the examples and cases cited rely primarily on the visual, and do not dive into those organizational strategies or the organizational dynamics of the occupiers. It in fact continues a tradition within the literature of workplace design and corporate architecture of relying on views or perceptions of both stakeholders (designer and client), not focusing on what shapes those perceptions and what the results of those perceptions can affect.

Various works by members of the DEGW organization focus on the role of workplace design as facilitators of workplace transformation. The workplace designs of DEGW (*Design for Change: The Architecture of DEGW*) are used to illustrate the role of design to support organizational

change and transformation. This work and especially *Architectural Knowledge* (Duffy. 1998) represent one of the few bodies of work that connect workplace strategy to organizational change. The projects illustrated, and the writings of the firm's principals support the theory that the role of workplace design goes beyond the aesthetic and is in fact an enabler of organizational strategy if used in the correct way. The book limits the agenda for strategic workplace making to organizational change and transformation and again is focused solely on the role of workplace design.

The Changing Workplace (Duffy; 1992) supports the premise that the use of the office, and the way in which it is perceived by organizations, reflects society's view of the workplace, that offices are statements of beliefs, even when that function is not the stated objective. The book examines the systems of organizations and the characteristics that need to be considered as part of workplace design. A question that could be posed would be if offices are statements of beliefs, how does this then relate to the client's perceptions?

A collection of papers in *Reinventing the Workplace* (Worthington; 1997) discusses the role of the workplace within the context of organizations and the need to provide an integrated workplace strategy that will positively influence existing and future spatial requirements. Drivers of workplace strategies that are reviewed are the need to create space efficiency and to affect organizational change. Like most works on this subject, the papers' central theme relies on the effects of workplace design as facilitators of transformation and not as facilitators of business strategies where transformation is not the desired outcome.

'Process Architecture' is a term used in *Excellence by Design* (Horgen, et al; 1999) to redefine the processes needed to be employed by designers to successfully make use of the workplace as a tool for business transformation. Process architecture is an attempt to rethink the dynamic

relationship between work processes and the spatial, technological, financial and organizational environment of the business organization where these processes occur. The book's premise is that design has more potential than has been exhibited in the way it has been and is currently being practiced. The authors suggest that design is both poorly utilized and highly underutilized. Design is about more than building physical space. It is a four-part process that begins with awareness of the business problem, understanding underlying business conditions, and the subsequent development of new work environments. The work concentrates on what 'should be' and adds to the already available literature that makes the case for a connection between the design of the workplace and the business organization. It makes the connection between business conditions and workplace design but does not touch on the issue of perceptions and why individuals within business organizations perceive workplace design in certain ways, often to the wonder of the design profession.

Strategy & Place (O'Mara; 1999) looks at the correlation between real estate utilization and business strategy. As with other similar works on the subject, the book goes into the two primary mindsets that are options in working with an organizations real estate or workplace strategies: the 'facilities mindset' where minimizing cost and reducing direct occupancy costs are the primary driver; and the '*strategic mindset*' that acknowledges the need for real estate and facility decisions to be made within the context of what the organization does to compete and succeed in their respective market place. Mindsets are perceptions and often the product of one's worldview, and therefore understanding the nature of these mindsets and how it affects the positioning of workplace design strategies, is central to the objectives of my research.

Two works by Jacqueline Vischer go on to discuss workplace strategies as facilitators for workplace change. Strategic Workplace Planning (Vischer; 1995) calls for a strategic mindset in planning the workplace, in

place of the conventional view of the workplace as a source for reducing overhead. This view reflects the move of business processes within the workplace from production work to knowledge work (tangible assets to intangible assets). The effect of this change in work processes leads to changes in the way facilities should be valued. When offices are no longer dependent on fixed equipment costs or tangible products, quantifying the effect of the workplace on knowledge work becomes problematic. This dilemma between the value of design approaches and defining just where the value of the physical workplace resides is reinforced in the Brookings Report (Blair, et al. 2000) on the value of intangible assets. This work explores the context of this workplace problem (defining value of workplace design in a time when tangible assets are diminishing in value to the organization, and intangible assets as seen through employees and work processes are the focus of organizational value), and establishes strategies in the framework of information technology, which possesses similar valuing problems: some view it as strategy, others as a cost.

The struggle by the design community to develop methods of quantifying results of successful workplace design initiatives, and the constant question of whether the workforce within business organizations perceives the workplace as a tangible or intangible asset further supports the need for the direction my research is taking. Within the framework of those texts that do not simply assume that 'well-designed' office interiors support business goals, but attempt to demonstrate the value of appropriate workplace design strategies, the conflict of purported value and occupier or client perceptions that need to be changed is an underlying issue but rarely if at all discussed and researched. What these works do not address or openly acknowledge, but nevertheless contain undercurrents of problems yet to be resolved, is the fact that workplace design strategies are continually coming up against perceptions by clients as to the value of these workplace design strategies in regards to productivity and cost. The critical issues of the causes of these

perceptions are never addressed. They simply assume that design initiatives will change these perceptions by the wisdom and justness of their correctness. Many of these works should reference back to the previously mentioned Brookings Institute report to better understand the underpinnings of these perceptions.

Workplace Strategies: Environment as a Tool for Work (Vischer; 1996) elaborates on the author's ideas expressed in her previously cited paper. It places the problems of workplace strategies faced today in its historical context by reviewing the affect Taylorist theories have had on modern office design and perceptions. The author's premise is that there is a relationship between the organization and its physical environment, and that the workplace is a pivotal component of these organizations' strengths, goals and successes. An interesting fact explored in this book is a discussion of the detrimental affect poor office space can have on the organization, but does not offer any research-based support of this theory. This raises another factor to be explored with my research: looking at case studies to examine if perceptions exist within organizations that support this stated relationship. A recent article in the Financial Times (Donkin; 2005) raises questions on this potentially discomforting phenomenon: does a so-called well-designed space actually have benefits to the organization. The article cites the work of Warren Bennis and Patricia Ward Biederman (*Organizing Genius, the Secrets of Creative Collaboration. 1997.*) who studied start up successful organizations such as Microsoft and Apple, all of whom began in the worst of workplace conditions: garages. The issues raised by these hypotheses are also revealed in the results of my field interviews, (see Section B). The question raised by this is what effect perceptions have on the value of the workplace within the context of business organizations, and how do these perceptions shape strategies on workplace design.

In summary, these works attempt to state the case for workplace design being a critical part of the business organization, but fall short of going

into the areas of whether organizations actually share these same perceptions. The built examples that are cited give the appearance of buy-in and support of this view, but is this actually the case? Is what actually is designed, and the rationale of the designer for developing a specific design strategy perceived in the same manner by the occupant? Further, where in all of the literature on workplace design is the empirical research on the components of workplace strategies that connect to the business. Many of the works successfully make the connection to workplace supporting organizational culture and indeed changes or transformation to organizational culture. They focus on the physical areas of collaboration but by limiting the linkages of workplace strategies to cultural transformation, workplace design strategies are relegated to associations with aesthetics and not to more fundamental areas of organizational design.

2.15 Strategy

The discussion of strategy as it pertains to this study falls into two categories: strategy as it relates to formulating specific workplace design strategies (which I review in greater detail in Chapter 3) and the role of workplace design strategies within the context of organizational strategy. The review of literature on workplace design strategies ignores discussion on what strategy specifically is, failing to recognize the various schools of strategic thought. In discussions on relating workplace design strategies to the broader context of organizations, they equally fail to acknowledge the various schools of strategy thinking and definition and therefore limit their ability to understand the organizational context within which workplace design strategies can operate and more importantly, play a contributing role.

Ignoring this aspect of strategy and strategy making also leaves the impression that strategy is fixed and absolute in nature, and therefore as it

relates to workplace design strategies, the choice of any strategy is fixed and intransigent. This in and of itself, creates some of the negative influences on decision making and therefore influences perceptions of not only the role of workplace design strategies within the organizations, but the choices regarding workplace design strategies.

Contrasting this perception is Mintzberg's, Ahlstrand's and Lampel's Strategy Safari (Mintzberg, et.al. 1998) which examines the complexities of strategy and strategic management, breaking down the areas into the various schools of thought: The Design School, The Planning School, The Positioning School, The Entrepreneurial School, The Cognitive School, The Learning School, The Power School, The Environmental School and The Configuration School (ibid). The lesson that this work offers is that the greatest failing of strategic management occurs when managers take any one of these schools too seriously (ibid.). The authors offer the view that strategy making and formulation is judgemental designing, intuitive visioning and emergent learning; and that it is about transformation as well as perpetuation (ibid.). They acknowledge the roles of what they term cooperation as well as conflict along with individual cognition and social interaction. Most critical to the views of workplace design strategies within this study, they find strategy formulation to require analyzing before and after as well as negotiating during the process (ibid.). All of this suggests a strategy making process that not only takes into consideration the various schools of strategy thinking and the contexts within the organizations where they reside, but that strategy making is a more fluid process than some of the texts on strategy may suggest. This is an area where the texts on workplace design strategy fail to go, and an area, which if the linkages were to be made, would place thinking on workplace design strategies well within a different context.

Supporting Mintzberg's view that strategy is more of a pattern or stream of both major and minor decisions about an organizations possible future areas of influence, Miles and Snow (Miles and Snow 2003) see strategy

decision making as taking on meaning within the organization only as these strategy decisions are implemented through an organizations structure and processes. They purport that an organizations strategy is best viewed through its behaviour and that one can conceptually associate strategy with intent, and structure with action (ibid. pg 7). Workplace design is a clear lens through which to view both organizational intent and organizational action.

Another view of the multiple perspectives of strategy and strategy formulation is discussed by Richard Whittington in *What is Strategy?* (Whittington. 2001). Whittington's work reviews what he terms four generic approaches to strategy: the classical approach relying on rational planning methodologies; the evolutionary approach drawing on metaphors of biological evolution by substituting market disciplines for 'laws of the jungle;' the processualist approach emphasising that strategy needs to be accommodated to the fallible processes of both organizations and markets; and the systemic approach linking strategy to the cultures and power structures of the environment in which it takes place (ibid. pg. 2). As with the previously cited work of Mintzberg et al (1998), this work demonstrates the varied views of strategy making and the differing implications of each not only in terms of processes, but in terms of ramifications for the business environments within which they are being formulated to work.

An example Whittington uses is the micro political view of organizations (Whittington. 2001) established by the Carnegie School, part of the processualist approach. This school of thought recognizes the individual's interests being represented by the business enterprise and that firms are not united in optimizing a single utility such as profit, but rather there exist coalitions of individuals each bringing their own perspective and objectives as well as cognitive biases to the organization (ibid.). One can use this to analyse certain strategy decisions regarding workplace design strategies where individual expectations, biases and perceptions affect

that process. In contrast to this approach is the classical perspective, where existing structures of the organization are taken for granted, and the focus of analysis is on market factors, downplaying the relevance of social, cultural and political demands of the organization (ibid.). In the business organizations studied in this research, one can see the conflict between the classical approach to strategy development in theory vs. the processualist approach in application. In viewing workplace design strategy development this absence of critical understanding of the differing strategy perspectives harms both the ability to assess the best strategic approach as well as to place an appropriate workplace design strategy in context with the realities of the business environment in which it is attempting to reside. Whittington concludes his discussion by certifying that what one thinks strategy is does indeed matter and that being clear about ones underlying perspectives of strategy will make these strategies more coherent and effective (ibid).

2.16 Decision-making, the role of perception + power within organizations

In examining the role of physical space and perceptions, especially as it relates to decision making, Gustafsson's paper on Organizations and Physical Space (Clegg and Kornberger, Eds. 2006) points to the fact that the role of physical settings affects the process of how an organization is shaped and ultimately to how it affects perceptions (ibid.). She identifies perception as a general term used to describe the whole process of how we come to know what is going on around us, and that physical space contributes to this through being experienced as a series of events and physical stimuli in contrast to the phenomenological experiencing of it (ibid.).

While the focus of this research is workplace design strategies within organizations, the ways in which decisions concerning workplace design

strategies are made by those individuals closest to and most responsible for implementing those decisions, is a critical component. Equally, how these decisions are influenced potentially by perceptions of those in these roles is also a fundamental issue that is explored in this research.

Klein in *Sources of Power* (Klein. 1999) looks at how decisions are made, the factors influencing decision-making and why in spite of individuals best intentions, poor decision are often made. As it pertains to this research, much of the decision-making involving workplace design strategies have been made with minimal or no empirical research, or evidence other than a financial analysis. Therefore it could be inferred that workplace design decisions are based on perception and or intuition. Klein assigns this level of decision-making as being a response to one's impression that individuals form based on a plan or strategy being successful or not successful based on how similar instances have worked in the past, whether they were successful or problematic, and that intuition results in a form of emotional reaction or optimism or pessimism (Klein. 1999.).

Klein also formulates the hypotheses that many poor decisions are the result of bias. That is, individuals are inherently biased, and therefore will misconstrue evidence. His hypothesis is based on a research strategy which Klein refers to as '*the heuristics and biases paradigm.*' (Klein. 1999). Klein further offers an example of a primary bias being the '*confirmation biases*' where one searches for information that confirms the original biases or perception even though one learns more by researching evidence that might dispute this (Klein. 1999.). An example of this in the research study groups is where *US Manufacturing Company* formed the belief that initiating a workplace design strategy was not necessary since in spite of poor financial times (this being the case at the time of this study's interviews) the organization has remained profitable and they have had no problems in hiring individuals they deemed to be the 'best and the brightest.' Brunson's

In his research, Klein identifies a set of some twenty-five decisions that resulted in errors. He places the errors in three categories: lack of experience; lack of information; mental simulation (decision-makers noticing the signs of a problem but explaining it away). This is also an error of decision-making that is captured in Diane Vaughan's work on researching the Challenger disaster (Vaughan. 1996). Klein points to the resulting problems of decision makers too easily dismissing evidence that is difficult or inconvenient (Klein. 1999.). Again, with this research one can identify instances of each of the three categories within the decision-making processes of the research groups.

The final area that Klein discusses is the role of superstition in the decision making process (an area not readily discussed in much of the literature on business decision making). He sees the difficulty of individuals and organizations inability to learn from experience or what he terms as the clear link between cause and effect, as being one of the more troubling results of errors in the decision making process (Klein. 1999.). Choices and decisions are often the result of what Klein terms acts of faith, rumour and precedent. Faith and precedent are most relevant to this research, in that much of the decision making on the part of the study groups, even with those that highly value work place design strategies are the result of precedent. Klein references corporations adopting business fads to build morale or increase motivation without substantiated evidence that these initiatives will indeed work. While superstition is typically only attributed to primitive cultures, Klein likens these superstitions or rituals as being a direct result of decision making without acknowledging cause and effect (Klein. 1999).

One's perceptions of reality, which subsequently influence decision-making, is a theme referenced by Drummond (Drummond. 2001.). The result of this bias is decisions being made in the face of what is real, passing the decision maker by (ibid.). He cites as an example of this lack

of foresight resulting in bias, IBM hanging on to the mainframe in spite of Apple's introduction of the personal computer (ibid.).

In order to preserve the status quo, or what to some decision makers is business continuity, these biases are used to affect perceptions, which in turn affect decisions (ibid.). This difficulty to face the future and the change that it implies creates the situation where the longer time goes by, the more expensive it becomes to initiate change, thereby resulting in no change being made and strategies adopted that continue the status quo (ibid.). Any objective view of the past being beneficial in the decision making process is fallacy and based on this biased perception (ibid.). This need to preserve the status quo, or to perceive it as the best strategic decision, is rooted in organizations complacency resulting in part from rules and procedures that exist within many businesses (ibid.).

As the instances facing business organizations in making decisions regarding workplace design strategies touches often on untested strategies, the ability to ask the right questions in pursuit of the correct answers leading to the best strategies becomes critical. Drummond argues that we are most at risk of failing to make the best strategic decision when perceptions are anchored in the past (ibid.). In the face of a spectrum of workplace design strategies that are devoid of empirical evidence, uncertainty exists as an informer of perceptions, which in turn influence decisions to avoid those strategies that may create uncertain results. Many organizations attempt or avoid uncertainty rather than accept uncertainty as potentially unavoidable (Pfeffer and Salancik. 2003.). As a result, many organizations seek to create more stable and predictable environments (ibid), far from the irrationality Brunson discusses (1982).

This is all too evident in my research though almost all the cases, those acknowledging negligible as well as high value in workplace design strategies. The contention of this research is that the evidence infers that

decisions regarding workplace design strategies have largely been made without any substantiated evidence based research, and that this can be attributed to all parties within the supply chain (client and consultant alike).

The way that wrong decisions are made in the face of obvious disaster signals is the normalization of deviance. Vaughan cites the Challenger disaster as the ultimate example of the normalization of deviance where obvious dangers existed in the design of a component of the space shuttle but which were '*normalized*' as a result of the culture within NASA in spite of the potential risk of monumental disaster (Vaughan. 1996). She points to the role of organizational culture as critical in assessing risk and determining a course of action (Vaughan. 1996.). Part of NASA's decision making process involved analyzing potential problems and developing solutions that conformed to a model that '*all was well*' (Vaughan. 1996.). In much the same way, the reluctance on the part of those responsible within the study organizations to make use of empirical data to develop workplace design strategies, relies in a similar way to those of the NASA engineers: the preconceived models of their vision of the workplace, and potential strategies became normalized even without evidence based data. The reliance on workplace standards programs, and strategy decision making based solely on cost analysis created the formalized standardization that became the norm in viewing workplace design strategy decisions in much the same way that Vaughan catalogues the NASA decision making processes as accumulated experience becoming formalized (Vaughan. 1996.). The absence of any formalized strategy development process within the workplace design strategy process may suggest that the current methodology for developing workplace design strategies is a similar form of '*normalization*.'

While much of the research on workplace design strategies has focused on workers behaviour and organizational psychology, little has been done on the motivational factors influencing decision making on the workplace

design strategies impacting workers. Hollway (Hollway. 1991) focuses on areas of knowledge that impact people within the workplace that potentially affect work practices (Hollway. 1991). She references the precedents of research in the human relations arena of organizational behaviour as well as industrial psychology (Hollway. 1991.). Citing the Hawthorne research where work output was a function of the degree of work satisfaction, which in turn is dependent upon the informal social patterns of the work groups (Hollway. 1991.), the focus is on the organizational behaviours of workers, and not on the motivational factors influencing those decision makers that then create the physical environment where these behaviours play out.

Additional motivating factors in decision-making affecting strategy decisions is based on political considerations. Often, political '*adroitness*' holds sway over substantive merits of a particular strategy (Drummond. 2001.). Looking critically at what influences perceptions of specific strategic decisions, Drummond looks at power and self interest as interpreted through organizational politics as being influential (*ibid.*). The role of organizational politics as influencing decision-making can be evidenced through examining one's perceptions of the consequences of the decisions that are the result of certain strategy choices.

The choice of a specific workplace design strategy, or as is the case of some of the study organizations, the decision to adopt no workplace design strategy is in part the result of the perceived consequences of those decisions in relation to ones place within the organization. In other words, while the surface decision making consequence involves the direct result of that specific workplace design strategy (i.e. creating a more collaborative work environment or reinforcing a specific organizational structure) the indirect result of these strategy decisions is more pervasive in terms of ones potential standing (real or perceived) within the organization. That the direct result of a specific workplace design strategy may cause consternation within the organization hierarchy of a business

enterprise and therefore create conflict, is often a mitigating influence on the decision making process.

One's desire to take on or avoid conflict despite potential long-term benefits of certain strategic decisions, is often a powerful influence not acknowledged within the workplace design strategy arena. In fact the role of conflict is rarely taken into consideration in studies of workplace design strategies. Yet dealing with conflict in an organizational context is very much part of the lexicon of everyday business life and decision making. March and Simon view conflict within organizations as arising in three ways: unacceptability, incomparability and uncertainty (March and Simon, 1993). Unacceptability involves the individual knowing the probability of the outcome of an action and acknowledging that it may not be satisfactory to the organization; incomparability is where the individual knows the probability of the outcome but cannot identify a preferred alternative; and uncertainty involves the individual not being able to substantiate or quantify the outcome in terms of connecting behaviour choices and environmental outcomes (*ibid.*). My research suggests that all three factors play a role in the workplace design strategy decision-making process.

Within the role of decision making pertaining to workplace design strategies, because of the often lack of empirical evidence to support a specific strategic direction, the conflict informing the decision-making process is often a perceived one. March and Simon refer to this perceived conflict as a function of the subjective uncertainty of alternatives; the subjective incomparability of alternatives; and the subjective unacceptability of alternatives. They point out that where conflict is perceived, there is a fundamental motivation to reduce conflict (*ibid.*). In the case of conflict arising as a result of workplace design strategy decisions the two ways of reducing conflict are either engaging in a change management program as part of the design strategy initiative, or

avoiding conflict. Each of these plays out within the study organizations that is part of this research.

Another aspect of perceived consequences affecting decision making within organizations is one's control over these perceptions. That is, the mechanisms by which individuals form their expectations of the consequences of their actions (ibid.). Here again March and Simon offer three types of information used by individuals in formulating expectations on the consequences of their actions: the external state of the environment in terms of alternatives; pressure emanating from sub groups within the organization which can result in resistance to certain strategic initiatives; and the internal reward systems used by organizations to encourage behaviours (ibid.). Rewards in the case of workplace design strategies can be seen in terms of individual's perceptions of the role of the workplace as part of entitlement, which I discuss in Chapter 6. A critical component of this, and one, which has great impact on the decision making of workplace design strategies, is this role of organizational rewards. What makes understanding this so important within the context of this study is that this factor is only partially controlled by the organization, yet has profound influence on perceived consequences within that organization (ibid.). Miles and Snow add to this discussion in seeing forces working within organizations against major changes to what is perceived as satisfactory patterns of behaviour and that these forces create what they term as underlying dynamics (Miles and Snow. 2003.).

In their work, Miles and Snow (2003) reference March and Simon's discussion of how individuals make decisions and how these decisions provide a perspective on why constraints on strategy making might occur. Organizational structure and processes evolve to prevent uncertainty as a result of individuals being limited in their capacity to make completely rational decisions (a view diametrically opposite of Brunson's irrationality of action [2002]). As a result, organizations place boundaries around the

areas in which rational decisions are needed (ibid.). The result of this, Miles and Snow conclude, is that by reducing uncertainty, organizations in fact encourage individual decision makers to be parochial in both their perceptions and responsibilities (ibid.) which helps explain the reluctance of many individuals with responsibility to formulate workplace design strategies to engage in more strategic decisions.

The concept of 'bounded rationality' goes to explain why and how individual perceptions of those responsible for making workplace design strategy decisions can differ from one organization to another, especially in light of similarities of constraints (time, costs, work processes) that confront every organization. In other words, faced with the same environmental factors, why do some organizations perceive the value of workplace design strategies while others do not? Bounded rationality takes into consideration the environment within which one works and the decisions one needs to make within the constraints of limited knowledge, time and resources (Gigerenzer and Selten, Eds. 2002).

Whittington connects decision-making to strategy making by discussing how decisions get spread over time rather than being immediate instances, citing Pettigrew who recommends a different vocabulary for thinking about strategy formulation which focuses on strategic change as opposed to strategic choice (Whittington. 2001.). This perspective takes the view that decision-making processes extend over time, which therefore affects the resulting strategy decisions (ibid.). This is part of a discussion Whittington makes on decisions 'happening' resulting from four independent streams of activities coinciding: problems, solutions, participation and choice opportunities (ibid.). This convergence of activities helps explain why decision-making actions are not necessarily the result of isolated specific and easily identifiable moments of action. On the contrary, they can often result from the momentum built off of these converging activities (ibid.; Brunson. 1982). March and Simon reference a '*garbage-can*' theory of decision making, which plays off of a similar

concept of unrelated but available problems, interests, solutions and goals come together to just as garbage cans attract many forms of garbage (March and Simon. 1993).

The role of power affects two areas of this research. Power as a form of control which is the result of these workplace design strategies, and the actual role of power in influencing the decision-making processes of these strategies. Hollway references Foucault's conception of power as never being singular or one-way, never homogeneous or monolithic. (Hollway. 1991.). This is very much in evidence throughout this research where the role and influences of power are sometimes openly infused in the decision-making processes, and also in more subtle and unacknowledged ways. While referencing workers in general as the population of her research, Hollway sees the diversity of the powers and practices available as varying greatly based on the interests of individual workers (Hollway. 1991.), so too one can see how this diversity of interests affects the decisions of those responsible for workplace design strategies.

One of the areas that this research examines through the process of structuration is that the role of physical space, and the workplace in particular does not play a neutral force within the organization. It very much reflects power relationships and control, covering traditional design strategies, as well as non-traditional or alternative workplace strategies. Space very much plays a role in the political aspects of the organization. Chanlat (Clegg and Kornberger, eds. 2006) looks at the organization through the role of the political aspects of space. Discussing work by Crozier and Friedberg in France, organizations are presented as a space of power relationships (ibid.). Their perspective views organizations as political space (ibid). They cite resource dependency theory as an attempt to understand how organizations can insure and maintain control of the resources they need, and resources in this case equate to physical space (ibid.).

An intriguing and very much overlooked view of the role of power and control extending to more progressive or alternative forms of workplace strategies is discussed by Weick (2001). He suggests that those same technologies that take on the form of knowledge and which are the foundation of so-called liberating forms of workplace strategies, provide an effective means of control as they are exerted throughout the organization. These are exhibited through what Weick terms '*unobtrusive*' controls (Weick. 2001) which are as much a form of control as the more obtrusive forms such as rules, regulations and hierarchy.

This new form of control and exertion of power through alternative workplace strategies is also discussed by Dale (2005). With the advent of mobile forms of workplace design strategies, power is no longer solely linked to space and the symbols of architectural forms. It is the actual production process with its emphasis on hyper mobility, global communications and the neutralisation of place where forms of power and control play out (Dale. 2005).

2.17 Gaps in knowledge leading to research objectives

As referenced earlier, this literature review suggests the breadth of areas that have an impact on workplace design strategies, and provides insight to the complexities of this world. So while this complexity suggests a range of areas affecting workplace strategy as well as being affected by it, certain specific gaps are consistent within all of the body of information. The two most fundamental gaps are in the absence of a focus on those individuals within organizations responsible for workplace design strategy decisions (as well as the influences on the decision-making process), and in the apparent lack of critical analysis on both the part of client and designer alike in developing and approving these strategies. Added to this is an absence of critical analysis of the workplace strategy process from

questioning how strategies are developed to the actual strategies that are developed.

Within each of these two areas exist deeper levels of disparities that create further layers of gaps within the body of available knowledge. These two gaps are closely connected in that it is these same individuals responsible for workplace strategy decisions who also do not engage in any formal research as part of the decision making process. In many of these cases, perceptions or views of strategies become the critical factor and are integral to the decision making process. As a result one needs to focus on the role of perceptions on decision making, and if one were to go further, to narrow the research to a discussion of reality, reality being integral to informing ones perceptions. Taking Bhaskar's view of ontological realism being that the natural world exists independently of human intervention and that from the perspective of critical realism events are the effects of underlying causal mechanisms. From this view, reality is regarded as being the product of a deeper structure (Goff. 2000).

Gregg and Kornberger are two of the few researchers to address a part of this. They suggest that decisions are mostly based on money and perceptions (Gregg and Kornberger. 2006). The financial influence is not so much a surprise. It plays a significant influence as supported in the interview data that forms much of the narrative in Part B of my research. However it is in the role of perceptions and the relationship to one's reality to those perceptions that in many ways highlights significant gaps in knowledge. Just how does ones' view or perception of the reality of workplace design strategy affect decisions. The role of how individuals shape their own reality which in turn affects their views of not only workplace design strategy decisions, but whether to engage in any form of workplace design strategy in the first place is an area missing from the literature.

Berger and Luckman suggest in *The Social Construction of Reality* (1967) that reality is socially constructed and that part of the function of the sociology of knowledge is in analyzing the processes in which it occurs. The implications for this research being that individuals form their view of reality and make it real, independent of what might or might not exist. As it pertains to this research, just how design consultants and clients alike make real their perceptions is indeed what forms a crucial part of the workplace design strategy decision process.

These gaps offer significant opportunities for new insight into the way in which strategy perceptions and development occurs. It looks two often overlooked roles that perception plays, particularly as it relates to informing ones reality. My research looks at both the implications of perceptions as informing the world view or reality of those that are charged with workplace design strategy decisions; and at the way in which reality is managed to affect the perceptions of a chosen workplace strategy. The overall objective of this research then, is to examine the role of perceptions in informing workplace design strategy decisions and to further uncover as part of this process, additional meanings to the processes that have for the most part been missing from any discourse on workplace design strategy – making. It is this point that forms the basis of my research question: what are the factors that influence the decision making process of those individuals within business organizations charged with developing and executing workplace strategies.

2.18 Reflections on gaps and research focus

The course and direction of this research has shifted in focus from my initial thoughts on what I was researching, and subsequently what the research question indeed was. I began with the notion that by examining the role of workplace design strategies and decision making on workplace design strategy within business organizations, I would uncover the often

sought holy grail of workplace strategy: evidence to support the value of this endeavour within the business enterprise. What I uncovered instead was the missing link that perception played on both the role of decision making on workplace strategy and on the strategy itself.

I also came to see, particularly through the literature review, that there was very little research conducted in a critical manner on these same factors (workplace design strategies and how decision-making is conducted). This lack of critical examination extends to the discourse on the historical context of these strategies as well. It has been this fundamental absence of critical perspective that I found most lacking and conversely most intriguing in pursuing, and which now forms the basis of my research. This gap in knowledge resulted in the reformulation of my research question: how do the perception of the value or outcome of workplace strategies held by those individuals charged with workplace strategies within their organizations affect decision-making? This then formed the criteria for choosing a research methodology that I will discuss in the following chapter.

3. Methodology

3.1 Introduction

This chapter explores the research methodology used to examine the research question: how do the perceptions of individuals charged with workplace strategies within their organizations affect their decision-making? It looks at the possible methodologies that could be applied in the context of the research question and the goals of this thesis, and discusses their merits and issues and why the selected methodology was chosen. It then goes on to review in greater detail the chosen research methodology, exploring the salient factors of that strategy that will be used to view and analyze the primary and secondary research data. Within the context of the research methodology, the chapter concludes with a discussion of the research group selected as part of the primary research, why and how this group was selected and the structure of the actual interviews.

3.2 Choice of methodologies

I approached the research subject from a qualitative research perspective. This stance is consistent with Creswell's view out that the researcher, in selecting a qualitative approach, would be writing about 'taken – for – granted' interests or perspectives; or write about challenges to prevailing positivist approaches that traditionally have concealed or hidden basic assumptions (Creswell. 1998). Both of these areas form key components of this thesis. The question of perception of value that informs decision making is both an assumption not considered in previous research and to which positive value has usually been assumed when it comes to the area of workplace strategy.

The background of qualitative inquiry goes back to the early 1970's where it arose out of a reformist research movement (Qualitative Inquiry. Schwandt). This form of research is based on a process of having ideas which are conceptualized through a process of abductive reasoning. Starting from the particular phenomena to be researched which then

relates to the broader concept. It involves understanding ones own (the researcher) experience in relation to the research subject as well as to go beyond the data and create an interpretative data framework. Finally it involves examining the interaction between existing ideas, former findings and observations and new ideas (Coffey + Atkinson. 1996). As this relates to my research, I have begun with the research question which I related to the broader concept of decision making, perceptions and strategy; I examined my own experiences and biases based on my being involved as a workplace strategist; then moving beyond the data from the secondary research and the statements from the interviewees to create an interpretative framework; and finally to examine this as a form of interaction between the existing notions on workplace strategy development and decision making, former research; observations from the primary research and new ideas in the form of perception being an important former of decision making.

Finally, qualitative research serves as a means to view the findings of my research in order to develop theoretical ideas about social processes (decision making within business organizations) and cultural forms (organizational culture) that will hopefully have relevance beyond the data collected in the course of this project (ibid). This notion is reinforced by the need to make discoveries and interpretations that will go beyond the surface of the data that evolved from the qualitative research and as cited by Coffey and Atkinson (Coffey + Atkinson. 1996) to interpret this data for potential and hidden meanings that are behind the data.

In considering the many methodologies that fall within the qualitative framework, I used as a metric which of these would best enable me to seek out meaning beyond the stated or obvious and would allow me to uncover those complexities that one encounters in workplace decision making and which ultimately would address the research question.

Phenomenological analysis poses being principally concerned with understanding how the everyday and intersubjective world is constituted, with the aim of grasping how we come to interpret our own and others' actions as meaningful and also to reconstruct the genesis of those objective meanings of action (Qualitative Inquiry. Schwandt. In the Handbook of Qualitative Research. 2000) is a view that could be consistent with the objectives of this research. However I felt that this approach was too limited and did not provide a critical enough lens through which to view and interpret the data from the research.

Ethnography and ethnomethodology are two other frameworks that were under consideration. Ethnography involves an ongoing attempt to place specific encounters, events and understandings into a fuller or more meaningful context (Ethnography and Ethnographic Representation. Tedlock in Handbook of Qualitative Research. 2000). To a certain degree, my research attempts to place the discourse of the interviewees in a broader context involving decision making. Ethnography also is cognizant of the role of the researcher in the process, and to this end, a characteristic form of ethnography involves the ethnographer participating either overtly or covertly in the research subject (Hammersley + Atkinson. 1995). However, the need for ethnographic research to view the subject over a period of time and to be viewed as a continuous process (ibid) did not conform to the research design. The view into the organizations being examined was based on a series of interviews and the data and views generated through those discussions, and placing that information in the context of the secondary research which explores the basis and backgrounds of the issues underlying the research question. The examination of the case study organizations was not over a period of time as would have been suggested by ethnographic research...

Grounded theory was considered in that data collection starts without the formation of an initial theoretical framework and is developed from data

generated by a series of observations (Saunders, Lewis and Thornhill. 2000). That it consists of systematic inductive guidelines for collecting and analyzing data to build middle range theoretical frameworks that explain the collected data (Grounded Theory. Charmaz. Handbook of Qualitative Research. 2000) is inconsistent with the research design. While grounded research does not have to fit into preconceived standardized codes but relies on the researchers interpretations of data that shape the research (ibid), similar to the approach of this research , its reliance on both the interviewer and interviewee, the coding processes, memo writing to construct conceptual analysis all were inconsistent with my design.

Finally, I examined Socio-Technical Systems Theory which has many parallels with the goals and objectives of this research. This is a methodology associated with Eric Trist (among others) and the Tavistock Institute. It concerns itself with a methodology that uses organizational design intervention in terms of self regulating work groups (Appelbaum. 1997). Systems theory provides a framework for organizational change in regard to technology and involves self-regulating work groups. (ibid). It is considered synonymous with the design of work and the involvement of employees (ibid.). The premise of ST is that an organization or a work unit is a combination of social and technical parts and that it is open to its environment. Since the social and technical element must work together to accomplish tasks, work systems produce both physical products and social/psychological outcomes, and the key issue is to design work to enable the two components to yield positive outcomes (ibid).

Conceptually, socio-technical systems theory states that work organizations exist to do work, which involves people using technological artefacts (whether hard or soft) in order to carry out sets of tasks related to specified overall purposes. As a result, a conceptual framework was designed around this in which work organizations were envisioned as

socio-technical systems rather than simply as social systems (Trist.) The central principles of ST that contributes to the understanding of effective work design is: minimal critical specification of rules; variance control; multi skills; boundary location; information flow; support of congruence; and design and human values (Appelbaum. 1997).

As a means of analysis, systems theory would be somewhat limiting based on the research question's focus on individual perceptions, yet as a methodology for future research to uncover and understand the relationships between technical systems and human systems within the study groups' organizations and just how the physical environment can impact work and subsequently perceptions. This is based on the view that ST has developed in terms of open systems theory, being concerned with the environment in which an organization must actively maintain a consistent state to be effective (ibid).

With the objective of the research turning to an exploration of the three underlying factors cited at the beginning of this chapter (the pivotal role of individuals within organizations in shaping workplace design strategies; the human factors such as perceptions that become integral to this; and the basic lack of critical analysis on the part of both business organizations and design consultancies in reviewing and ultimately deciding on a strategic course), I sought out a research methodology that would through its structure, allow me to examine areas not often viewed as obvious. To a degree, more importantly, these objectives and the research question concern itself with a new way of looking at workplace design strategies, and strategy developments and a different critical perspective on meanings and influences in relation to decision making.

Critical Theory became the guiding framework that allowed for this untouched way of looking at workplace strategy decisions. Giddens Structuration theory through the role of agent and structure further

assisted in placing many of these findings into a perspective that provides a vehicle for viewing strategic workplace design decisions within this new and broader perspective. By using the combined components of both research theories (agency and structure; unintended consequences; managing meaning; power and control; and the use of metaphors and language), the research data could be viewed in a very focused manner through different but related layers of perspectives. I believe that it is this synergistic relationship between the two theories that afforded me the opportunities to view the research question and the subsequent research data in a new and important light, thereby bringing to the surface questions, reflections and perspectives pertaining to individual's decision making affecting organizations.

The precedence for using Critical Theory as a basis for uncovering a different and potentially broader understanding of the roles of individuals within business organizations is discussed by Alvesson and Willmott (2003) who noted in a study by Forester on planners that Critical Theory provides a new way of understanding action over the conventional approaches that take a more narrow view of interpreting events (ibid.) In seeking a wider interpretation of the actions of individuals involved in workplace design strategy decisions as well as the effects of these strategies themselves on understanding that all of this leads to arguing against both the decision process and the strategies as being neutral within the context of the organization, is a notion supported by Powell and Burrell (2008) in their assessment of understanding management perspectives as moving away from conventional management theory. These same issues have often been assumed to be apolitical, a point also supported by Alvesson and Skoldberg (2000).

Of the many advantages of making use of Structuration Theory to further examine the material, a key element is its ability to take what on the surface may appear to be many disparate variables and create a common

framework of analysis and understanding (Whittington. 1992). In attempting to examine and understand the role of individuals operating within the context of their organizations, a more complex and often irrational view of decision-making and outcomes is uncovered. This becomes the central issue, one that has not been the focus in previous literature on workplace strategies.

In taking on this study, I also had to be aware that my personal background created potential conflicts. As both a design consultant engaged in working with clients on workplace design strategies, as well as a number of the field study interviewees being former clients, my role as an impartial interpreter of the data gathered from the interviews could be viewed with some concern. A number of writers on research methodologies address this, and to this end Creswell's view that often a researcher employs a variety of research strategies such as making sense of information collected, gains awareness of the theories and assumptions that guide practice while also viewing him or herself as a part of this cultural '*panorama*' (Creswell. 1998) or in the case of this research, a part of research field within which this study takes place.

In choosing to use two methodologies (Critical Theory and Structuration Theory) rather than a single methodology, I was attempting to provide the richest and most robust means to research and respond to the complexities of the research question. As discussed in Chapter 1, while the research question is based on the role of perceptions as informers of workplace strategy decision, the underlying issue of the lack of critical thinking conducted in this field directly relates to and stems from the research into the question. Rather than ignore this secondary issue, it is my belief that it is so intertwined in understanding the primary research question, and has important implications for future research and practice. It is my view therefore that the choice of a second methodology, and one that is complementary to the first, was necessary to uncover and develop an understanding of the role of perceptions which due to their qualitative

nature could be difficult to explain without the benefit of these two methodologies.

3.3 Critical theory + structuration: critical theory and structuration as research methodologies

This section explores critical theory and structuration as a means to view workplace design strategy decisions. My thesis focuses on external factors that inform and influence these decisions, and how these factors have been widely ignored or passed over in research that has explored workplace design strategies. The research examines the ways in which workplace design strategies are developed resulting from numerous external and internal factors. The study shows that all of the decisions have been based on financial analysis and not on evidence based research linking particular strategy decision to any organizational performance criteria other than financial. The use of critical theory as the umbrella methodology and structuration theory as a means of analysis provides a way to examine the study groups from a new and different perspective. It allows me to view the role these factors have in informing and shaping workplace design strategies and exploring if other factors previously ignored, can provide new meaning and insight.

3.3.1 Critical Theory

Critical theory comes from German philosophers and social theorists associated with the Frankfurt School. The basis of critical theory distinguished itself from traditional theory in that it sought human emancipation (Bohman. 2005) According to Horkeimer, a critical theory has to meet three criteria: it must be explanatory, practical and normative simultaneously. As such it must explain what is wrong with current social reality, identify actors to change it, and provide clear norms for criticism and achievable practical goals for social transformation. (ibid).

Critical theory proves to be a means to view these decisions and perceptions for a number of reasons. Just as that Critical Management Theory looks at the roles of management theory and the organisation, looking at workplace strategies in a similar light begins to uncover influences and relationships that have not been previously explored. Many of the so-called theories behind workplace strategies (collaboration, workplace transformation) are founded on established theories of management. Theories of change, and the need to view the workplace as an agent of change has been the cornerstone of much of the workplace strategy approaches. Duffy (1992, 1997, 1998), Vicher (1995, 1996, 1999) and O'Mara (1999) all approach workplace strategies from the given perspective of using the design of the workplace as an enabler of change. What has been missing is an analysis of the assumptions behind these management theories and their affects on the development of workplace strategies.

Critical Management Theory (Alvesson & Wilmot. 1992, 1996, 2003) examines assumptions and context as a framework for analysis: assumptions underpinning the world of management are subjected to scrutiny rather than given tacit approval. Most analysis has taken for granted the role of context as well as assumptions behind particular strategies. Horgan, et al discuss the role of the workplace as an enabler of organizational transformation stating the case for why but not discussing what it is that goes beyond the surface of changing ways of work.

Workplace design strategies have been so closely linked to and associated with architecture since in most instances there is a strong association with the structures within which these workplace design strategies are contained, and because they have been developed in large part by architects. Iain Borden and Jane Rendell's essay on the challenges and intersections between architectural histories and critical theories point to the monograph type books on architecture which lack

critical perspective. These have focused on the imagery of workplace design strategies suggesting that ‘there is no need to look beyond the internalized concerns of the discipline in order to understand it historically.’ (Borden and Rendell. 2000. Pg 5). These works, like those on architecture referenced by Borden and Rendell *‘provide glimpses or partial views of architecture [workplace strategies], but ultimately do little more than record the general character of architecture [workplace design strategies]...’* (Borden and Rendell. 2000. Pg 5). This lack of critical perspective has resulted in only a partial view of workplace design strategies, and by its very omission has failed to provide a more meaningful understanding of the underlying issues that result in workplace design strategies and affect the organizations within which they function.

Another aspect of critical theory allows the research to explore uninvestigated ways in which *‘normative claims’* to practice are actually made (Alvesson and Willmott. 1992. Pg 62). John Forester writing about Fieldwork in a Habermasian Way discusses this aspect of critical theory and points to its abilities in leading one to look more closely at complex and unexplored managerial claims. It prods one to ‘look and see’ and not to accept assumptions. Further, it assesses what Forester terms *‘actual flows of action that reshape our beliefs...’* (Alvesson and Willmott. 1992. Pg 62).

Borden and Rendell in relating critical theory to architectural issues, reference it (critical theory) as both an understanding of the world as well as its liberation and transformation. (Borden and Rendell. 2000. Pg 13). Taking into account the work of the Frankfurt School but going beyond, the authors define critical theory as *‘any mental schema, which abstracts a model, explanation, speculation, hypotheses or method for any aspect of social life.’* (Borden and Rendell. 2000. Pg 7).

As much of the work on workplace design strategies can be compared to conventional management theory, critical theory allows for a departure

from this by seeking to encourage a questioning of assumptions that have previously been taken for granted (Alvesson and Willmott. 1992.). It is ideally suited for the type of study represented by my thesis, where the objective is to probe deeper into the factors behind workplace design strategies, and thereby, as Alvesson and Willmott state, create a *'counterpoint to mainstream management studies.'* (ibid.). It is the contention of this thesis that the current perspectives of workplace design strategies have been formulated as a result of established theories of management and that it is this 'critical' view or perspective that has been absent in obtaining a better understanding of the 'underpinnings' involved in formulating these strategies. (Most of the current thinking and analysis has taken as a given both the context and assumptions for these strategies which have been primarily based on published management theories).

Part of the reason for the lack of critical review is in part a hold over from writings on architectural theory, and since many of those responsible for writing about workplace design strategies come from that arena, writings tend to reflect that bias. Jane Rendell in an essay comparing art and architecture with critical theory, points to the differences based on definitions. She examines theory in architecture as writing that is written by architects, who she points out, describe a design methodology that has been proven over time. In contrast, she that argues that critical theory she concludes does not seek to prove a theory but is reflective in nature and seeks to change the world rather than merely comment upon it (Rendell. 1999.).

There is precedence for using critical theory as a methodology both in writings on these relationships and in examining how critical theory has been used to study other organizational resources.

Karen Dale and Burrell Gibson in their overview of their paper *An-aesthetics and Architecture* write of the need to examine the built

environment from the standpoint of critical management studies in order to understand just how architecture contributes to the ideological, political and economic structures of domination (a recurrent theme in critical theory). In studying the organizations participating in my research, critical theory has been used in much the same way, by exploring workplace design strategies and how they contribute to the ideological, political and economic structures of organizational control within their organizations (Dale and Gibson. 2002).

Conversely, Dale and Gibson argue that critical management studies need to be more aware of the significance of the built environment, and the ways in which management has made use of these environments to build power. Building on a theme previously discussed in Chapter 3, the authors query the point in time when architecture produces an aesthetic experience and when it becomes a '*form of anaesthesia*' (Dale and Gibson, *ibid*). This is similar to views expressed by Neil Leach in his *Anaesthetics of Architecture* (Leach. 1999) where he concludes that architects have been desensitized to the potential of design to solve social problems due to an obsession with form and aesthetics over more substantive issues. Their reference to anaesthesia is similar to Neal Leach's thesis on the current state of architecture as being obsessed with theories of form and imagery. Furthermore, in exploring Guillen's *The Taylorized Beauty of the Mechanical* (Guillen. 2006), Dale and Gibson critically examine the statements of the author and provoke critical examination of many of his theories on the views of Taylor by those early architects of the modern movement (Dale and Gibson. 2008). By questioning Guillen's perspective, they indicate a clear lack of critical thinking in examining works such as this. In failing to look critically at those responsible for making workplace design strategy decisions, researchers have failed to go deeper in exploring the meanings and substance of strategy decisions. In the case of Guillen, they question whether his view that those modernist architects having '*avant-garde*

credentials does not necessarily mean that these talented individuals' [architects] did not come to their embracing of Taylor's theories unencumbered by political motivation. Rather, their embracing of Taylorism was a means of attracting a client base of like-minded individuals and not simply for its theoretical ideals. (Ibid).

Another example noted by the authors concerns the American adoption of European modernism (as discussed in the previous chapter) by eliminating all of the social criticism associated with that form of modernism. In essence, they adopted the aesthetic of European modernism without its social consciousness. Peter Blake, an American architect of European descent who both practiced at that time as well as wrote about it as editor of the influential *Architectural Forum* magazine supports this contention as his central thesis in *No Place Like Utopia* (Blake. 1993). In it, he writes of the failures of the Modern Movement as being a loss of idealism, which was an original motivator of that generation of architects. He goes on to chronicle how the movement turned away from these ideals, embracing the imagery and form giving elements of Modernism and saying: *"There is no longer much talk about saving mankind; instead there is a great deal of talk about how to get the job – how to manipulate the media, how to clobber the competition, how to make a buck. My generation once considered ourselves to be the ombudsmen...for the environment; today most of the horror which is man-made America was and is being created by architects-sometimes by the very same people who once dedicated themselves to the creation of a more humane and more beautiful future."* (ibid).

He details how these architects were concerned more about creating democratic, egalitarian social orders during the period between the two world wars. While acknowledging their desire to incorporate artistic issues, he notes how these same issues were secondary to the basic concerns that involved economic and social justice, overpopulation, poverty and disease (ibid). Leach's work on *The Anaesthetics of*

Architecture refers to this problem as creating a culture of consumption from Architecture, whereby architectural design is reduced to seductive forms and philosophical rhetoric, which are used merely as justification (Leach. 1999).

Dale and Gibson's critical assessment of this anaesthetic places the responsibility for this condition on the rift between European and American practices of modernism. They reference the architectural writer Colin Rowe who theorized that European modernism remained true to Socialist '*ambiance*' even within the Capitalist system where it practiced, while American modern architecture did not (Dale and Gibson. 2008). They focus on SOM (Skidmore Owings and Merrill) whose practice formed much of the architectural imagery of corporate post war modernism in America as taking what they refer to as the aesthetic function of modernism and removing any semblance of '*left wing confrontation*' from it. It's [SOM's] ability to use corporate architecture to 'dazzle' was what made it so appealing to corporate America. (Ibid).

Dale and Gibson view architecture as supporting twentieth century management practice and that our understanding of 'space and place' have been influenced to a certain extent by our architectural confinements. This critical assessment of the role of architecture in enabling management practices is unique in the field of both management studies and workplace practice with the exception of possibly Foucault. In his essay 'Space, Knowledge and Power', Foucault refers to the eighteenth century as the time in which architecture became a function of the '*aims and techniques of the government of societies*' (Rabinow. 1984.). In that same essay, he discusses the role of architecture as not only an element located in '*space*' but that it inserts itself into social relationships thereby causing specific effects. (ibid.). Foucault writes about '*heterotopias*,' a word he describes as different spaces that lay within both mythical and real spaces within which we exist. He ascribes this term to rest homes, psychiatric clinics and of course prisons – spaces

that by their very nature exist to exert power and control over individuals (Ockman and Eigen. 1993). Their work connects the relationships between architecture and business and reflects on the role of anaesthetics as having numbed one's perceptions of the causal effects of this relationship.

My research takes this conclusion and supports the premise that anaesthetics has informed perceptions on workplace design strategy's value, but goes on to look at the relationship between architecture and management from an additional perspective that rather than architecture informing management practices, management practices have informed workplace design strategies. Much of the responses of workplace strategies has been influenced by popular business philosophy rather than substantive or robust research into the varied layering of these strategies within organizations and how they in actuality come to be developed and moreover, how they play out in the context of a particular business organization. Design firms use of strategies and any analysis that is part of it, has become somewhat simplistic in its approach and execution, and fails to take into account the complex nature of today's business organization. An article in the 21 January 2006 issue of *The Economist* examines how the twenty first century organizations are not fit for twenty first century workers (*The Economist*. 2006). The article references research by both McKinsey and Mercer, pointing to the realities of dramatic changes that are occurring in the way people work which have not been matched by changes within business organizations (McKinsey). The management structure of choice of today's organization (the matrix organization) has made work more complex and more inefficient (Mercer). It is into this unchallenged and often ignored organizational environment that design practitioners develop workplace strategies.

This contextual situation and the lack of critical analysis in the formulation of workplace design strategies has had the reverse affect from that

detailed by Dale and Gibson (2002). Workplace design strategies having been developed and formulated in the manner in which they have, and as a result of an absence of critical thinking has served to support existing management theories negating their potential role as the real change agents they aim to be.

While critical theory has not been used to assess workplace design strategy decisions, two works demonstrate a precedent of critical theory being used as the methodology and lens from which to view this research. The first is a study of IS in the Middle East (Stahl and McBride. 2005) while the second (Valentin. 1999) examines critically workplace learning. The former research used critical theory along with Postmodernism to investigate the empowering potential of ICT and its realization in Egypt. Using a Habermasian framework to analyze national policy and a Foucauldian viewpoint to provide the theoretical lens to investigate social reality on the micro level, the research looked at the tacit expressions of IS benefits in Egypt which claimed to be liberating and explored the subtexts whereby these actual claims were shown to have not been realized and had indeed the opposite affect of disempowering constituents. It is an example of the other component of the research methodology of this paper reviewed in the following section, Structuration, where one important feature is unintended consequences of actions.

The perspective of Habermas that concentrating on power relationships at the micro level results in blocking the view of macro level problems and the issues of power which have the potential of being of a more pressing nature in society (Stalh & McBride. 2005.). The use of Habermas in this context looks to give reasons for one's actions, and in the case of this research on IS, the actions related to decisions on power relationships and empowerment (ibid). Searching for the underpinnings of statements and claims is at the heart of Habermas. In a paper On Fieldwork in a Habermasian Way, John Forester explains Habermasian discourse as what appears to be ordinary within a professional bureaucratic setting is,

in actuality, a *'richly layered texture of political struggles concerning power and authority, cultural negotiations over identities, and social constructions of the problems at hand'* (Alvesson & Willmott eds. 2003.). Habermas goes further with what he terms 'discourse ethics' whereby his focus is on a form of communication evidenced as argumentation. This involves the critical examination of a hypothetical claim to reality (Endres. 1996), which goes beyond the bounds of this research.

However, the reference above to situations that on the surface appear ordinary within an organizational context, yet are in reflection a highly layered stratification of political struggles, speaks to the purpose of this research. Workplace strategies have been for the most part a response to surface analysis while ignoring the underpinnings of the social and internal political influences comprising organizational social relationships. Failing to address these complexities has limited the true effectiveness of workplace strategies and has served to limit both the analytic processes needed to develop greater valued workplace strategies and has negated a more realistic view or understanding of the realities of interrelationships existing in organizations. These underpinnings profoundly influence perceptions and decision-making regarding workplace strategies.

The use of Foucault allows the researcher to determine, according to Stahl and McBride, what the criticisms are to be *'levelled'* at. Bringing the critical analysis in the context of power relationships is that it serves to ground the Habermassian perspective (Stahl & McBride. 2005.). As a means of constructing reality, language is emphasized as the methodology of creating meaning. Critical research views reality as being socially constructed (ibid.) which provides a good window into the substance of my research, where an examination of the narratives of the interviewees provides insight into perspectives of workplace design strategies through the perceived realities of those interviewed. As in the case of the IS research, my research attempts to break down the views of realities in much the same manner using this Habermassian perspective

as well as Foucault's discourses on power. The individuals interviewed as part of my research developed a view of the reality of workplace design strategies based not on any empirical evidence but on their perceptions of this reality. The use of language to define these realities, some on the negative side, and others on the positive, echo the researcher's interpretations of Habermas and Foucault. The use of language in describing approaches to workplace design strategies is very much at the core of explaining and shaping realities within the organizational context of workplace design strategies. Supporting this idea, Stahl and McBride state: *"...reality is constituted and structured by language and that we therefore have to pay attention to discourses when we critically observe the world. The discursive constitution of reality includes the creation of individuals whose identity is formed (or deformed) through social discourses"* (ibid.). The language used during the interviews exposes and reveals a more realistic view of the participant's perspectives. Language also plays an important part in explaining and 'selling' workplace strategies to internal stakeholders within those organizations.

The perspectives illustrated in Valentine's research (Challenging the Corporation) involves the uncritical acceptance of what she refers to as dominant paradigms as they relate to training and management. Her research questions the lack of challenge within this domain as they relate specifically to issues of power structures. This acceptance has resulted in the lack of critical thinking when it comes to challenging dominant organizational ideological assumptions and practices (Valentine. 1999). This serves as an illustrative precedent on the other important factor in my research, which is the lack of questioning organizational and managerial assumptions when it comes to perceiving and developing workplace design strategies. This holds true on both positive and negative perspectives. Whether one perceives value or lack of value in these strategies, the transmission of these precepts is never questioned as part of the development and implementation of these strategies. Additionally,

the development of these strategies around common managerial theories is done so without ever questioning the basis of these strategies. The design profession has simply accepted as fact the legitimacy of any of the array of managerial theories used as the basis for developing workplace design strategies.

An important component of Valentine's research regards viewing how knowledge is constructed and what counts for reality or, as Valentine refers to it: truth (Valentine. 1999). A point of particular interest to my research which Valentine covers is the new perspectives on power and control viewed within a Foucaultian manner and that have developed within knowledge organizations. The extensive examples provided in Chapter 3 on the relationships of workplace design strategies and Taylorism as they relate to post war corporate office design offer insights into the role of office design in maintaining control and power relationships in very obvious ways. One can see in both Chapter 3's discussion of alternative workplace strategies and in the results of some of the interviews with those organizations that have adopted similar strategies, one could very possibly come away with the feeling that these more egalitarian forms of workplace design strategies have eliminated the essence of Foucault's discourses on the role of space, architecture and power relationships. Valentine, through her critical assessment of Human Resource Management, shows how, by using Foucault, new forms and mechanisms of control have indeed emerged in these new knowledge based organizations (Valentine. 1999). By using Foucault to view the formulation and accumulation of knowledge within these organizations as a new form of control, Valentine has served to set the precedent of viewing knowledge/power relationships in a manner reflective of a segment of organizations participating in my research. The use of technology as a means of control has replaced the older forms of management controls originally identified by Foucault. Technology that on

the surface appears liberating, has replaced conventional control protocols.

3.3.2 Structuration

Structuration theory is attributed to Anthony Giddens and is based on human agency (action) and social structure (institutions) not being two separate concepts within social analysis but existing as a duality where actors undertake social action and interaction, and social systems and structures form the rules, resources and relationships that these actors produce and reproduce through social interactions. Structuration is the structuring of these social relationships across time and space (Giddens.1979,1984). Using structuration theory, analysing the study groups allows for a view of the perceptions of workplace strategies through the concept of structure and agency. Structure as the structural forces which constrain people and enable things to be done in a certain way; and agency which is the interpretation of life within these organisations. The view of actions within this context involves both intended and unintended consequences of these workplace strategies.

Precedence for using structuration theory as a means of examining organizational resources, and the workplace in particular, exists in a number of studies. The majority are in the realm of IS, though there are a few instances involving architecture and the environment. Jeremy Rose from Manchester Metropolitan University evaluates the contribution of structuration theory to the IS discipline (Rose. 1998) and again with Paul Lewis of Lancaster University on the use of Structuration Theory in researching an intranet development project (Rose and Lewis. 2001); Yates and Orlikowski of MIT write on using a structurational approach to studying communication and media (Yates and Orlikowski. 1992); Jones and Karsten at University of Cambridge use structuration theory to review IS research (Jones and Karsten. 2003); and Patricia Alexander in her

PhD thesis examines reconstructing meaning when text is electronically communicated (Alexander. 2002); and finally Lewis and Suchan from the Naval Postgraduate School in Monterey California study the potential impact of structuration theory on logistics research (Lewis and Suchan. 2002). In the area of physical environments, Mavridou Magda uses Structuration Theory, among several theories, to investigate the relation of space to society (Magda. 2003); Manning, writing in *The British Journal of Sociology* examines the structuration of work environments resulting from organizational work (Manning. 1982); and on the non-environmental side of workplace, Rose Boucaut of the University of South Australia applies structuration theory to understanding workplace bullying (Boucaut. 2001). Finally, two works combining institutional theory and structuration theory study the links between action and institution (Barley and Tolbert. 1997); and social systems and managerial agency (Whittington. 1992).

In the case of Rose and Lewis' use of structuration theory is used as the basis of action research (Rose and Lewis. 2001). The research is intended to move away from structuration theory as merely a means of analyzing empirical situations towards operationalising it with the intention of ultimately influencing IS practice (Rose and Lewis. 2001.). As such, the research operated within a technical arena focusing on social aspects and moved structuration theory away from a purely academic setting. (Rose and Lewis. 2001.).

My research uses structuration theory to examine the translation between discourse styles within the field of IS, looking first at social theory and moving on to information systems followed by IS practice. The result is a model for putting IS development into a practice framework where the action research cycle moves from theory to concepts and framework, to tools, techniques and methods, and finally to practice. (Rose and Lewis. 2001.). The final framework developed, based on Giddens duality of structure, focuses on two aspects of social practice: regularity and change. Taking the three components of structuration theory

(signification, domination and legitimation; and communication, power and sanction) and putting them into an applicable model, the authors develop interaction analysis tools where the basis of the model remains but the language is altered to meaning (power structure and norms); communication (use of power and sanctions) (Rose and Lewis. 2001.). The practicality of this model is to have a means of analyzing social change and social regularity which then takes the role of IT and places it in the context of history, direction, degree and speed (Rose and Lewis. 2001.).

Rose and Lewis were able to use this research to study the role of the intranet in the delivery of academic courses. The significance of the analysis, according to the authors was to uncover how disenfranchised the study group of students were in the delivery of the actual courses, and how the design and operation of the intranet reflected entrenched perspectives of teaching and course management (Rose and Lewis. 2001). By adopting Giddens dimensions of change model, the authors develop a framework for analysis of a change programme looking at historical context, strategy direction, speed of development and finally degree of change required. An action plan based on this framework analysis was then developed which took into account the above analysis, scenario development and change planning (Rose and Lewis. 2001).

In an earlier paper, Rose evaluates the contribution of structuration theory to the discipline of IS (Rose. 1998) noting that his research concerns what he terms the appropriation of one theory (structuration theory) for use in another (IS) (ibid.). This could very well be used as a model for examining Workplace Design Strategies and the role of design practice. Citing Giddens' theory which takes what were considered to be two disparate theoretical perspectives, Structuralists and Functionalists (Marx, Parsons, Levi Strauss) who explained human behaviour in terms of structural forces. These forces constrained individuals to do things in a particular manner. Hermeneutics and phenomenology concentrated on

the human agent as being the primary actor in and interpreter of social life. They then demonstrated that knowledgeable actions of human agents discursively and recursively form the sets of rules, practices and routines which over time creates ones conception of structure (structuration) (ibid.).

Rose connects Giddens' theory to power vis-a-vie human agency which represents the capacity to make a difference and the association of one's ability to make a difference being the opposite of powerlessness (ibid.). Furthermore, Rose continues, that power involves the exploitation of resources which (referencing Giddens) are 'structured properties of social systems, drawn on and reproduced by knowledgeable agents in the course of interaction (ibid.). He references two types of resources: authoritative and allocative. Authoritative resources derive from the coordination of human agent activities, and allocative resources are from the control of material products or aspects of the natural world (ibid.). Power however, Rose points out, is not a resource.

In theorizing about IS, structuration theory assists in understanding the relationships between IT and the organizations they serve as resources. The '*duality of technology*' according to Rose is expressed in its 'constitutive nature,' that IT is a theoretical product of subjective human action within specific structural and cultural contexts. (ibid.). The use of structuration theory for analyzing IS is linked to research by Walsham who uses an '*eclectic*' mix of concepts from phenomenology, hermeneutics, critical theory and postmodernism to form the basis of an analytical framework drawn from Morgan, Pettigrew and Giddens (ibid.). Operationalising IS in terms of structuration is the one area Rose points to as lacking substantive basis (ibid.). This research hopes to operationalise workplace strategies in order to better understand how influences below the surface can often subvert its intended benefits and how this new understanding can result in development of better connected workplace strategies to enable organizational performance.

One of the implications of this sort of research utilizing Structuration theory is the development of a richer understanding of social actions through the process of analysis and theorizing which will turn into a basis of knowledge that ultimately informs IS practice (ibid.). Here again, an application of this research is to develop a base of knowledge that can positively inform workplace design practice.

Yates and Orlikowski's paper on a structural approach to studying communication and media (Yates and Orlikowski. 1992) examines the nature and role of communication in organizations as continually evolving as individual actors interact with social institutions over time (ibid). In essence, the authors take genre, which they describe as a literary and rhetorical concept, describing widely recognized types of discourse, to explain organizational communication as a structuration process (ibid). Here also, one can transfer this approach to my study thereby viewing and giving meaning to workplace design strategies as a structuration process.

The authors further make the case, through citing Giddens and structuration theory, that genres (discourse) are a form of social institution that is produced and reproduced or modified when human agents utilize genre rules to engage in organizational communication (ibid.). Workplace design strategies practice in much the same way. The work environment is very much a social institution that is affected either directly or indirectly by workplace design strategies, and is produced, reproduced and modified through the actions of human agents (designers, occupiers, facilities managers). Part of the thesis of this study is that workplace design strategies both shape and are shaped by individuals (agents) that are part of the structures or organizations involved.

Another component of structuration theory used in Yates' and Orlikowski's study is the process through which structuration reproduces genres over time and how these genres may also change those processes. More to

the point, that while genres facilitate and constrain choices in communication, the roles of genre do not create a binding constraint. In effect, human agents are the ones that enact genres and that during this process of enactment; human agents can change them (ibid). This could explain the effects of workplace design strategies from both perspectives: those that change the manner of work and those that are changed by the individuals (agents) responsible for implementing them. Workplace design strategies are controlled by agents who can either be affected by, or affect the organizations they work with.

A structural perspective of the production of genre can assist in describing and interpreting not only what is occurring at the present, but to view historical changes in communicative practices. It is a lens through which one can study the relationships between communications in organizations and the media of communications (ibid.). Similarly, structuration is a lens through which to describe and study both the current state of workplace design strategies within organizations, and their affect on those organizations, as well as the historical context from which these strategies evolved. It is further useful to examine the relationships between workplace design strategies and organizational decision-making. It is the lens through which we can view activities and decision making about workplace design strategies, and to describe and give meaning to these activities and processes. Critical theory provides a context through which to better understand both the decisions themselves, and the consequences of those decisions as well as lessons for future practice.

Most of the studies of workplace design strategies have focused on how design is a physical manifestation and influence on organizations. A structural view demonstrates how both structure and agency are reciprocal of their relationships that these reciprocal and recursive relationships between workplace design strategies and organizations, and those that come into contact with them are incomplete without understanding those interrelationships. Yates and Orlikowski make this

point in writing about how most existing research on communications focus on either how technical, organizational, personal or social factors influence media decisions or strategies and their implementation, but not on both (ibid.). The involvement of power as a component of the effects of workplace design strategies, and its affects on workplace design strategies, is equally reflected in the authors' perceptions of power being exercised and demonstrated through what they term the manipulation or selective application of genre rules (ibid.).

As I will examine in the interviews, these power relationships are created by workplace design strategies themselves, as well as in the often-selective application existing domains created by previous strategies. Most important to this study, is the notion that Structuration allows one to understand workplace design strategies, their process and affects not as isolated instances or occurrences, as most studies have perceived them, but as part of a social process within organizations that over time is produced, reproduced and modified through both the organizations they are serving (structure) and those that they affect and are affected by (agents) (ibid). Structuration allows us to understand the roles of workplace design strategies as part of an embedded social process and structure that over time produces, reproduces and modifies the workplace, thereby linking it to a broader organizational perspective, and making it part of the organizational discourse.

In a paper more associated to workplace design as a discipline, Mavridou Magda's MS thesis uses Giddens (among several architectural theorists) to investigate the relation of space to society (Magda. 2003). She contends that space is the primary point of Giddens Structuration Theory. That to understand the importance of individual action is to provide an account of the knowledgeable human agent, and to formulate this account without grasping the structural components of social institutions is missing the point that space and time are indeed critically interconnected components (Magda. 2003.). Her perspective connects in a tangible way

the relationship between workplace design and structuration theory not only as an abstract theoretical discourse but that the theory itself focuses on the role of space.

She points to the role of space in a number of instances. Space is the place that contributes to the communication of organizational meaning through the interaction of agents. It also implicates the routinised nature of social life by imposing limitations on human actions and human action affects social relations across space to overcome these limitations. (ibid.). Here, as in the previous study, power and its relationship to the concept of structure as a resource is also important. Her study furthers the discussion of the role of power in workplace design strategy (both in the strategy and in its formulation). She views power within social systems as being the relations between autonomy and dependence between actors who draw upon and reproduce structural properties of domination as well as the power over those agents who take advantage of those resources (ibid.). Physical space, and the workplace in particular, contributes to the communication of meaning through both its physicality (visual imagery) and the creation of the routinisation of social life within the organization and in its ability to transcend time and space through the relationship of its responsiveness or lack of, to change (organizational change and change associated with the evolution of time). Time can be viewed in the area of the workplace as specific change over time, or the affects of age and of not deliberately creating or responding to change in a planned manner.

In similar ways to the examples cited above, critical theory as the umbrella principal of analysis and structuration theory as the detailed methodology within critical theory are used in this study. The following sections detail the components of critical theory and structuration theory as they are applied to this research.

3.4 Factors of Critical Theory

3.4.1 Managing meaning

Critical theory looks at how managers seek to develop initiatives while exercising it in managerially acceptable and disciplined ways (Alvesson & Willmott. 1996.). As a result, managers look to define and manage the meaning of work. According to critical theory, managers and organizations construct reality through the management of meaning (ibid.) Deetz argues in Critical Management Studies (Alvesson & Willmott. 1992) that organizations engineer the willing cooperation of their employees through the production of the normality of every day life. This produces cultural norms that result in the shaping and expression of values, actions and meanings, which in turn create what he terms hidden forms of domination.

While not wanting to create the presumption that this form of creation of meaning is linked to class politics within organizations, Deetz makes the clarification that within this context, the results are not designed for overt methods of control, but non-the-less have the same affects through the production of order and dependency (ibid.). In the same publication, Morgan makes the case by referencing Habermas, of the importance of understanding how meanings are constituted and as a result, how power is implicated in the process (ibid). To the point of this research, this addresses the central theme that the perceptions of the values of workplace strategies and how they are shaped and utilized are very much the result of responses to power relationships and in its execution, workplace strategies is a form of managing meaning and creating a form of reality.

Forester in an essay published in Studying Management Critically (Alvesson & Willmott. 2003) looks at Habermas who suggests systematic connections and linkages to what he refers to as the double structure of speech in creating '*truth claims*' on the one hand, and creating legitimacy on the other (ibid.). This is the result of representing issues in selective

use of language, terminologies and frameworks (ibid.). He goes on the point out through the work of Habermas that the result of the shaping of meaning is the shaping of beliefs, patterns of legitimacy through the management of consent by employees and the shaping of patterns of status and identity. In other words, the shaping of perceptions (ibid.). Implementation of workplace strategies is very much the shaping of reality. What these strategies mean and convey, become organizational realities (some time by design, and often by circumstance, thereby constituting a reality resulting as unintended consequences of non designed action). It is why the branding of these strategies becomes so important to its implementation. The 'Future of Work' program at Financial Group, for example, defines the reality of work at Financial Group as being in the forefront, or as a Financial Group internal power point on the strategy proclaims: 'lead the revolution.'

3.4.2 Metaphors + language

The shaping of meaning and the creation of realities within organizations are very much the products of the use of metaphors and language within the organizational context of workplace strategies. Organizations and their resulting cultures are the means through which employees experience the meanings of particular organizations. Organizational culture as represented through values and beliefs is the means through which employees experience that organizations' world. Language and the way it is produced, is the way in which individuals mediate their experiences of that world, and it is the product of socially inscribed values and distinctions (Alvesson & Willmott. 2003.).

It is through Human Resources Management (HRM) that cultural forms of expression are formed that create values, actions and meanings within these organizations and subsequently create a form of domination (ibid.). This form of domination, which is discussed in further detail in the

following section, is sometimes intentional but often unintentional, and often results in unintended consequences, which is a component of structuration theory that also will be discussed in the following sections. A component of HRM as a means of shaping meaning is the creation of the definitions of reality so that these take on the appearances of the normal rather than the political (ibid.) The relationship to this research is two-fold. First, in the area of the use of workplace strategies to create the realities as seen and experienced through these strategies and secondly, the formed realities of organizations create the context and fields through which workplace strategies are created or negated depending upon the particular organizational landscape. The use of language within organizations becomes pivotal according to Deetz in aiding classification and identity production, and take on the appearance of neutrality and a natural form of organization rather than an articulation of political meaning (Alvesson & Willmott. 1992.).

If one looks at workplace strategies as being expressed through the crafting and articulation of language, it has the affect of taking on an organizational role of discourse that creates what it speaks (Deetz. Ibid.). In this context, language takes on an ideological role mediating between employees and the organizational and physical conditions of the business they are part of (ibid). It is through HRM that much of the use of language within an organizational setting takes place. Metaphors and rhetoric become tools through which language is expressed. Such words as 'empowerment' and 'reengineering' form the lexicon of iconographic meaning within organizations (Alvesson & Willmott. 1996.). Through workplace strategies, metaphors such as 'alternative workplace strategies,' 'hotelling' and 'activity based work settings' take on prescribed meanings. These are further exemplified through the branding exercises that have become pivotal to the implementation of workplace strategies. Branding campaigns such as 'Future of Work' and 'BlueSky' are intended

to form a new reality on the part of employees as to their work environment.

3.4.3 Power + control

Issues of power and control relating to critical theory and workplace strategies link directly to both the previous issues: the management of meaning and the use of language and metaphors. It is through the use of these two categories that organizations and those within them exercise both power and control. For both critical theory and the purposes of this research, the review of the role of power and control within the decision processes of workplace strategies is neither a positive or negative judgement but an observation of factors that play an instrumental role in shaping perceptions, thinking and actions regarding the role of workplace strategies and the particular strategy to execute. Within the arena of critical theory, this manifests itself in numerous ways, which I will explore in greater detail in the following section on the analysis of the study groups.

Within many contemporary organizations the role of power and control, and its very existence is subtler than in previous times due to the nature of work. Critical theory examines how these relationships come about and can coexist in both the production and reproduction of organizations (Alvesson & Willmott. 2003.). In fact, Alvesson and Willmott point out that the identities formed from power and control domains exist despite frequent discussions on discursive and non-discursive identities being interrelated and reproduced. They examine Foucault's view that this condition exists because we have failed to understand its presence and means of deployment within organizations (ibid.). The positive aspects of power and control according to Foucault are in its enabling and creating actions, while on the negative side it serves to marginalize and exclude.

All of this Foucault believes, resides in perceptions, judgements and actions, and is part of an invisible structure of control (ibid.).

Alvesson and Willmott discuss discipline and identity within organizations and how this occurs in the discursive practices of specific work environments. They detail discursive practices as being: organizational vocabulary which includes the language make up of identities through systems of distinctions; the presence of specific subject positions in organisational talk that employees take on as their own; and subject positions embedded in organizational structures and practices that offer the point of view from which employees experience their work (ibid.). As relating to this research, it could be argued that seemingly progressive forms of workplace strategies (Alternative Workplace Strategies) are actually extensions of discursive work processes exercising corporate power and control rather than being in actuality the liberating forms of organizations that they are portrayed as being.

Very little has been examined concerning this subtle role that workplace strategies plays within organizations as enablers of power and control. A crucial role of critical theory is in its function of directing attention to what could be considered the deeper and more pervasive aspects of control within organizations, contending that the extent of power and control within this arena is most significant when they are not recognized as being what they indeed are (Alvesson & Willmott. 1992.). Workplace strategies serve this function through its neglect of studying these underlying issues and subsequently glossing over them as workplace strategies are developed. Much is made within the study groups of organizational culture, and in fact this forms much of the discourse that is written on workplace strategies. The routines and practices within organizations, as well as what Deetz refers to as institutional artefacts, all serve to implement organizational values and establish an employees point of view. Corporate architecture as observed in the preceding chapter is the manifestation of these practices. They serve, similar to language, to

position a subject and direct particular conflicts and opportunities as part of these perceptions (ibid).

3.4.4 Identity and perception

As critical theory builds on a base of managing meaning, power and control, the use of language, and metaphors to create and manage meaning, the roles of these areas result in influencing employee's identities within their organizations. They also serve to influence their perceptions of the workplace as well as the roles and meanings of workplace strategies. Individuals within organizations take on socially available identities within them (Alvesson & Willmott. 2003.). Organizations create embedded values from which individuals must take on and influence their system of thinking and expression and which constitute experiences through the creation of distinctions and relations through perceptions (ibid). They serve to influence what is considered to be one's personal identity within the organization and further, what one perceives as real (ibid). Deetz refers to this as being each individual's existence producing identities that are placed in the context of an existing meaningful world. This world exists from a set of discursive and non-discursive practices. According to Deetz, understanding these concepts is critical to understanding the workplace (Alvesson & Willmott. 1992.). The roles that this takes in understanding workplace strategies and decision making as a result of perceptions is in understanding how employees become obedient within the confines of their own ways. It creates sets of practices, which ultimately constitute identities, and as a result according to Deetz, '*instantiates inclusions and exclusions in decision processes*' (ibid.).

Using this to examine the ways in which perceptions are possibly formed within organizations helps to better understand some of the decision-making actions concerning workplace strategies within the study groups.

The role and interplay between perception and systems of thought as well as ones' sense of reality, is important in explaining how individuals within organizations constitute their conceptions of what is real and meaningful, and constitutes their identities within those organizations (Alvesson & Willmott. 1992.). Deetz cites Giddens in pointing out that as the result of individuals taking on the thoughts, feelings and beliefs of what they come across as being their own, it creates an illusion of individuality and freedom and therefore becomes important in functioning within the corporate setting (ibid.). The branding of workplace strategies is a means to personalize these strategies and to have workers taking them on as their own. It is also important to note that critical theory suggests that organizational processes through communicative action contends that actors (employees) are not only unaware of their objectification, but that it is self imposed

Examining the connection between one's experiences and the formation of perceptions (does the work and educational experiences of those responsible for determining workplace strategies have any relation to their actual perceptions of those strategies), Bhaskar places the formation of perceptions of events as being independent of experiences (Bhaskar. 1975). An individual's knowledge as the very basis of perception is an ongoing activity within a continuous process of evolution based on the activities and experiences one encounters (ibid.). While the object of ones perceptions is intransient, perception making is an independent occurrence, which helps separate events from experiences (ibid.). From a Critical Realist perspective, a set of perspectives on society or organizations is provided and how best to understand them (Bhaskar. 1989.). It looks at individuals being part of relations that pre-exist them and whose activities transform them, thereby making them structures. From Bhaskar's view, these structures of social relations are the key to understanding events and trends (ibid.), which in effect form identities and perceptions.

Critical theory shows perceptions as being influenced involuntarily while Bhaskar explains human action as being a phenomenon of intentionality. Therefore while perceptions may be developed as a condition of certain circumstances, the actions arising from these perceptions are very much intentional, even though as I will discuss in the following section Structuration Theory serves to explain the role of unintended consequences in the decision making process. Perceptions resulting in the activity of actions on workplace strategies can also be viewed as Weick explains as '*sensemaking*' (Weick. 1995). It takes the notion described above where identities are formed within organizational settings, which influence perceptions. Making sense of these realities or perceptions within the organizational context describes the ensuing activities resulting from this worldview. It further helps explain much of the activities described in the study groups and in framing an analysis within a broader context of the effects of perceptions on workplace strategies development and execution.

Weick positions sensemaking as a process that is grounded in the construction of identity; is retrospective in that it speaks to attributing different meanings to different activities within the organization at the same time (ibid.); enactive of sensible environments (connecting action with cognition) (ibid.); social where it a component of a network of individuals (ibid.); ongoing in that it is part of a continuous cycle (ibid.); focused on and by extracted cues which has us examining the ways in which people pay attention to and take away cues from certain events and subsequently embellish that which they extract (ibid.); and are driven by plausibility rather than accuracy (ibid). This last point addresses much that is missing in the development of workplace strategies which as the study groups suggest are the result of what could be the correct approach as opposed to what has been evaluated and studied as being the correct strategy.

3.4.5 Neutrality vs. political roles of workplace decisions

According to critical theory, organizations are not apolitical nor are the functions within them (i.e. workplace strategies) neutral through their intended application. In a critical analysis of marketing discourse and practice, Morgan rejects the assumption that marketing is neutral in its functioning within the organizational context (Alvesson & Willmott. 1992.). Her point being that what on the surface is merely an activity that is concerned with exchange and bargaining, influencing and negotiating, the discourse that is concealed is in fact underlying inequalities of power which are produced and reproduced both inside and outside the market transaction (ibid). She further goes on to cite Drucker and Kotler, who portray marketing as a neutral tool. What they fail to consider is that marketing constitutes social relations and participates actively in the self-constitution of subjects through commodities. It does this by projecting images of self, of fulfilment and of happiness through the purchase of goods and services (ibid.).

In a similar fashion, Alvesson and Willmott state, "*practices and discourse that comprise organizations are never politically neutral.*" (Alvesson & Willmott. 2003.). This is evidenced through what they point to as sedimented within asymmetrical relations of power, which in turn reproduce structures where there are different accesses to valued materials and symbolic goods. (Ibid). Even the act of strategy making is a political action according to critical theory. Levy, Alvesson and Willmott write that all strategy is political and provides the example that within corporations, strategy is developed to improve market and technological positioning, sustain social legitimacy, discipline labour, influence government policy and put in high esteem those that create and execute strategy (Alvesson & Willmott. 2003. Pg 101). As such, organizations and the activities of the resources within them are indeed political in nature and far from neutral endeavours. These authors go on to point out that this is a neglected aspect of the literature that exists on corporate political

strategy, which they state, takes on a managerialist rather than a critical perspective of strategy. The central concern of critical theory, they observe, is the uncovering of the political nature of what is on the surface perceived of as being a neutral practice (ibid.).

Deetz goes on to observe that from a critical theory perspective, organizations can never be neutral in that organizational structures, communication and decision making systems, technologies and work design influence the representation and fulfilment of different interests within those organizations (Alvesson & Willmott. 1992). Deetz further draws the connection that organizations are political systems in that they serve primary sites where different values, forms of knowledge and groups interests are articulated and embodied in decisions, structures and practices (ibid). That the practices and discourses that make up organizations are never politically neutral is evidenced by top management being privileged in decision making and agenda setting resulting in the definition and shaping of employee needs and social reality (ibid.). Paul Rabinow interviewing Michael Foucault quotes him (Foucault) as saying that architecture became political at the end of the eighteenth century (Rabinow. 1984.).

Drawing on these concepts for this research, three areas of focus are used to view workplace strategies and the study groups. Most of the literature on workplace strategies is based on topical management theory and remain uncritical in their assessment of those theories, viewing them as acceptable and neutral objects within the corporate realm; the factors influencing workplace strategies are political in nature with layers of issues and ramifications going far beyond those that are published or stated; and that as with marketing discourse and practice, the practice of workplace strategies is not a neutral activity in its application. That workplace strategies are not neutral should influence the way in which we understand issues behind decision making within organizations and also how we understand the potential affects of these strategies.

3.5 Factors of Structuration Theory

3.5.1 Individual action + unintended consequence

Structuration theory is concerned with understanding how all action occurs within certain contexts that include elements, which actor's specific activities have neither created or have control over. Giddens refers to this as enabling and constraining activities of action that include both social and material phenomena (Giddens. 1984.). This phenomena results in conditions that are controllable for one agent yet uncontrollable for another (ibid). This for Giddens has resulted in one of the most intellectually challenging features of social analysis (ibid). The relationship between individual action and unintended consequences is highly involved in the process of the reproduction of institutions, which Giddens also links to the unacknowledged conditions as specified by a theory of motivation (ibid.).

Studying workplace strategies through structuration theory highlights various aspects of actions of individuals in terms of the course of developing certain strategies, and in its ultimate fruition, which is in the completed spaces that are the results of those strategies. Subsequently, actions of individuals responsible for these strategies have consequences that are often unintended both through the workplace strategy process and in the resulting architecture or workplace design. The very act of creating physical space is an act of creating meaning, some intentional and some unintentional. The meaning that individuals who occupy those spaces attach to those spaces can sometimes be the opposite of the meaning intended. As an example, a workplace strategy that involves changing work styles through removing workers from private office space is sometimes interpreted as either a signal that the organization does not value its employees or that it is simply a move to reduce costs at the expense of workers effectiveness. Chiat Day the Los Angeles advertising

firm, converted to a workplace strategy of hoteling when it completed its new headquarters in 1993. The motivation for the transition was the belief on the part of Jay Chiat (the firm's founder and president) that the conventional American office structure was antiquated and counterproductive. Six months after the facility was completed there was a widespread 'counterrevolution' where workers began to ignore the strategy of non-territorial office space and began to take over conference rooms. Within three years, Jay Chiat left the agency and Chiat Day was interviewing new architectural firms to design new spaces (Berger. 1999).

Because it is often connected to physical space as the manifestation of a particular strategy, workplace strategies possess an emotional connection to meaning. As a physical manifestation of strategy, the design of the workplace both shapes meaning (critical theory) and results in intended or unintended consequences. This relationship between space and action is viewed by Giddens as structure that shapes action and action that reshapes and reinforces space (Clegg & Kornberger. 2006.). It is precisely the symbiotic relationship between WPS as action shaping space and space as a symbol of corporate culture shaping action (developing workplace strategies). Hernes, Bakken and Olsen in their paper published in *Space, Organization and Management Theory* (Clegg & Kornberger. 2006) discuss the relationship between space and structuration theory. They note that the production and reproduction of space will always entail unforeseen consequences especially as it relates to change (organizational change) (ibid.). The importance of this relationship is further explored by the authors in viewing and understanding space (the workplace) existing as a result of production and reproduction. They note that while space is what shapes action and interaction (how workers behave within the workplace) it is also reshaped by actions and interactions (ibid.). In other words, how workers actually behave within the workplace serves to reshape how the workplace

actually functions, often ignoring the intentions of what was originally conceived (Stephenson).

3.5.2 Structure

In discussing the use of Structuration Theory and Information Systems Theory, Rose outlines Giddens' definition of structure as those rules and resources that are involved in social reproduction. He goes on to point out that the institutionalized features of social systems have structural properties in that they are comprised of relationships that are made stable across time and space (Rose 1998.). Used in social analysis, Rose references Giddens as saying that it is the structuring properties which allow for the '*binding*' of time and space (ibid). Giddens goes on to say that this binding of time-space in social systems creates the properties or context from which to make it possible for similar social practices to exist across different spans of times and space, and which result in systemic forms (Giddens 1984). As such, according to Giddens, structure is both constraining and enabling.

Taking this into consideration as a viewpoint in looking at organizations and workplace strategies, structure can be defined as the rules and resources within organizations that enable those organizations to continue and replicate. It is those rules and resources centred around workplace design strategy that enables the organization through its culture, work processes and imaging or branding, to continue and replicate or grow (replicate as in expanding laterally though additional facilities both domestically and globally) and continue as in the facilitation of the organizations work processes and culture. As for its ability to constrain or enable, this study looks at the study groups and their utilization of workplace strategies as resulting in either a resource that constrains behaviours, processes or culture; or serves as an enabler. Giddens refers to structure as both rules implicated in the production and reproduction of

social systems and also to resources. He goes on to point out that the most critical aspects of structure are the rules and resources involved in these institutions, which lead to their institutionalization or the provision of solidity across time and space. (Giddens. 1984.).

Regarding the workplace and workplace strategies, structure refers to those rules resulting from WPS that result in the organizations' production and reproduction of itself occurring across both time and space (time being the evolution of the workplace over the span of its lifetime or existence, and space being across the varying duplication of premises over differing geographic locales. Bhaskar argues through Critical Realism that the relationship between structures and agents is based on a transformational notion of social activity and that the understanding of social activities exist within and are dependent upon relationships between social structures and human agency (Bhaskar. 1989). Giddens views structure as existing in an explanatory role, linked to the concept of transformations. The process of analysis of structures goes beyond the surface of appearances, thereby separating structure from appearance and equating this separation to the difference between code and message (Giddens. 1979.). The rules and resources comprising structure within organizations and which are inherent to it is existence and reproduction is often not apparent on the surface. One must dig beyond the appearances of certain workplace strategies to distinguish its meaning. On the surface, certain workplace strategies give the appearance of being egalitarian and non-hierarchical, yet by examining these organizations in a more in-depth way, you find that the same hierarchal relationships exist as before but within different surroundings and structures.

3.5.3 Agency

Giddens notes that the focus of social theory is the understanding of human agency and its corresponding social institutions (Giddens. 1984).

In the case of Workplace Design Strategies, human agency represents those individuals along the supply chain (a term used by Duffy [2007] to describe the pecking order of the design process and interactions with stakeholders that affect the decision process) that affect strategy decision-making policies: design practitioners, corporate real estate personnel, stakeholders and senior management. The actions of these groups, individually as well as collectively, take place over time (e.g. from decision-making, lease processes to the actual construction and occupancy of a completed work environment).

For the purposes of this research, I am considering business organizations analogous to those social institutions through which Giddens views Structuration Theory as a means of illuminating the concrete processes of social life (Giddens. 1984.). Human agency is the capacity to make a difference (ibid). It is also connected to power through its defining characteristics (Rose. 1998). The role of agency and power is in the ability of agents to possess transformational capacity through the exploitation of resources which Giddens views as structured properties of social systems. These are the result of reproduction by knowledgeable agents in the course of interaction (Giddens. 1984.). Resources, as reviewed in greater detail below, consist of authoritative resources and allocative resources. As such, human agency is both work or production and reproduction of the conditions of production as seen through society or organizations, which is also the duality of praxis (ibid). Workplace strategies are the means of enabling transformation within organizations and can also be considered illustrative of transformation. They clearly are the result of agents and of the interactions of many parties (agents) both external and internal to the organization.

3.5.4 Duality of structure

It is the ability of structure to serve dual purposes of constraining or enabling that Giddens refers to as the duality of structure. As it relates to this research, there are often instances where the role of structure takes on both constraining and enabling qualities. Structure takes on what Giddens refers to as the constitution of both agent and social practices, both medium and outcome of the reproduction of practices (Giddens. 1979.). A feature of this duality is that agents are aware of the social systems within which they are part of and of which they are responsible for reproducing through their actions (Giddens. 1979.). Design consultants and those responsible within organizations for workplace strategies are part of this duality. They operate within defined social systems (organizational culture, structures and politics) and play key roles in reproducing in either a transformative or conservative manner, those systems. Bhaskar's view in his elaboration of the transformational model of social activity which allows for the dualities of both structure and praxis or as he states, the conception of social structure that exists in the virtue of human praxis of which it is the indispensable condition through which that praxis reproduces and or transforms (Bhaskar. 1989.).

3.5.5 Space + time

Giddens formulates that the basic domain of studying social sciences according to Structuration Theory is the study of social practices that are constructed across time and space, rather than the experience of an individual actor or any particular form of '*societal totality*' (Giddens. 1984). Issues of space and time affect architecture and more specifically the workplace in numerous ways. At the macro level, buildings and architecture as its manifestation, are built for certain purposes and change as they age (both by design and by situation). Duffy references this when he discusses the unit of analysis for building evaluation as being the use

of the building through time (Brand. 1994.). He goes on to say that the time factor is in actuality the true essence of the design problem (ibid). Various components of the building, Duffy argues, change at differing rates. He categorizes these components as site, structure, skin, services, space plan and 'stuff.' (ibid). Each of these components changes over time at different rates and ultimately affects any given workplace strategies. The 'space plan' component has most relevance for this study. Along with services, interior elements age with time, materials have certain life spans and the needs of the users or occupiers change over time. Specifically, how organizations through their workplace strategies cope with these issues of change is both the challenge and driver of workplace strategies.

Using Financial Group as an example, what started out as a credit card company based on the use of innovative technology and distribution systems has evolved into a financial banking organisation. As evidenced by the narrative, The Future of Work strategy which worked well for former and current initiatives is being rethought to accommodate this changing factor and the subsequent utilization of space. The issue of change has become one of the most central issues confronting organizations and their workplace strategies. This is discussed in Time-Based Architecture by the authors who state in their introduction: "*A new approach, therefore, is to design buildings that are able to cope with such changes, in other words buildings that respond to the time factor. Designing for the unknown, the unpredictable, is the new challenge facing architects today*" (Leupen & Heijne. 2005.). Time affects WPS decisions as well through constraints imposed through specific time frames governing real estate decisions. Financial Group's Ed Lawrence discussed in his interview that awareness of lease durations (typically negotiated in the U.S. in ten year increments) limits decisions when one thinks about the time it takes to implement any workplace strategy initiative and noting that by the time a project is completed, a

organizations lease could be nearly up, thereby rendering the workplace strategies obsolete before it is utilized.

3.5.6 Authoritative resources

Building on the idea of time-space distancing which Giddens connects to a theory of power (Giddens. 1984.), resources are comprised of two types of structures of domination, viewed either as authoritative or allocative (ibid). Giddens connects these across time and space by viewing social systems as involving a combination of these two resources. Authorative resources consist of the organization of social time-space; the production and reproduction of the organisation and relation of human beings in mutual associations; and the organization of life changes or the constitution of changes of self-development and self-expression (ibid). These are the constitution of societies or for the purposes of this research, organizations.

Giddens refers to the containers which store allocative and authoritative resources that generate the structural principles in the constitution of societies (ibid). He likens this to cities, and the ability of societies to store information as being a fundamental phenomenon that allow for time-space distancing (ibid). Again, the view of societies can be transferred to organizations, which are made real and empowered through the storage and use of information and knowledge. Containers in this instance are offices, real or virtual.

3.5.7 Allocative resources

Allocative resources derive from the coordination of the activities of human agents (Rose. 1998). Allocative resources consist of material features of the environment such as material power sources; the means

of material production and reproduction; and produced goods resulting from the interaction of the previous two components (ibid). As such, allocative resources are closely connected to the continuity of societies across time and space and thus the generation of power (Giddens. 1984). One can say that workplace design strategies are the process of controlling the physical environment through the allocation of resources: people, resources such as technology and work processes.

Section B: Research study findings + discussion

4. Research design

4.1 Introduction

The research is organized to first understand the complexities of areas that are involved in workplace design strategy decision making; identifying the gaps in addressing the hypotheses of this research and then to use the study groups represented by the interviewees, to examine their responses to workplace design strategies. The study groups were then used to identify and develop an understanding of decision-making regarding workplace design strategies. To further support the thesis, three layers of analysis were used to view the same information that was gathered from the interviews. Layer one took representational approach to viewing this information. It examined the narratives based on the interview responses much the same way that the available literature on workplace design strategy traces similar information. It takes at face value the information provided by the interviewee without adding meaning beyond what was said. Layers two and three then take the same narratives from the interviews and examines them through the lens of Critical Theory and Structuration Theory to uncover meaning that will hopefully lead to a new and broader understanding of the subject matter (reference Diagram 2.1).

4.2 Interview Structure

In selecting the organizations for this research I set out certain initial criteria to use in the selection process. I felt that these criteria would be critical in eliciting responses that would assist in addressing the issues outlined in Chapter 1 and 4 as the focus of this research. The interviewees were selected utilising the following criteria:

- Access to the highest-level person involved in developing and implementing workplace design strategies within the

organisation. This was critical since the research is examining what informs perceptions of the value of workplace strategies by those individuals within business organisations responsible for those strategies, as well as to gain insight into the decision process itself.

- A broad group of organisations covering a wide range of industries so as to provide insight into these issues across industry lines, and to test if there were industry related issues informing perceptions and ultimately the decision process itself.
- They were to be a combination of US based firms, US based firms with substantial European offices, and European based businesses. Of those that were either European offices of US businesses, or European based ones, I focused on the entities located in the UK. The reason for the European study groups was to test if national culture would potentially play any role in informing these perceptions, and by focusing on UK organisations I was able to study potential cultural issues within the closest physical similarities. The UK, and London in particular, has the most similar building types to those of the US. Issue such as unique building footprints being the result of ancient cityscapes that affect much of the building infrastructure of countries such as Sweden, France and Germany by and large do not exist in London (where all of the European study groups were located). The resulting footprints were all categorised as 'deep' (The European Office. Van Meel. 2000) and comes the closest to their US counterparts in terms of settings for potential workplace design strategies. This would hopefully limit variances due to building types, government regulations and labour practices intrinsically European, and allow the interviews to focus on any potential unique cultural issues.

These criteria and the subsequent chosen organizations were a direct result of the areas of focus within the research methodologies discussed in the previous chapter. The decision to examine the variety of business sectors and the types of organizations within these sectors was influenced first by the role of structuration with its views on the relationship between agency and structure and then by the layers of perspectives contained within critical theory (managing meaning, power and control, etc.). Multinational and complex organizations would allow me the breadth as well as the depth within a single organization to explore the research question within a single organization, and within a specific industry sector. Later on in the interview process, I made the decision to extend the interview field to organizations that were not multi-national and which also were duplicates within certain industry sectors to test for saturation of data and information. The repetitive nature of the responses led me to conclude that going beyond the fourteen organizations would not necessarily yield new data or interpretations of the interview responses.

Once I had identified the organizations that I wished to study, and the individuals within those organization to contact, a combination of telephone and email introductions were made summarizing the intent and scope of the research. After this was accomplished, a follow up email was sent to each individual with a more detailed explanation of the research project, along with a description of the topics and areas proposed to be covered in the interviews. It was on the basis of this information that recipients either committed to participate or to deny the request. Only one organization contacted expressed no interest in participating. I also expressed in these correspondences that this research endeavour was in no way a marketing ploy (this was especially important since many of the study organizations were former or current clients of mine) and that the information gathered as well as the subsequent analysis was being conducted for academic purposes only. I can only assume by the fact that

each of those clients contacted agreed to participate and therefore felt comfortable with my being able to separate my consulting role from that of my research role. In addition, each participant was guaranteed complete anonymity of both individual and organization if so desired.

At the start of each interview I asked the participant to express their view on anonymity and if a recording device could be used. Among the fourteen participants there was mixed feelings concerning the issue of anonymity, and as a result I eliminated the company names for those organisations. The first two participants also requested that a recording device not be used, and I therefore made the decision not to use one for any of the interviews in order to maintain a consistent format of gathering the information from each of the interviews.

Each interview was conducted with an outline set of questions with the expressed hope that any of the participants could deviate from the direction of the conversation which would allow one to express their individual perceptions as openly as possible. Hand notes were taken during each of the interviews which I then transcribed after each session and compiled and organized by organization and then by heading of research methodology (i.e. power and control, managing meaning, etc.). I also requested any available collateral material on their particular organisations workplace strategy that they used to support their efforts. The collected materials included press releases, communication programs and power point presentations made to various audiences within their organizations. These secondary materials were used to both supplement the data provided during the interviews and also to triangulate the perceptions expressed during these interviews. It provided a window to examine how the perceptions expressed during the interviews actually corresponded to the public face being presented to the employees and decision makers within each of the organizations where I had the materials.

A total of fifteen interviews were conducted with eleven business organisations. Six were US based, three of which were US based with European offices, five European based, and one was a subsidiary of the US organisation with offices in both the US and Europe (Fig. 16).

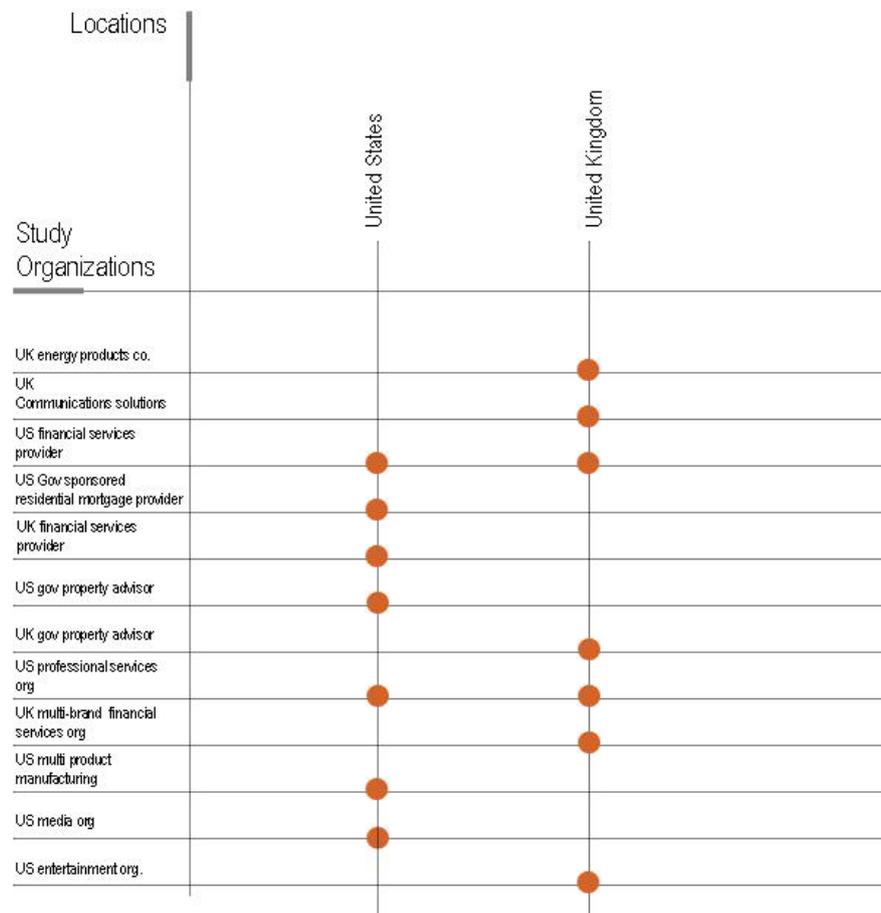


Fig. 16 Study Group Interview Structure

The industries represented were:

- Finance and banking (4)
- Professional service (1)
- Media (1)
- Energy (1)

- Communications (1)
- Entertainment (1)
- Manufacturing (1)
- Public entities of the national governments of the two respective countries (2)

The interviews were based solely on perceptions of the interview subjects and responses were not automatically accepted as factual but as the views and perceptions of the respondents, and focused on a number of subjects: role of workplace strategies within their organisations; the culture of the organisation; the value of workplace strategies by employees and management and perceptions of various stakeholders. At all times the discussion involved responses that were framed as perceptions and not as hard data or fact. It was viewed as the subjects' lens or viewpoint of their world and their organizational world, and because the individuals interviewed are in positions of responsibility for either formulating, or executing (or both) workplace design strategies, I felt it imperative for the aim of this research to understand their perceptions in order to best analyze how perceptions potentially play a crucial role in establishing workplace design strategies. With this aim in mind, the actual structure of the interview was established as a discussion with some eight to ten questions used to help establish a framework for the process. It was anticipated that this framework would create the tone at the interviews to enable one to capture specific responses but to allow the interview subject to reflect on the questions and offer potentially less edited responses. You will see by the narrative discussion that in many instances this was successful, and has added richness to the meanings of those responses.

While not assuming that this sampling of business organizations is representative of all organizations, let alone all industries, I discovered that after conducting the first six interviews, the responses to the posed questions were similar and consistent with each other to offer the sense

that further interviews would lead to more of the same response and would not provide additional insight. Also, and to some degree more important, the aim of this research is not to find a conclusive quantitative answer to the research question, which by the nature of the question is not answerable in a quantitative manner. Rather, the intention of this research is to explore the views and perceptions of individuals within organizations responsible for the decision making on selecting workplace strategies for their organizations and therefore I believe that a sampling of industries provides that insight. The sampling strategy that I have applied is consistent with this goal and has succeeded in providing such insight.

The field size is also consistent with the tenets of qualitative research where a goal is not always to be representative of entire populations. Coffey + Atkinson maintain that in the study of manifestations of culture and social order, one does not have to assume that such social worlds are representative of wider populations (1996). In conducting research in this manner, qualitative research captures multiple versions of multiple realities and as a result, does not need to reconcile the particular and the universal (ibid). Nor does one have to normally conceive of local or individual research settings as being representative of typical or know populations (ibid).

These perceptions can then be compared with the secondary materials (supporting materials provided by the study groups) that in tandem with the perceptions of the interviewees, form a picture of an organisations' view on utilisation of workplace design strategies. The interviews provide drivers, which are affected by and in turn also affect perceptions of workplace design strategies held by the individuals within the study organizations (Fig. 17). These drivers then form the basis of the analysis presented in Chapter 5.

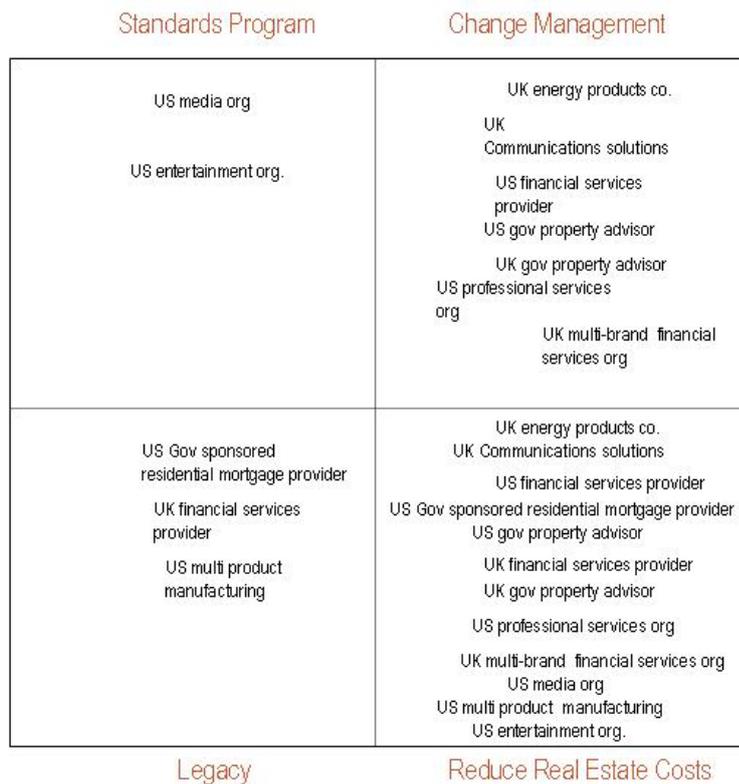


Fig. 17 Study Group Workplace Design Strategy Enablers

4.3 Context

The individuals, who participated in this research, represent key participants in the corporate real estate and or facility departments within each of the organizations they represent. I chose these persons because they represented the highest-level individuals within each of these organisations who had responsibility for workplace design strategies. In some cases, these individuals recommended I speak with other persons in their place, or in some instances, in addition to them, or in conjunction with them. As previously stated, the primary goal in their selection was to reach the most senior point person on the supply chain who both was in some way responsible for workplace design strategies and interfaced with

both senior management at the one level, and employees on the other level. Prior to conducting the interviews, a questionnaire was electronically submitted to each participant outlining the purpose of the research, the manner in which the interview would be conducted, and a guideline of the questions that may be covered. After this, the interviews were scheduled and conducted at the offices of each participating organisation. Upon completion of the first interviews, additional questions were electronically sent to the participants to follow up on issues that were raised at the initial sessions and which warranted further clarification or explanation. In some cases, follow up interviews were also conducted, some in person and some by telephone.

The interview questions were structured on the following themes:

- Background of interviewee
- Definition of workplace strategy
- Influences on workplace strategy decisions; workplace strategy perceptions.
- Influences on interviewee views and perceptions
- Current state of workplace strategy within their organisation
- How workplace strategies are developed within their organisations
- What is the organisations perception of change
- How are strategy decisions carried out
- Factors that influence workplace strategy decision-making
- Organisational resources that directly affect the workplace strategy process
- Importance of the design of the workplace within the organisation and what contributes to this perception
- Systems for measuring successful outcomes of workplace strategies
- The culture of the organisation
- Employee perceptions of the role of workplace design

- Management perceptions of the role of workplace design
- Do employees perceive the allocation of space as part of their compensation

While there were different approaches to workplace design strategies, and differing definitions, there were consistent factors that each respondent cited as influencing these perceptions.

The general consensus was that perceptions of workplace design strategies as a value-added organisational component (see Fig. 17, 18) were triggered and influenced by the need for relocation or change to existing real estate holdings; and a need to reduce real estate costs. Even with those organisations that adopted a more progressive workplace design strategy, the prevailing belief was that without the before mentioned criteria being present, none of these strategies would have come about and been approved. Recognition of and approval for any particular strategy was the result of presenting the strategy to senior management as a business case.

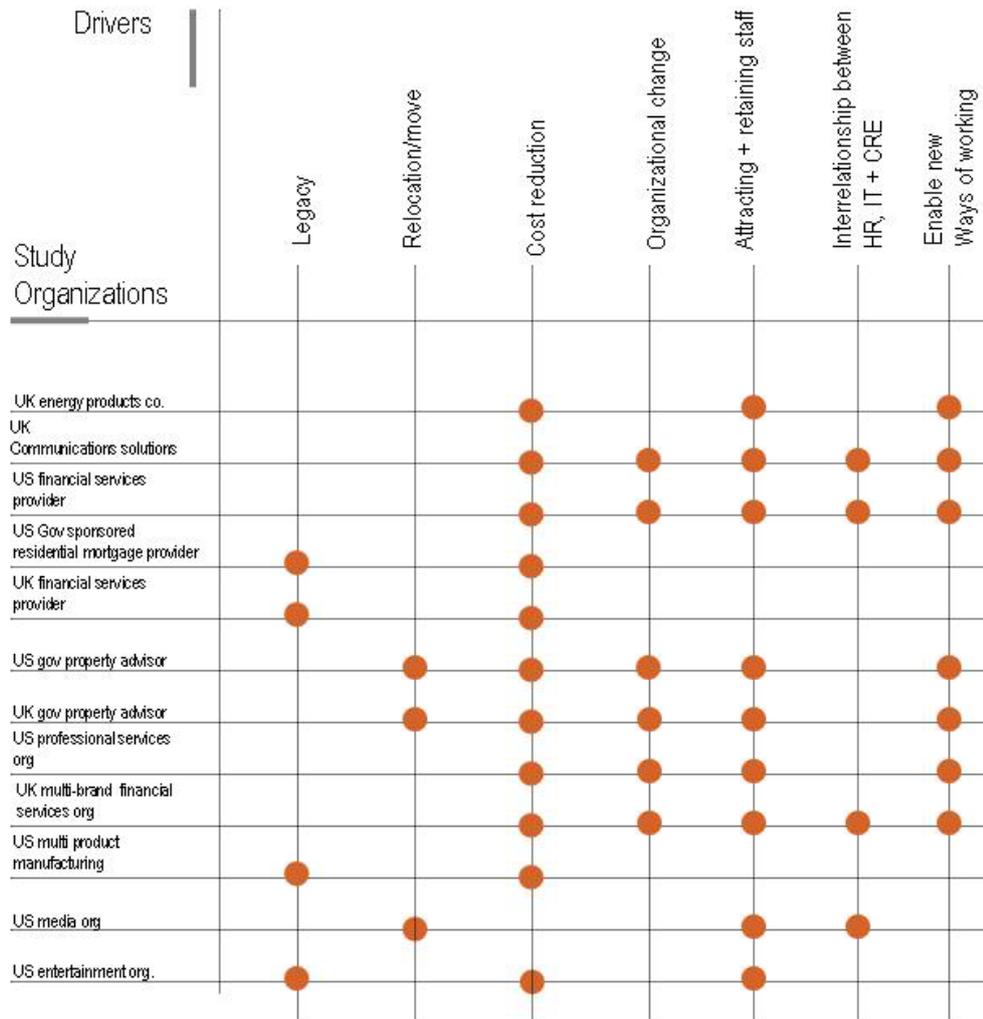


Fig. 18 Value perceptions + decision - making

A secondary level of influence involved the title of the group within each organisation that is responsible for workplace strategies; the level of the individual within the organisation responsible for interfacing with senior management and carrying out the particular strategy initiative; and the group’s relationship primarily to Human Resources, and secondarily to IT.

A further influencing factor cited was the issue of time. Time as it relates to perceiving workplace design strategy as being obsolete before it is implemented due to the time involved in developing the strategy, and the issues of time spans of real estate leases and occupancy. The pressures to complete the design of the premises within a specific time frame when

the point of beginning this portion has been delayed to the last minute due to not enough time being allocated, coupled with the time frames for actual construction of the premises, already puts any strategy eight to twenty four months (depending on the size of the project) behind fruition. Overlaid onto this is the limited time frames of leases that typically range from ten to fifteen years, (unless an organisation is occupying a building that they own) strategy decisions, or strategy value is undermined. This involves the position of workplace design strategies within the supply chain of place making, what Duffy refers to as the sequence of activities within this chain: from investors through developers, real estate brokers, corporate real estate practitioners, to tenants, facilities managers, furniture manufacturers, and other suppliers to the actual occupying of the completed premise (Duffy.2007).

4.4 Interview schedule

The following schedule represents the combined series of interviews and the participants within each of the study organizations:

UK energy products co.: 31 October 2005

UK communications solutions co.: 23 January 2006, 19 April 2006

US financial services products/US: 05 August 2004, 15 February 2005, 03 March, 05 October 2005, 2005, 21 June 2006

US financial services products/UK: 18 April 2005

US government sponsored mortgage company: 26 August 2005, 19 April 2006

US government property advisor: 12 August 2005

UK financial services company 1 US: 27 November 2005, 05 January 2006

British government property advocacy advisor: 05 July, 2005, 19 September 2006

Professional service company 1, UK: 23 January 2006

Professional service company 1, US: 22 March 2006

Professional service company 1, US: 11 November 2004

UK financial services company 2: 31 October 2005

US multi products mfg. co.: 25 February 2005

US media org., US: 12 December 2004, 07 January 2005, 27 January 2005

US media org, UK: 04 November 2005

US entertainment org., US/UK: 03 August 2005, 29 June 2006

US entertainment org., UK: 04 November 2005

5. Analysis of interviews: developing new insight + meaning into workplace design strategies

5.1 Introduction

This chapter examines in detail three fundamental areas of the interviews: workplace strategies, perceptions and decision-making influences as they relate to each of the field study organisations. The chapter concludes by examining the findings relating to these three components utilising both Critical Theory and Structuration Theory. The premise here, as discussed and supported in the Literature Review, is that the foundation of both writings and research on workplace design strategies, as formulated by design firms, workplace design strategists and business organizations in the development and pursuit of these strategies rely primarily on Layer 1, a representational analysis. There is potentially more to be uncovered that

has been largely ignored in previous research on workplace strategy. The focus of this study is that there exists substantive critical analysis of the underpinnings of these strategies, the decision making processes involved, and the fundamental influence of perceptions in this decision making process. It is hoped that by viewing the responses of the study groups as they relate to workplace strategies, perceptions and decision making through Structuration and Critical Theory, a new view of these issues can be brought to light and that a richer understanding of the basis of these strategies and the results of them can be illuminated.

The narratives of the study groups (Section A, Appendices) show the driving forces behind each of the workplace design strategies as well as the decisions not to engage in formulated strategies. The primary forces are a need to reduce corporate expenses in the form of real estates savings; and or relocation to new facilities driven by a need to expand or contract, and or the conditions of a lease expiration.

The three areas focused on here (workplace design strategy, perceptions influencing decision making and the actual decision making process) can be viewed as a culmination of a process involving three steps: (1) an incident triggers the need to explore, consider and or adopt a workplace design strategy (in some cases discussed in the narratives that decision could also be choosing not to adopt a workplace design strategy); as previously stated, that trigger could be a relocation, a merger, reducing corporate expenses, a desire to change the organizations' culture and or a lease expiration; (2) in all of the case studies, the decision process first involves that organizations' Corporate Real Estate (CRE) group; and (3) depending on the size of the organization and the magnitude of the trigger, the 'C' suite may or may not have involvement in the decision process (reference the decision process for each of the study groups in Chapter 5).

5.2 Layer 1: Presentation of data

5.2.1 Introduction

Layer 1 examines the interviews in terms of what was revealed, discussed, and in some instances, what was omitted, not said or was knowingly inaccurate. I have broken the results of the interviews into workplace design strategies, decision making and perceptions(Fig. 19.1) that categorise the discussions into elements that can be compared across the field study interviews. I have attempted to segment the array of responses into manageable headings that could easily be used for comparison: to see similarities and differences between the organisations, and to identify any common themes or issues that prevail. It is also useful, to identify differences as well.

The source of the data used as the basis of the analysis primarily comes from the interviews. Additional data deriving from secondary research materials such as power point presentations provided by the interviewees, company communications relating to their workplace strategies, and articles on the interviewees were also used to supplement the interviews. The narrative of the interviews is structured to first examine what was

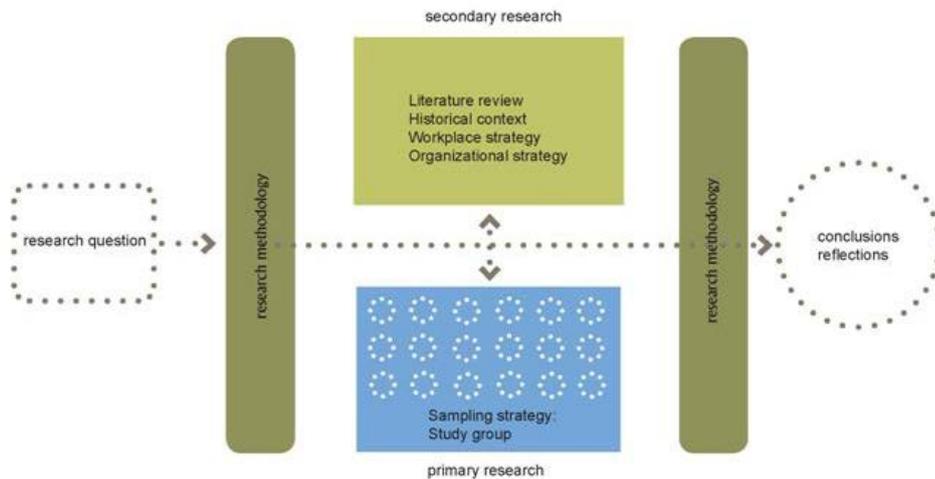


Fig. 19.1 Research Design

revealed about the workplace design strategies within each of the organisations. Using the question of what is each organisations approach to workplace design strategies as the foundation, following areas look at perceptions of various internal stakeholders and the decision making process as it relates to developing workplace design strategies; influences on each of the individuals interviewed that helped shape their perceptions; and cultural influences within each of the organisations that either shape or influence the strategy decision process.

It should be noted, as discussed in the Research Methodology section, that a feature comes into play in regards to the interviews. Two of the interview subjects have been clients of mine, and therefore I have knowledge concerning facts and interpretations as to what was being revealed during the course of the interviews, knowledge that an impartial interviewer may not be privileged to have. Part of the dilemma of this research was to determine what role as a researcher I would play in terms of evaluating the information. I could either take on the role of the impartial observer or make use of my being part of the story to add to the discourse. In the end, because the focus of the interviews is on

participant's perceptions, I have chosen to add my knowledge to the discussion in the hopes of adding to the perspective of the respondent's perceptions.

5.2.2 Workplace strategies

In examining workplace strategies within each of the participating organisations (Fig. 20), there were two identifiable tracks that each organisation fell into: conventional and progressive (progressive is used here to describe any workplace strategy considered as 'AWS, Fig. 19.3). Within the conventional area, the organisations broke down into those firms that developed their particular strategy as a result of a conscious decision-making process (or strategy pursuit), or those where the approach evolved from existing conditions or was a hold over resulting from legacy. Interestingly, those firms that adopted or pursued a progressive approach, all were the result of a strategic decision.

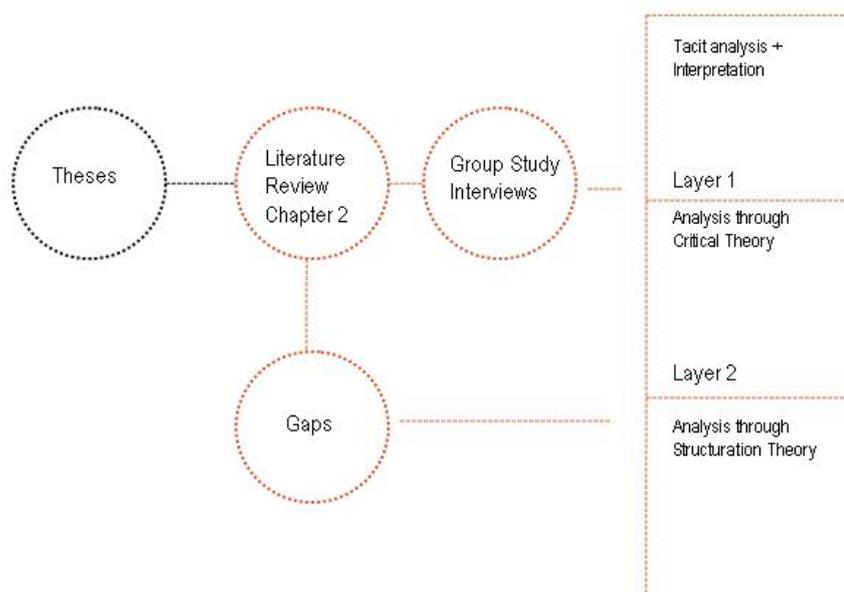


Fig. 19.2 Relationship between primary + secondary research + research methodology

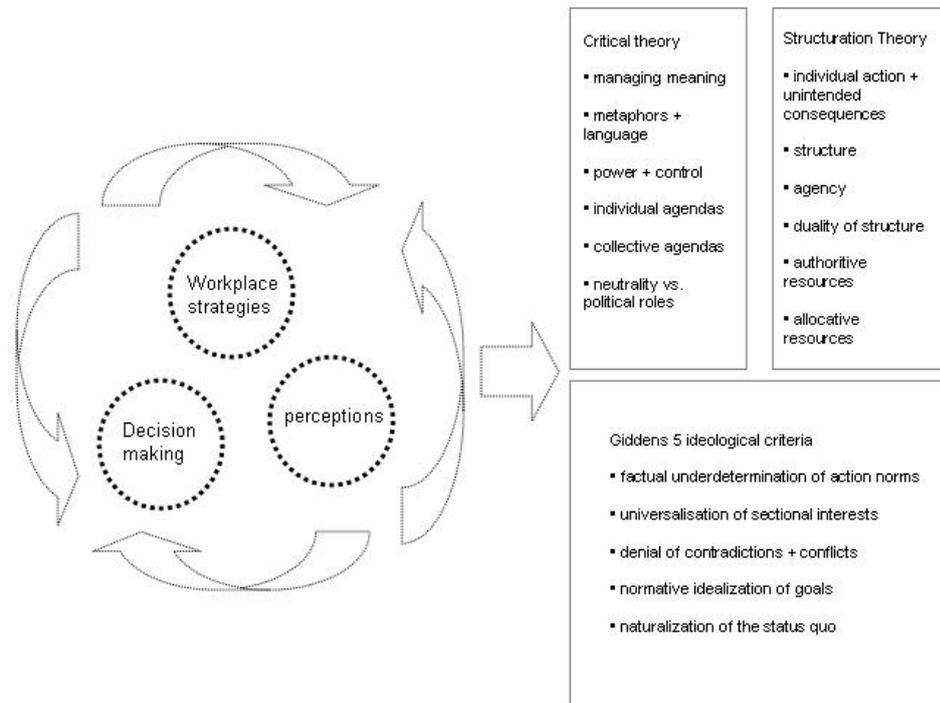


Fig. 19.3 Analysis of interviews

Three of the organisations did not fall into any of the two categories. Two of the organisations, both on the public side (US government and British government advocacy groups) represented organisations within their public sector arenas, and served to influence workplace strategies, but not to initiate them or develop them directly. The third firm, Global financial company 2, was currently housed within a conventional workplace approach, but was in the process of evaluating the appropriate form of workplace design strategy to adopt.

The organisations that adopted or maintained a conventional approach were US government mortgage company, US manufacturing company, US media companies. Of the organisations that fell into the conventional category, the US media company was the only one that adopted a conventional approach as the result of a defined strategy. The media company UK, though a division of the US media company, adopted a

workplace design strategy based on standards developed in the United States.

Also, in formatting this section I have recorded the interviewee's responses as a descriptive narrative incorporating phrases that were used in order to capture the essence of some of the language and phrases used in response to my questions. In many instances it helps set the tone of the perceptions of these individuals in terms of how they responded to a particular question.

US Government Sponsored Residential Mortgage Company (USGSRM)

This company and the manufacturing company share similarities in workplace design strategy approach with the exception that facilities at USGSM are newer, and work on implementing their strategy is still underway, while at the manufacturing company, the facilities are older, and the workplace design strategy represents a hold over from the original 1960's strategy.

The interview at USGSRM was conducted with the Director of Property Development. USGSRM at the time of this interview occupies 1.4 million square feet of office space, housing 6,269 employees. Previous to relocating to their current headquarters site, they were housed in office facilities that comprised both open and closed office work settings, with designations based on title. They adopted a workplace design strategy of primarily open plan when they relocated to their present headquarters site in 1990. The workplace design strategy configuration is based on a ratio of open to closed office settings being 80:20 (80% open office and 20% enclosed offices). While the ratio of open settings has increased, and there are more employees located in open work areas, the strategy of designating office space based on title and grade level remains constant.

In their previous facility, directors, managers and administrative staff were provided space based on a different standard for each staff category. It was not seen as being efficient to carry this strategy over to the new facility in order to maximise the use of office space.

The new facility, Phase 1 (1990), managers and below were allocated eighty square foot workspaces. In phases 2 and 3 (1995), these were again revised to sixty square feet. Additionally, all enclosed office spaces were located on the interior of the facility, rather than on the window perimeter, with the exceptions of Vice Presidents, who are located in the corner positions. Director and vice Presidents are given 180 square foot offices; senior vice presidents 250 square foot. There is also an executive suite for the Chairman and COO. Aside from these enclosed office settings, a universal size approach for open work settings was adopted as a component of their workplace design strategy. In their own perspective, the workplace design strategy was based on maximising space utilisation of the buildings' footprints. Maximising space efficiencies was seen as a critical goal of the strategy.

Subsequently, each building phase evolved the workplace design strategy. Phase 4 adopted a 60 square foot footprint, with the addition of teaming areas interspersed among the open work settings. Also in Phase 4, pantries with meeting type seating and write-on partitions were introduced. These seating areas became meeting space. Currently, the strategy has further evolved to utilise more loose furniture in the open areas to encourage informal and impromptu meetings. Additional features of the strategy included escalators in addition to elevators and in place of the traditional open stair. The use of an escalator as a central feature of their strategy was seen as a facilitator of collaboration in that it made travelling vertically through the facility easier, and because of its ease, served to facilitate movement. It also became a symbol of movement, which was transferred metaphorically to collaboration. Changes and evolution to the workplace design strategy is attributed to a function of a

dramatic change in culture within the organisation; and changes in the median age of the workforce (younger). This inclusion of more comfortable work settings is seen as providing work settings that contain the elements of accommodating alternative work styles.

The original and evolved workplace design strategy is the result of an overall real estate strategy that is based on planned growth within the organisation. There was a twenty-year building plan to build the entire corporate campus in a phased manner. The workplace design strategy was seen as supporting a vision of a growing company. The organisation wanted employees to be able to work in less proximity to each other, and be able to collocate with other colleagues across the campus. This drove the workplace design strategy behind Phase 1. A component of this was wanting to appear strong and as a solid American institution.

US Multi Products Mfg. Co.. (USMPMC)

USMPMC's workplace design strategy is based solely on a standards program. This is the allocation of workspace based on corporate title designations and levels. In essence this is no different than the strategy employed at USGSRM, except that individuals within USMPMC's CRE group views this standards program as antiquated, and based on legacy issues, while USGSRM sees the standards program as being part of an effective workplace design strategy.

The interviews at USMPMC were a joint interview with three individuals: workplace Strategist; Manger of Global Facilities Management; and VP of Global Facilities Management. At USMPMC, enclosed offices are assigned to managers and above, while all other personal are located in cubicle type work settings. There are prenegotiated contracts with two furniture manufacturers to implement these standards. This differs to some extent with USGSM, who make use of both prenegotiated furniture

contracts to supply the furniture standards, but utilise both internal design staff and external design consultants to implement the strategies

The standards were developed through metrics, which was based on benchmarking other organisations to view their approach to workplace standards and work settings. The benchmarking looked at best practices and demonstratable successes within each of the benchmarked organisations. The resulting standards was developed as 'space + cost = 3m standards.' A 225 square foot per employee metric was developed to become the core of this standards program. This metric is viewed, as 'the envelope' within which there is flexibility to create so-called 'unique' solutions. This metric creates 'a window to view the workplace.'

The standard is still evolving, though as stated in the interview, USMPMC is not as far ahead as some of their peers in the devolvement of best practice standards. The standards are viewed as evolving, and those interviewed feel it will take time to get where they need to get to. The needs for this standards program were the product of growth within the company. However, this standards program has created in the view of the interviewees, a legacy issue within the company and has affected perceptions within the organisation that have impeded change (more about this in the next sections).

Current standards are broken down to 64 square foot cubicles for 'professionals;' 80 square foot cubicles for 'specialists;' 120 square foot enclosed offices for managers; and 324 square foot enclosed offices for vice presidents. Another noted difference here between USMPMC and USGSM is the multi-tiered approach to the standards within USMPMC, whereas USGSRM's strategy is based on fewer tiers. For instance, USGSRM has only one size open work setting. While there is a desire and move within some parts of the organisation to develop a standards program that is more efficient (multi-tiered standards programs are viewed as being not as efficient as two-tiered programs), the entitlement mentality

that exists within USMPMC has impeded change. This entitlement attitude can further be seen in business units that have high profit margins and are allowed to dictate the type of office space they get, regardless of the standards program.

That USGSRM has adopted a standards program with fewer tiers, leads them to believing that their program is strategic. They clearly view their standards program as part of a workplace design strategy, while USMPMC sees their standards program as being associated with legacy issues, and an impediment to a workplace design strategy. Additionally, USMPMC equates efficiency within office space utilisation as linked to the efficiencies of their standards program (i.e. their view that their current program with multi-tiers is inefficient and that a goal is to become more efficient by adopting a program with fewer tiers).

USMPMC's expressed a desire to see a pilot program instituted that would assist in developing a new standard that could be adopted firm wide. She views the current state of private office space occupancy at 30-35% as being an 'extreme waste of time.' Part of this change in strategy, is a need to change the perception of space on the part of USMPMC employees. The workplace strategist expresses this as a need to shift from an 'I' space attitude, to a 'we' space attitude.

The approach to workplace design strategies is different in USMPMC's UK facilities where the approach is more open. The strategy is evolving on a global basis, and is individually influenced by operating groups within each location. At this level there is no comparison with USGSRM since they are located only within the United States. It should also be noted that as part of this study to compare US and UK approaches to workplace design strategies, USMPMC was reluctant to provide contacts within the UK, and ignored requests for UK access.

US Global Entertainment Organisation (USEO)

The focus of the interviews with USEO was on their UK operations. The US media organization (USMO) provided USEO as their counterpart to be interviewed to compare UK and US approaches to workplace design strategies. In the case of USEO UK, corporate real estate, and workplace design strategies fall under the auspices of USEO's European Division located in Burbank California. As a result, I interviewed the Senior Vice President of Corporate Real Estate who oversees all of USEO's real estate decisions, and the Vice President of Corporate Real Estate who oversees USEO's European real estate decisions. Additionally, I interviewed the Director of Facilities who oversees UEO's corporate real estate decisions within the UK. This provided a rare opportunity within this research to obtain perceptions of exactly the same issues for a single location by two separate entities: one US based, the other UK based.

The discussions in Burbank centred on workplace design strategies being developed through benchmarking and being hierarchal based. Both the VP and Sr. VP termed the USEO workplace design strategy as both 'traditional' and 'conventional.' USEO views the need for real estate to be both affordable and used for consolidation purposes. This perspective, informs much of the workplace design strategy decisions. The goal of the Corporate Real Estate group is to find the best buildings they can that can support this objective.

The US discussions focused on the need to consolidate groups within facilities, with most of this consolidation required within the UK. They pointed to the need to create more open work settings as an attempt to fulfil a desire to enable adjacencies between operating groups. This has led to the workplace design strategy of moving away from more conventional enclosed work settings, to the current approach of more open settings. In particular, they noted, this moved the UK operations into a different workplace design strategy model. The previous model had

private offices for Senior Vice Presidents, Managing Directors, and Directors, with Managers and support staff in open work settings. These typologies have been folded into all open work environments with the exception of Managing Directors and Senior Vice Presidents.

The new strategy also created what they termed 'brainstorming' areas. They view this approach as more of a hybrid strategy than a radical shift in paradigms. Influencing this was a new Country Manager (CM) who brought with him a vision of the type of workplace design strategy to employ. Additionally, the design consultant they retained was instrumental in developing the approach to the current workplace design strategy.

The new CM favoured the idea of more collaboration. All divisions were located under one leadership. The new strategy integrated all of the necessary components, placing all divisions under a single management leadership. Managing Director's retained their offices, and Executive Vice Presidents shifted to smaller size offices than their former ones. The UK standard for an EVP office became 250 square feet, in contrast to their US counterpart who was situated in 350 square feet.

The interview with the UK director brought out that CRE in Burbank drives all workplace design decisions. Within the UK they try to emulate those standards as much as they can. Densities that exist in the UK that do not fit the US model may cause a different type of application to be developed. This usually takes the form of a downgrade rather than an upgrade in the standard.

In line with the overall real estate strategy that was stated in the US interview as being focused on cost savings and consolidation, the decision of WB in the UK to relocate to Holborn was driven by the desire to save on rent, even though their previous location in Soho was more in keeping with the area preferred by other film/entertainment industry organisations. This move from an area associated with the US film industry, and based on a decision to save money (external amenities

afforded a need for less space in Holborn) was perceived by staff as being a downgrade. The move into Holborn was also an opportunity to consolidate from four sites into a single location (this occurred in 1999).

The VP and Sr. VP pointed to the standard developed in the US, but noted that it was slowly changing. They pointed out that the USEO culture influences the standard, and that any change has to be executed quickly. In the UK there was some resistance to this change, but that the new CM assisted in 'getting the message across.' The UK looked to the US as a benchmark as to what their facility should be. The new standards were very dense, coming in at under 200 square feet per person (this figure is different than the one provided below). This densification has influenced other global projects such as Taipei and Sydney, where it was noted that it was a business decision to compress.

The UK director reinforced the view that the 140 square foot allocation per employee employed in the UK facility follows the Burbank standard. Again, he reiterated that design and space needs come from the Burbank standards on a 'need to know capacity.' In the UK they undergo at least one hundred churns (moves) per year. There is often miscommunication between the US and UK in terms of space needs and the need to compromise space standards.

USEO UK is currently in the process of undergoing a business continuity planning process, which may influence the need for adding space. Being in space that offers little or no expansion possibilities brings on problems for space management. Taking on additional space outside of the current site would be an option. Further densification of the space standards could be an option within a new facility, and new staff coming into a different facility could be adapted to fit this modified standard, but it would be a different situation for existing staff if forced to conform to a new downsized standard.

While USEO and USGSRMP view their approach of space standards as part of an overall workplace design strategy, as well as a corporate real estate strategy, the end result relying on hierarchal standards do not differ significantly in approach and application to that of 3m where the standards program is viewed not so much as a strategic decision, but one of legacy which stifles strategic change.

UK Global Energy Organisation (UKEO)

For UKEO, UKCS, USFSP and USMO, workplace design strategies became a means of implementing actions to enable specific organisational strategies. These workplace design strategies, though different in approach and objectives, served each organisation in a way more than merely supporting existing hierarchical structures and housing employees. Each in their view, and in their own respective way, was developed and implemented to enable what each organisation viewed as imperative organisational strategies.

Up to the time of my interview with the Global Real Estate Manager for UKEO, her group was known as Global Property Management & Solutions, consisting of 450 people. The group reported directly to the CFO of UKEO. The entire function was being disbanded as of March 2006, so this narrative represents the state of workplace design strategies within UKEO up until that time. This model is one based on a centralised control system, while the new one is based on decentralising services. It was a decision made by the CFO. The Global Real Estate Manager has referred to this decision 'cutting the head off.'

The reason given behind the change was that UKEO has a number of businesses with different profiles and needs. They have recognised that the financial expenses for UKEO have been 2.5 times higher than those of Exxon. This change in direction is driven by a need to cut expenses.

The possible result of this revised structure will be a Global Team centred around eight persons reporting directly to Mergers and Acquisitions. Four people will reside in the US, one in Asia and three in the UK. Various individual business units will take some of the remaining 450 persons on.

The workplace design strategy that guided UKEO real estate and workplace decisions was branded 'Blue Chalk' (Fig. 20). The group that developed this strategic approach within UKEO believed that they could influence change within UKEO with a change of work settings and the utilisation of workspace. The former Workplace Innovation Manager for Global Property Management & Services, championed it. He took charge of the initiative, and took it personally to each of the business unit heads for approval. The strategy was based on change management and creating different types of spaces for different activities, a strategy that is often referred to as 'activity based planning.' It respected the manner in which people like to interact and aimed at having a rich dialogue with the individual business units within UKEO. It is the direct opposite to a hierarchical standards program.



Fig. 20 Blue Chalk workplace design strategy

Eventually it was compromised from its original robust strategy. The concept was based on 'efficiency, effectiveness and expression.' Efficiency refers to the utilisation of space, with Blue Chalk targeting a high utilisation ratio; effectiveness referring to effective business behaviours such as promoting communication, collaboration, creativity, innovation and performance; and expression referring to BP values, brand and cultural aspects of the organisation.

Further, Blue Chalk developed a model based on four components of work setting typologies: Restack, Blue Chalk, Enclosed and Spacious. The Blue Chalk office was driven by low degree of ownership and high allocation of space for interaction. It was based on the worker viewing the whole office floor as his or her workspace. The strategy went on to include space principles, organisational change, design guidelines and real estate and project management principles. As a strategy, it was comprehensive

in its vision and in its documentation, much more so than any of the other organisations detailed in this study.

Compromising the strategy was the result of a number of factors typically confronting all workplace design strategy initiatives: scale of any particular project and the need for speed in delivering the completed project. Speed reflects the time scales involved from inception of the project through design, procurement, construction and occupancy. These time frames are never based on the time needed to complete a given project relative to the need to include strategic initiatives, but are solely based on real estate time issues. This entire process is what I referred earlier to the supply chain influence on workplace design strategy decisions (Duffy.2007).

Another factor influencing the strategy's being compromised was the ability of the GPM&S to 'sell' the strategy to the business units. He was the only person within UKEO who was viewed as being capable of engaging in the proper language with the respective user groups. As a result, portions of the model became more generic within the lexicon of UKEO. Despite these compromises, Blue Chalk moved UKEO from the most boring cubicle work environment to alignment with the brand.

Development of the strategy was based on surveys, which helped to quantify an assessment. At first, the business units were sceptical, but despite the scepticism, the surveys showed high levels of employee satisfaction with the completed projects. This was due to Blue Chalk beginning with a strong vision: delivering great spaces. The group lived and shared the strategy and vision with the CFO, and promoted how motivational the concept was. It was first rolled out to the business units. As a result of this implementation strategy, a lot of the BP companies looked at what UKEO was doing and began to implement it.

UK Telecommunications Organisation (UKTO)

The former Manager of Global Real Estate was interviewed from UKTO. The workplace design strategy at UKTO can be described as one based on distributed work and mobility (Fig. 21). The strategy developed as a result of the privatisation of UKTO from a government entity, the need to minimise real estate holdings, and the development of a concept that would enable the organisation to accomplish it. Shifting from a government civil service organization to a business within the private sector forced employees to view change and transition as critical. UKTO went from an organization comprising .5 million employees to 125,000. Most of the difficult change was accomplished by 1995 (this included staff changes). The necessity of undergoing change was critical to this transition.



Fig. 21 UKTO

The strategy incorporates a number of initiatives: distributed or mobile work and optimising collaboration. Part of this strategy is for UKTO to possess as few floors of real estate as possible. This is to encourage the complete integration of employees. This strategy also involves getting managers to be located with their teams. The resulting strategy, in addition to fostering mobility, is based on open planning and minimising private office space designations. The reason cited were: open plan offices are less expensive; it is easier to control climate conditions and lighting; and shared desking is far more efficient. Cost cutting was a prime motivational reason from management. But in addition to this, UKTO also hoped to support the business units and it was believed that this workplace design strategy approach would accomplish this. With fewer and fewer larger buildings available to house a typical UKTO work environment, there was also a need to control the types of work settings that would minimise the need for large office spaces.

The workplace design strategy that they adopted, was branded, and linked to their workplace transformation program, which was simultaneously going on within the organisation. This linkage was a means of selling the workplace design strategy to the employees. At the same time, reducing real estate assets by disposing them, assisted in supporting the transformation. This workplace transformation program was an attempt to radically change the work styles within UKTO. This was a strategy that started in the mid-90's and was initiated with senior management. The driver was the organisation coming out of the Postal Service system (a government function and the legacy issues that were part of that entity). In transitioning to the private sector, there was an appreciation within the business that they needed to respond better to customers. To do this, employees had to be empowered to respond directly to the customer, thereby eliminating the old bureaucratic structure.

The way to do this was to create a non-hierarchical business structure which the workplace needed to support and enable.

Large numbers of management layers were stripped away. Staff was given more autonomy to make decisions and respond to the customer directly. There was also a need to become more visible to external stakeholders. The organisation was moving towards a more task dependent strategy rather than a hierarchical dependent one. Part of this meant having a need to co-locate people together more than they had been doing in the past. On assessing their real estate portfolio, they came to the conclusion after reviewing their over one hundred buildings in central London, that there was no reason to be concentrated there. The strategy turned to locating facilities closer to hubs of where people (their workforce) lived along with the support infrastructure that supported that workforce. In the mid-90's this workplace transformation was started with two sites: Stockley Park and Apsley. The central theme of this workplace design strategy was a mobile workforce (both internally within UKTO facilities, and externally: to work anywhere) and a workplace that supported this endeavour. This was translated into a non-hierarchical workplace design strategy consisting of no private offices and work settings that would support mobility.

The workplace strategy concept was developed internally by UKTO, but utilized the knowledge resources of outside consultants. UKTO had to push their consultants to develop solutions that supported their business needs. UKTO executed the experiments and used the knowledge of consultants to develop the brief that was provided to architects to implement. Architects were then retained to design the facilities based on the brief. A performance specification was also developed that required each building/facility to cope with change, especially in a business environment where change is no longer predictable.

US Financial Services Organisation (UFSO)

The UFSO strategy was the result of a new business entity experiencing phenomenal rapid growth as noted by the Vice President for Corporate Real Estate. As more and more employees were hired, their real estate supporting this staff also grew. A Memorandum of Understanding (MOU) was issued by UFSO's auditors to correct certain deficiencies with government regulators and with the Federal Reserve Board. As a result, there was a drive to move the portfolio to super prime: a 25% earnings growth per year. The MOU resulted in a change in strategy to deal with certain issues such as how to make money with lower margins. Reducing real estate assets became one of the strategies to accomplish this.

Additionally, there was a move to diversify while shoring up the credit card sector. Discipline and control within the organisation became a huge challenge, especially within a start up business founded on an entrepreneurial spirit. Part of this challenge was how to maintain incredible earning growth in markets that are tighter and have lower margins. Placing the focus on reducing real estate assets became a challenge for Corporate Real Estate: finding a way to contribute to this and define the role of real estate within all this.

As part of their information based business strategy revolved around people and a desire to hire the very smartest people, the real estate strategy started with how to support people and get more productivity from them. The cost side involved the real estate portfolio and creating the discipline to control growth in the form of discontinuing real estate acquisitions.

Deloitte and Touche was retained to build a 'robust' process model of the organisation to implement the controls that were called for. As UFSO is an

organisation heavily into processes, part of the charge for Deloitte and Touche was to create disciplines and controls over company costs that would affect the process side of the business. An outgrowth of this was the development of a strategy to reduce the cost of real estate. There was a need to optimise the real estate portfolio by eliminating two million square feet of office space. At the McLean campus, comprising the administrative headquarters activities, there was an existing employee capacity for 600 persons. At the West Creek Campus, their operations headquarters, the capacity was for 1000 persons. McLean also had the ability to build onto the site an additional three office structures that could potentially add an additional 18,000 persons.

The real estate strategy that was translated into a workplace design strategy was driven by associate (the term used by UFSO for all of their employees) satisfaction; productivity; and the retention and hiring of what they termed 'smart people.' The resulting workplace design strategy was termed 'Future of Work (FOW)' (See Fig. 22 and 23 for a comparison of a typical floor at Northern Virginia headquarters between pre – FOW and current FOW). . This strategy was developed as an integral component of the real estate strategy. FOW is about productivity. It involves workplace settings; voice over IP; equipping associates to be mobile; wireless networks; and large screen monitors. It represents an enterprise-produced strategy. Productivity is viewed in terms of people working at home, anywhere in the office, at any office or on the road. Parts of the tools that are essential to this are high-speed Internet connections at home and Blackberry's along with lap top computers.

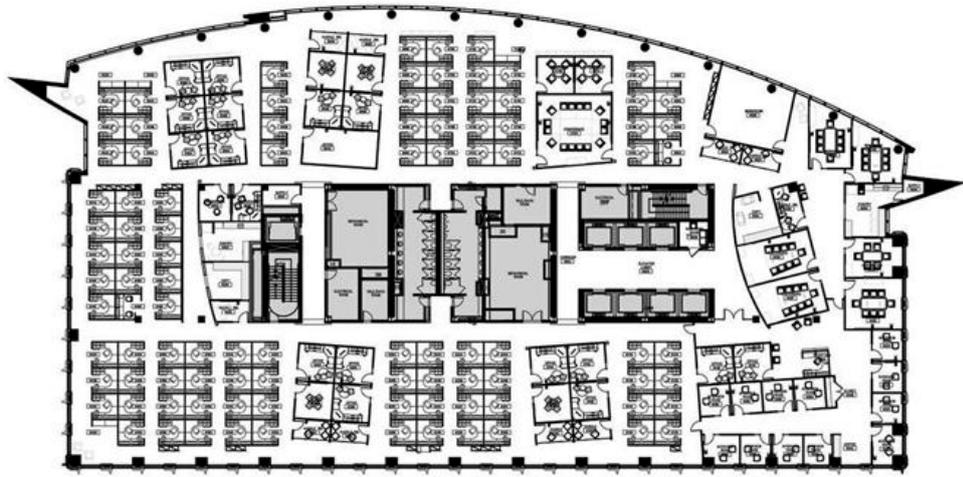


Fig. 22 Financial Group: McLean, VA Pre Future of Work planning concept



Fig. 23 Financial Group Future of Work: McLean, VA

The work setting component of the strategy involved four types of desking arrangements, supported by clusters of team rooms, conference rooms, and short stay rooms (small meeting spaces adaptable for two to four persons at a time). Additionally, integral break out areas, and quiet zones were components of the strategy. The four work settings comprised of ‘anchors’ which were for administrative assistants, those individuals who were always on site; ‘directors digs’ which accommodated senior directors and vice presidents in bench-like settings (these work areas also included lounge areas to encourage informal meetings); ‘resident’ work settings, comprising of bench type desking areas for associates that are in the office for a high percentage of their work day and therefore are designated to individuals; and ‘mobile’ work settings that are not individually allocated and are for associates who travel.

In addition to these settings, there are open informal meeting space interspersed throughout the work settings, and a concierge at the entry to facilitate accommodations for those who are mobile workers. For both

campuses (McLean and West Creek, Figs. 24, 25), implementation of the workplace design strategy (FOW) was through pilot projects comprising a floor within each location and volunteer groups to locate there. After time for assessing its merits and ascertaining issues (through extensive associate surveys) the program was initiated first throughout the West Creek campus and then on a staged basis in the McLean campus. Implementation at the McLean campus was slower due to extensive internal discussions as to FOW's appropriateness in an administrative headquarters environment.

The corporate sponsor for this strategy was Human Resources, IT and Corporate Real Estate. The VP Corporate Real Estate pointed out that it was highly unusual for Human Resources to play this role. A business case was built around FOW as part of the approval process. Part of the business case



Fig. 24 Financial Group Future of Work: McLean, VA



Fig. 25 Financial Group Future of Work: Richmond, VA

demonstrated such a large savings in real estate with the adoption of FOW that this savings would fund the implementation of the technology necessary to make FOW possible. It was noted that this is a first for a CRE initiative to fund an IT initiative.

On the UK side of USFSP, the Manager International CRE and the Workplace Manager, participated in the interviews. Both individuals put the workplace design strategy adopted by UFSO, especially in the US in the perspective of the UK. They pointed out the history of workplace design at UFSO, prior to FOW was driven by the US with a cubicle

approach (64 square feet). It should also be noted here, that this cubicle size legacy was what was originally installed in the McLean campus. This cubicle-based strategy was implemented by the US in the UK when they opened up their London facility. It changed in the UK to a more open, panelless collaborative work setting (Figs. 26, 27), one more commonly found in the UK. This was a complete departure from the settings at the time in the US. The Manage International CRE and the Workplace Manager noted that this took the US 'aback.' The UK then took it one stage further, which was driven by a more transient workforce. In the London office, mobile working became the norm: creating flexible work between locations, which resulted in, unassigned workspaces. The strategy in the Loxley facility is similar but with assigned workspaces.

The resulting work settings in the UK are bench type desks. The two differences between the UK and US model was the height of the screens between desks and the density of the work settings. The screens in the UK were originally lower than those used in the US. It should be noted that after a visit to the UK by the EVP for HR who served as the champion of this project, after viewing the lowered screen heights, he ordered the US screen heights lowered to match. In the UK creating value through examining the bottom line was translated through creating greater floor

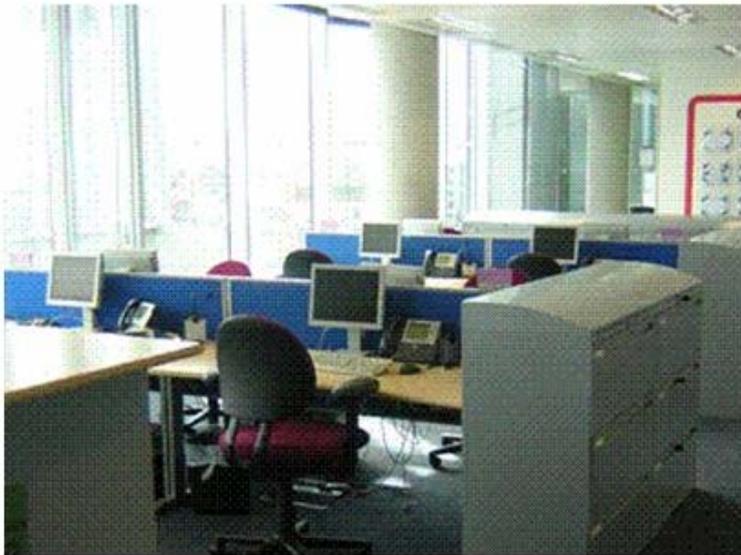


Fig. 26 Financial Group Future of Work: London, UK

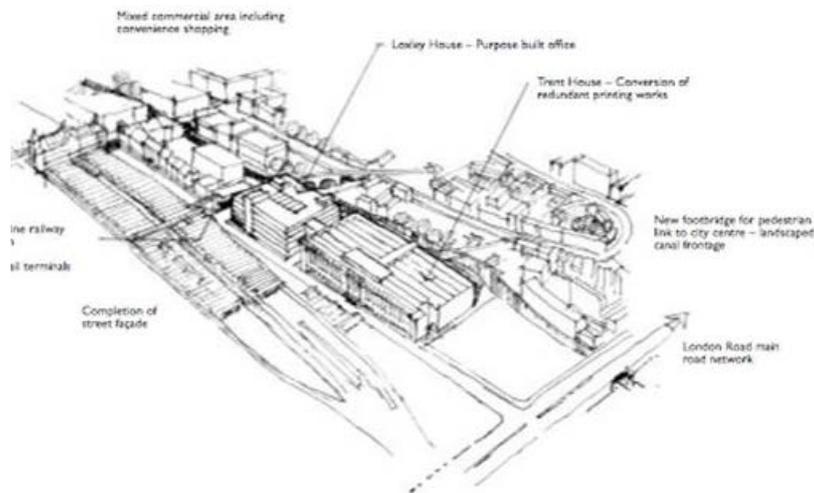


Fig. 27 Financial Group Nottingham, UK

density (this is a generally accepted feature in UK planning strategies that typically differs with US counterparts). USFSP calculated the average cost per desk in the UK as being £21,000 per year. The densification of the floor was a solution to an economic problem and was solved through an economical approach. When the US saw the approach utilised in London, it crystallised their ideas about workplace strategies (this view has only been expressed in the UK interview and was never picked up in

the US discussions). This approach is now embraced in the US through the FOW initiative.

The Manager International CRE and the Workplace Manager both expressed the view that the European model moved the US into doing something similar and moving away from the cubicle model so prevalent in the US. The primary difference between the US and UK applications are the densities and that the US has a greater investment in technology and has built greater flexibility into their adaptation of the strategy. As noted by both, the US has made a 'quantum leap from London.'

US Professional Service Organisation (USPS)

USPS has a 'global' workplace design strategy but after interviewing three sets of persons (both UK and US based) there was a feeling that this global strategy was not universally understood. In the US, the primary interview was conducted with the Director of Real Estate Services. At the time of the interview, she was fairly new to this position, and as such, had the former director prepare notes to respond to my questionnaires that I forwarded prior to our interview. As the interviewer, Nancy did not inform me of this, but the former director did let me know though I was instructed not to disclose my knowledge of this. As a result, I have included the notes prepared by him as well as my notes from follow up interviews with him as part of this study. The UK interviews were conducted both jointly with the I&P Head of Facilities UK, and the Head of Accommodation Services, and with subsequent interviews with the I&P Head of Facilities alone.

From USPS's US interview, the workplace design strategy is to reflect the business and fit into the culture of USPS. It is also intended to reflect the work styles of the people within USPS. The UFFSP workplace strategy

model is where Real Estate Services would like to be, but the current director offered that USPS is not yet there.

USPS is located where their clients are. This informs the portion of strategy concerning real estate location. On the people front, the workplace design strategy is concerned with retention and providing a unique client experience. The workplace strategy needs to provide the atmosphere that gives staff the tools to do their work. There are national standards based on each office having input on the look and feel of the facility, within the utilisation of the national standards. Each office has their own look and feel that reflects the local group. As such, the design approach is the same throughout. Part of the standards is that private offices are not to be located on the window perimeter of any of the building sites they occupy, but on the interior space. Each facility is instructed: here are the standards, but you can design the office in the way you think best. Within the range of standards, there are no exceptions.

These standards are based on 120 square feet for Partners, and 80 square feet for Directors. All other staff are in open work settings consisting of 48 square feet. Additionally, Assurance Managers are located in private offices but not designated ones (they hotel or hot desk). Focus rooms and team rooms are at 120 square feet.

These standards were developed in 2000 as a result of a need to drive real estate and occupancy costs down. The driver came from the business units themselves. Hoteling started in the mid-80's. This came about as a result of doing 'bed checks' to quantify the amount of time staff were actually spending in their office space, and how much time was being spent around the office, and out of the office. This was done to justify initiating a hoteling strategy.

The standards are viewed as space management tools. Their perspective is that the standards are what there is, and hoteling is how they are

utilised. The average age of the employees at USPS are twenty-seven. Design committees for individual projects, reflect the demographics within USPS.

Lines of service work differently. USPS did not want a 'cookie cutter' approach to workplace strategies. While office sizes would be the same across all lines of services, how the spaces within these locations were utilised, would be tailored to each of the projects and locations.

These initiatives were started with the Tax practice group in order to change process behaviours. The group wanted its consultants to spend more time with their clients, while at the same time, wanting to increase collaboration within the group. Again, the primary driver was looking at occupancy costs. The business aspects and the financial drivers were equal. USPS believed that this initiative would generate more business, as it also reduced real estate costs. To this end, the financial drivers and the business aspects as triggers were considered equal. When it got to RES, they felt it needed to be on a much broader approach than just limited to a single practice area within the organisation (i.e. Tax Practice Group).

Initially, the hoteling strategy was not successful in the Tax practice area. It did not match the business needs. It did create a need to look at the impact of this strategy across the organisation. This shifted the emphasis to looking at how workspace was utilised being based on lines of service. This strategy, branded Global Workplace Initiative, was rolled out in 2001 with a lot of change management initiatives.

Part of the change management initiative was to conduct POS (post occupancy surveys) to make any necessary or required adjustments as part of the change management process. The commitment to the Global Workplace Initiative was that it worked for today's worker, but was adaptable to the future needs of the workplace. Along the way from its inception, changes were made. The original size of an office was 60

square feet, which was subsequently modified to 80 square feet. Open work settings were changed to serpentine desking arrangements to create more privacy between settings. In actuality, it created the perception of privacy rather than the actual conditions for privacy. Global Workplace Initiative created a lot of 'noise in the system'. It was difficult to know what was a genuine change management issue, and what was general nervousness about moving to a different workplace design strategy. As it was, most of this 'noise' came from the Tax practice.

Another fundamental change occurred by locating offices in clusters perpendicular to the perimeter window partitions rather than having them be located on the interior. This enabled the creation of 'neighbourhoods.' This modification did not compromise the open plan feel of the original strategy, but was an example of responsiveness to change management issues. A planning model change to the open work settings involved the modification of the heights of the privacy panels. This same height as the original was used, but utilised in a wrap around manner, giving a feeling of more privacy. This was created by increasing the quantity of panels used within each of the work settings. Once again, there was not much of a fundamental change from the original strategy, but perceptions were changed.

The UK interviews also were framed in the background of the development of the workplace design strategies historically within the organisation. A fact brought out in the UK interviews and not in the US ones was the effects of the merger between two of the largest professional service firms that created USPS and the legacy issues of the workplace design strategies coming off of those organisations.

Within the UK operations, London is divided into three locations. USPS is currently looking strategically to consolidate into two locations as part of its cost savings initiatives. In the regions, outside of London, USPS occupies primarily smaller offices. The overall view of a strategy is to use

space efficiently and somewhat aggressively. There is an emphasis on looking at the numbers (costs) and spending as metrics to use office space as efficiently and effectively as possible.

In the UK, it is the Insurance practice group that was the driver for much of the workplace design strategy initiatives. This practice group spends a lot of time with their clients out of the office. As a result, they became a prime focus on informing much of the workplace design strategies.

Prior to the merger, both former organisations had been experimenting with forms of hoteling as components of workplace design strategies. There was always a cross over between the real estate and workplace strategies of both organisations. Real estate strategy provided the opportunity to look at workplace strategies. It provided the impetus.

The head of real estate went to senior management with a payback proposal to invest in real estate through the use of workplace design strategies as a means of reducing operating costs. A fundamental difference between the US and UK, noted the I&P Head of Facilities and the Head of Accommodation Services, is that property in the UK is built with a landlord bias. This can be evidenced through the lengths of the lease structures in the UK where leases can run anywhere from 25 to 100 years. Conversely, a typical lease time frame in the US is 10 years. This has the effect of placing a bias on physical property in the UK due to longer leases resulting in longer occupancies.

What is currently driving the strategy in London is that opportunities have developed that breaking their leases is a possibility. USPS presently occupies 1.7 million square feet of office space throughout the UK. In many of these properties, they are acting as landlord, and in 210 of these properties, they do not occupy the premises. This has resulted in USPS examining every property within the portfolio. This has come at the same time that SEC regulators are looking at consulting firms occupying facilities with their clients, which USPS was engaged with. This has

resulted in USPS examining the potential penalties for breaking leases vs. the benefits and long-term savings in relocating and consolidating.

In concert with this, they are currently looking at where the business wants to go long term. A driving force in any workplace design strategy decisions is making USPS a great place to work and not treating employees as second-class citizens.

Branding is a large part of the workplace design strategy. Part of the physical branding of USPS is viewing certain benefits of services and amenities within the workplace. A fundamental strategic goal is to be able to go to any office and recognise it as USPS. There are certain branding consistencies: colours, logo and workplace standards (which varies globally). This standardisation of the brand is a departure from the strategy discussed in the US interviews, and a component of the US driven Global initiatives.

There was an attempt to create a global standard after the merger. Within these standards, there are differences resulting from geographic and cultural differences. For instance, team working and collaboration is higher in the UK than in the US. Collaboration is encouraged at the most senior level within the organisation. In the US, especially in New York, there is more emphasis on the individual. Additionally, within the UK, there is a greater degree of individuality expressed project by project.

The Global Standards that are being applied in the UK involves private offices for partners, with all other staff located in a form of open work setting. There are three types of open work settings: alternative work settings; quieter space; and touch down space. The strategy involves examining these work settings in an attempt to move the strategy forward. This approach means they are not as far along as their competitors in the application of progressive workplace strategies. There is less leveraging of the partners being out of the office for a good portion of any given day and the empty unoccupied spaces that this creates, leading to investing in

alternative workplace settings. Part of this reluctance to pursue this route has been that partners, who want to keep their offices, generate new business. As a result, USPS will never be 'cutting edge.'

Currently, 50% of the UK USPS population is hoteling and or sharing desks and office space. USPS is developing 'club space' to encourage more interaction within these types of settings. In implementing workplace strategies, USPS does not like policies that are set in stone. The firm is made up of individual partners and they are against someone telling them how to set up their offices.

UK Financial Organisation 2 (UKFO2)

The Head of Strategy & Performance Management, Group Workplace Operations for UKFO2 was interviewed for this research. He framed UKFO2's' approach to workplace design strategies as emanating from the fact that UKFO2 represents a series of brands that offer a spectrum of services: manufacturing, retail and corporate banking which accounts for forty to fifty brands. UKFO2 took over another UK financial organisation and consolidated properties. There is a perceived back office and front office operation. Buildings are tailored to suite these types of operations. Design standards have been applied universally across the brand, but customised for particular brands. Group Workplace Operations develops workplace standards and furniture solutions to meet these standards requirements.

Moving towards more flexible work environments that speak to specific business needs has been the overriding workplace design strategy adopted by UKFO2. Flexible work environments need to be matched to particular business units. This direction is currently being rolled out to designated pilot sites among the portfolio. Senior executives have bought into this concept. A goal of the flexible work environment is to be able to promote networking and cross selling across all of the UKFO2 brand portfolios, and at the same time minimise the amounts of square footage

being occupied. External consultants were retained to assist in developing the current workplace strategy, but did not initiate its concept (it was noted that the use of external consultants to implement any workplace strategy initiatives is made internally, within Group Workplace Operations).

The overall strategy was developed internally, with the architectural firm, DEGW serving as consultants. The strategy involved changing the square footage of work place settings. 60% more people are now housed in existing facilities. UKFO2 is targeting the core office portfolio to make these facilities 30% more efficient over the next two years. The internal branding of this initiative is 'Your Space Solutions.'

UKFO2's in-house workplace strategist was influential in pushing this strategy. Within the group there are different people looking at different levels of strategy. The Workplace Team consists of thirty persons organised around performance management and strategy. They represent the second largest property management group within the UK for facility management purposes. Steve expressed the belief that UKFO2 is so successful in this endeavour because they are not only unique in identifying the problem, but also in leading the way for solutions.

This strategist and his involvement in CoreNet 2010 initiatives was a driving force behind this strategy and the solutions. CoreNet 2010 represented a vision of how the workplace could be designed to support the workforce. He was the champion behind this initiative. There was also key divisional support behind the initiatives. The Chief Financial Executive (CFE) of Manufacturing was an important supporter. Being one level below the CEO made his championing this strategy a formula for success.



Fig. 28 Good to Great Workplace Strategy

The branding 'Your Workplace Solutions' (Fig. 28) became the workplace design strategy and was designed to be customised by departmental needs rather than viewed as a rigid standards program. A process manual was developed around this strategy and approach. To accomplish this there is a dedicated workplace team supporting and implementing these strategy initiatives. They interview the user groups to determine needs and then develop the appropriate response. The Head of Strategy & Performance Management also noted that implementing a change management strategy solution is easier to facilitate when a group is relocating, as opposed to working with a group that is changing in place. It is always easier to get buy-in from occupiers when a move to new locations was involved rather than in refurbishing an existing space. Another component of selling the concept to occupiers was that the

workplace group itself created a workplace design strategy employing these same concepts for themselves.

The strategy concept is currently expanding to facilities in the US, even though a manufacturing platform does not yet apply to the States in terms of furniture support. Currently best practices are shared between the UK and the US in developing workplace solutions and appropriate strategies.

Up to this point all of the individuals interviewed represented organisations where the workplace design strategies used either were based on employing these strategies to implement change management processes or new ways of working, and were driven by a need and desire to reduce real estate occupancy costs. Global Media Organization represents the opposite end of the workplace design strategy spectrum in that they are an organisation that adopted a conscious workplace design strategy in making their relocation to a new headquarters facility in New York City. However, rather than use the strategy to increase densities, change patterns of work, and decrease the amount of physical space being occupied, they adopted a workplace design strategy that was conventional and not too dissimilar to their former strategy. In fact, the strategy they adopted called for taking on two more floors of space in their new facility than they would have required if they had taken the course that many of the other organisations represented in this study had taken.

US Global Media Organisation (USGMO)

In 2003, USGMO relocated from their landmark headquarters in New York City's Rockefeller Centre to new premises on Columbus Square. At 800,000 square feet, the move represented the largest corporate relocation within New York City in fifteen years. The Vice President for Corporate Real Estate participated in these interviews.

A pivotal component of this project was that during the planning stages, USGMO was going through considerable turmoil. They had recently been purchased by a larger internet organisation, and all during the planning stages the relationship was unravelling, not only internally, but in the public media. The shifts in perspective of the appropriate workplace strategy reflected this ongoing crisis. Additionally, there was consolidation of many different companies within the organisation, which also represented different organisational cultures. They were questioning how to get the fundamental issues and marry these with the planning concepts. They had originally considered bringing in a cultural anthropologist, but they could not get anyone from the organisation to participate in the necessary sessions.

Perkins & Will, who were the original architects, drove what the VP for CRE referred to as the 'trends.' Furniture vendors who flocked to a project of this size and magnitude, and who also had contractual relationships with USGMO, similarly pushed trends. USGMO explored options, but in the end chose the more conventional strategy.

This strategy involved implementing standards that were developed based on salary grade, and to provide a work environment that enhances and assists in the hiring and retaining of what USGMO considers their 'best and brightest.' This has taken on a number of forms and is reflective of the company's heritage as a media company and what its primary focus is today (that of an entertainment company).



Fig. 29 US Global Media Organisation

The overall strategy revolves around two components: a private office based work setting environment (Fig. 29), and what in the view of Time Warner are 'generous' amenities. On the amenity side, components include providing natural light to employees (this is provided through utilising the perimeter partitions for private offices and providing side lights from offices for those individuals situated in open work settings); facilitating logical adjacencies and work groupings throughout the building; providing pantry's on every floor; a first class cafeteria with views of Central Park; meeting and training facilities, an art program

representative of Global Media Organization's assets and products; and attempting to make the daily work life 'more pleasant.'

As a strategic decision, USGMO did not push compression of space to the extent that other organisations had done (this would have involved downsizing employee work space). Instead, they chose to deliberately not go down the same path as financial companies in the compression of space standards. Philip expressed the view that as a media company, USGMO viewed space as employee entitlement, and that as part of their culture, this is pivotal in what it means to create a 'good working environment.' Here again the VP CRE expressed the view that in contrast, some companies would push down the space standards (reduce individual work settings) but would compensate for this by increasing salaries or creating more meeting spaces. USGMO has a different view of people, space and their connection to job satisfaction, he explained. While the new headquarters facility did have some individuals moving out of private offices and into open work settings, it represented a very small percentage of the overall population. He also felt that some of those companies that revert to a compression strategy ask their employees not to look at their office for job satisfaction but towards their bonus or their health club membership.

The new headquarters facility is compressed five to ten percent over their previous facility in Rockefeller Centre, but it does not come close to matching the compression standards of other organisations in other industries. In coming out of five older buildings, they pushed compression only slightly, but not as radically as other industries. The VP CRE believes that they now have standards that will stick.

However, within the facility there were different strategy approaches for certain operating companies. These major business entities shared similar planning concepts, but different ratios of open to closed work

settings. These offices also used brighter colours, and painted wood finishes in place of natural wood finishes.

UK Financial Service Organisation 1 (UKFSO1)

UKFSO1 represents an organisation seeking a workplace design strategy, and struggling between the legacy issues of both their existing standards program and the perceived perspectives of the financial organisation as being conservative; and the acknowledgement that change is needed. The Vice President Corporate Real Estate, North America was interviewed as part of this study. He spent some time on reviewing the history of the organisation and its mergers to set the stage for their current predicament, and to differentiate the US climate with that of their counterparts in the UK. It should also be noted here that he was reluctant to provide a contact in the UK for me to interview, and in the end, failed to come up with someone.

UKFSO1 in the US is the result of a merger between two financial providers. Out of this merger, a best practices approach to workplace strategies was developed. This was driven by the one faction, and was in the interviewee's description, a step backwards.

There are two levels of strategies. First is the current application as implemented in the US. The second is the group perspective emanating from the UK. The UK home office is attempting to develop this approach in the States. The strategy in the UK takes the form of pods of open workspaces, with only six private offices. Conference rooms are clustered in the centre, with everything else taking on a uniform distribution. As driven by the UK model, the direction of workplace design strategies is moving towards *Alternative Workplace Strategies (AWS)*. This has included mobile working. In the States they are about to conduct pilot studies with two selected groups, and have retained the British firm

DEGW as strategy consultants. These pilot studies will incorporate both dedicated and shared workspaces. Audit and CRE have been designated as test cases.

This pilot study is the result of the published real estate goal of having a cost savings over a two to three year period. Part of this pilot study also involves changing furniture providers from Knoll to Allsteel. Space allocation is reducing from 156 square feet per person to 136 square feet per person. With staff increasing 15% (500 people), the objective is to not lease additional space to accommodate this growth. Increased staff counts will be accommodated through further densification and the introduction of AWS. The time frames for these pilot studies are not known at this time. The seeds for this change in workplace design strategy were planted in London. The Group Property Manager is responsible for standardisation of all facilities and infrastructure systems. Part of the global standards program also includes furnishing such as carpet as well as furniture.

A perceived critical issue pertaining to the change at UKFSO1 to AWS involves introducing this change on a phased basis rather than through relocation to a new facility. Phasing it into an existing operation poses problems in selling the concept to employees, whereas with a move to new facilities, the relocation becomes part of the change management strategy, and provides an opportunity beyond the legacy issues of existing frames of reference.

The mechanics and time frames of this change involve eight floors of office space per year, 'if they are lucky.' (Interviewee's comment). This will be done through converting two floors at a time. This all began with standards based on three cubicle sizes and two private office sizes, all of which have been based on entitlement. Their people would rather work as a team than be considered as leaders. They perceive working better as being part of teams.

Management has mandated that the bank will downsize. A goal of the bank is to eliminate entitlement. So far it is being taken well because it is coming from the top down. However, the interviewee believes AWS is only applicable to 10 percent of the banks population within their US headquarters facility.

Group Properties within London drove the concept of AWS. This person was a champion of AWS. The interviewee does not know if this strategy (AWS) has been actually applied in the UK despite it being initiated there. Collaboration has become more of an issue to accommodate. Younger groups of workers seem to adapt better to pods and collaborative spaces than older groups of workers. Through all of this, the hidden objective of the strategy remained 'be cheaper.'

A group within London drives the AWS strategy. The head of Group Properties looks at dollars and cents and looks to global purchasing contracts as a panacea whereas the previous head of Group Properties felt you could not get the same cost effectiveness by having global purchasing in terms of applying a global standards program.

US Government Property (USGPO) and UK Government Property (UKGPA) Advisors

Both the USGPO and UKGPA share somewhat similar functions. The interview with USGPO was conducted with the Director of Workplace and with Workplace Strategies Advice Manager of USGPA. Both organisations are not involved in developing or directly implementing workplace design strategies, but serve in an advisory and influencing capacity. While the functions of many of the CRE groups within the corporate sector served similar functions, either overtly or tacitly, both groups primary directive was openly to influence.

As stated by the Workplace Strategies Advice Manager, UKGPA acts as a catalyst for change within the property side of government offices. The group serves as an influencing body through improving procurement of consultants, office space and construction (the range of activities involved in the supply chain of the occupancy process). UKGPA identifies and promotes best practices and encourage government departments to adopt these practices as they relate to the utilisation of office space.

The group is an amalgamation of three government agencies, and is part of the UK Treasury Department. It was formed from a former purchasing agency, CCTA and Property Audit. They came together as a result of a report on improving government procurement practices. Since coming together for improvement issues, UKGPA has since been involved in program management as well as the other supply chain procurement services. As a result of documented success within the government, UKGPA has continued to grow both in terms of staffing and influence.

Prior to UKGPA's formation, property that was owned by the civil government was managed centrally up until 1996. This consolidation has put decision making with the departments themselves in order to be more accountable to internal stakeholders. UKGPA has been a new initiative to improve asset management and to raise the impact of property utilisation.

UKGPA works with the British central civil government and core departments within that central civil government. They play several roles in dealing with property: coordinating management of real estate and property. Each department or agency makes their own strategy decisions, with UKGPA having a consultancy arm within its functions to advise the occupier as to best practices to adopt for workplace design strategies.

On the procurement side, UKGPA's buying solutions establishes controls, frames briefs for implementation and establishes a range of services to create fixed prices for purchasing both furniture (fixed assets) and services (intangible assets).

In the USGPO's Workplace 20/20 initiative, what makes this group significant according to the Director of Workplace, is that with this organisation, it is the first time the Federal Government is looking at office space as more than overhead (this in of itself is a strategy initiative). The GSA, the umbrella organisation of USGPO, is landlord to 360 million square feet of office space. Customers are not required to use these groups' services as consultants. In this regard, they see themselves as somewhat competing with private sector consultants providing workplace design strategy services (architecture and design firms, workplace consultants). The interviewee pointed out that in a consulting capacity, they provide something more than what the private sector consultants provide: consulting at no cost to the agencies.

Often, many of the groups they work with change their views once they see how valuable their services are and through the strategies they assist in developing. The private sector is involved with 'bricks and mortar' and not in the creation of workspaces according to the interviewee. The challenge for the government has been dealing with large projects where requirements have been developed in the 'by and by' (not in a workplace strategy, and managed way). How the government utilises monetary allocations is often not rationale. Money has to be spent and there is not enough time to think about where and how. Consultants become order takers. The Lawmakers, who legislate and delegate the financial allocations for projects may not be aware of the building processes that drive the decision-making supply chain.

Regarding strategy development for projects, there is not order taking. The current process keeps away from strategy development. There is not enough time in the pre-design processes due to the legislative procurement processes and allocation of funding for projects. Currently, there no strategy is developed. There is a poor understanding of what the customer needs or wants. There exists no methodology for uncovering what the customer requires across the agency. This is the reason behind

the creation of USGPO, and is its greatest challenge. The goal is for USGPO to become the focus of strategy development and implementation.

5.2.3 Perceptions and decision-making

The focus of these interviews was on the perceptions of those individuals and or groups participating in the interviews. In addition, the role of workplace strategy based on existing standards or the use of the strategy to enable a change management program was also reviewed (Figs. 17, 30). Thereby being a pivotal component of both the interviews and the research is the role of perceptions in framing and or influencing decision making within each of the participant organisations. As such, this section looks at the perceptions of various groups in the organisation and their role in affecting decisions and strategic choice. It should be restated here, that the perceptions contained here, are perceptions as noted by the individuals interviewed, and may not be objective descriptions, and may be influenced also by that individuals biases. That in and of itself is important as part of this analysis and study, and will be discussed in greater depth in the next sections on critical theory and structuration.

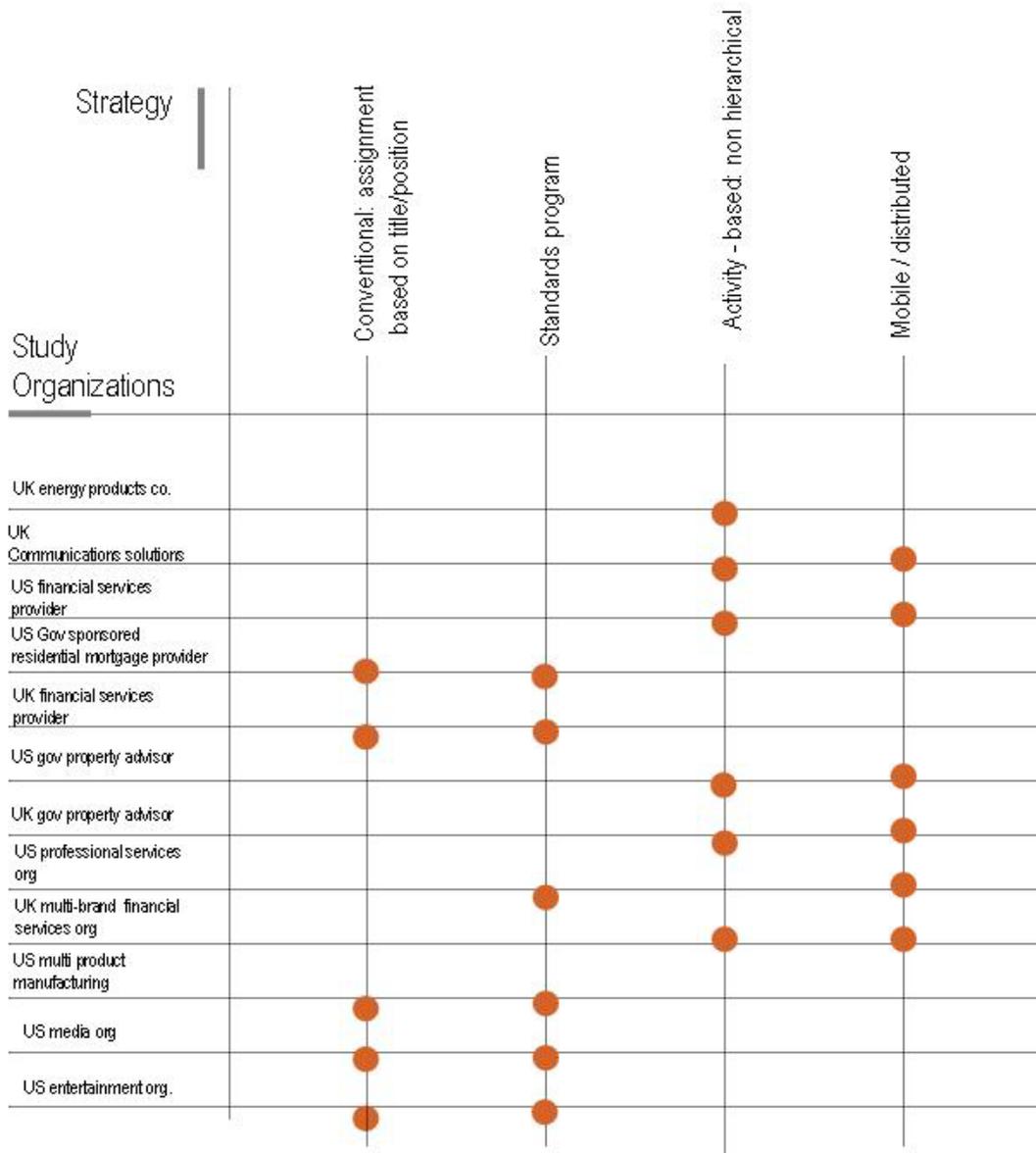


Fig. 30 Approaches to Workplace Design Strategies

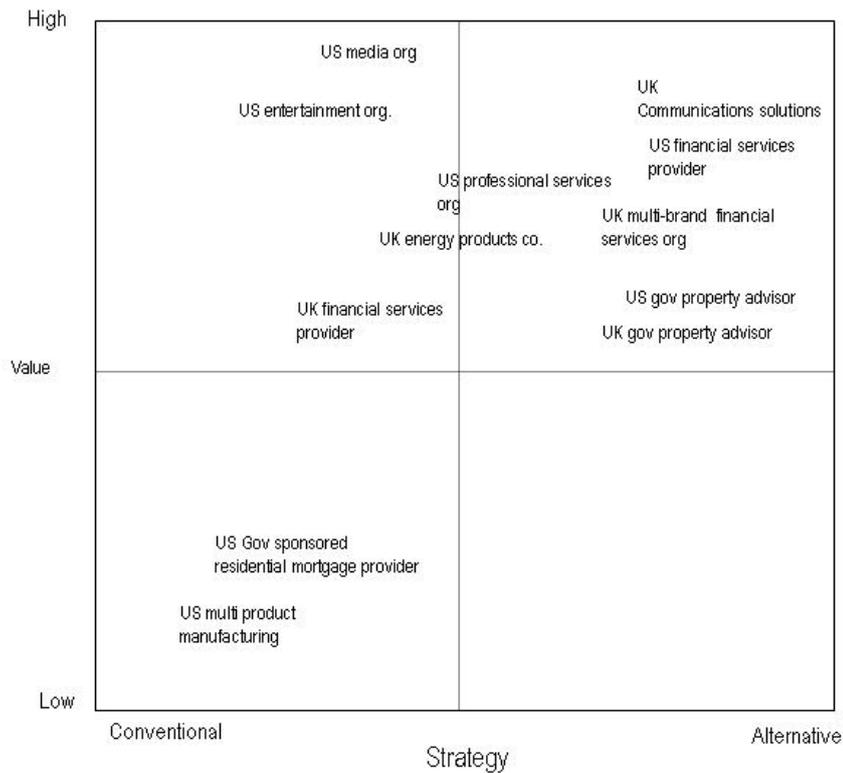


Fig. 31 Study Group Workplace Design Strategy Value Perceptions

Not surprisingly, there are direct corollaries between the approaches to workplace design strategies within each of the organisations, and the perceptions of the value of workplace design strategies (Figs. 18, 30) within these organisations. In all cases, perceptions also reflected the way workplace design strategy decisions were made and indeed played pivotal roles in influencing those decisions. The study organizations can be clustered in three basic groupings (Fig. 31): those that placed a low value on the use of workplace strategies and employed a conventional form of workplace typology standards; those that place a high value on the use of workplace strategies and employed a conventional form of workplace typology standards; and those that place a high value on the use of workplace strategies and employed non-conventional or alternative forms of workplace typologies.

Those organisations that utilised workplace design strategies as hold-over's and as evidenced above, were in all instances strategies that relied

on a 'standards' program based on hierarchy, level and or position of employee within the organisation. To a certain extent, 3m typifies the case, where the strategy being used is viewed as the result of what the participants termed 'legacy' issues. Global Media Organization was the only anomaly to this, in that while they developed their workplace design strategy based on a hierarchical standards program, on the surface at least, it was based on a strategic case rather than a continuation of the status quo.

US Multi Product Manufacturing Organisation

In the case of US Manufacturing Organisation, Corporate Real Estate does not control decisions or directions. They act to help influence decisions, but decisions are made autonomously by country. Each country is set up as a separate business unit. The strategy in place attempts to avoid duplicating systems, but acknowledges that workplace strategies need to be different in each country, and that the culture of each country influences the strategy decision process.

Facility management is viewed as asset management within the company. US Manufacturing Organisation is not clear despite the desire to have cultural independence, about whether or not to have one standard or global regional standards. Within the facilities group, the Governance Team resolves issues related to workplace strategies. There is a centralised approval of funds to finance implementation of fit outs and workplace strategy projects. Each project needs to demonstrate its benefit to the company for allocating funds for their respective projects. This serves to prevent groups from ignoring corporate guidelines. This Governance Team consists of individuals from upper management within Tax, Finance and Technology. Corporate Real Estate is not part of this team, though implementation is part of their responsibility.

Any strategy initiatives would be developed through capital improvement projects, which are driven by the CFO. Workplace design strategy is driven by the business needs (i.e. how do the business needs get met) while overall strategy is driven by the needs from each of the individual business units. Resources get together to assess those needs.

Metrics are used to examine how best to make this the most productive square footage possible. A component of this is looking at the square footage per person allocation (the target is 225 square feet per person). This is a common metric used throughout the industry to develop or benchmark workplace design strategies. In terms of space utilisation, how much is allocated for collaboration, for individual space and for support spaces is examined. Operating costs are a component of these cost metrics. US Manufacturing Organisation utilises benchmarking as a means of determining metrics. Organisations that have been benchmarked as part of the decision making process are Japan Steel, Intel, HP and Microsoft. The critical metric is exploring how much space needs to be consolidated to support head counts, and what is the cost to US Manufacturing Organisation to accomplish this.

All of the participants expressed the belief that it would take a business case to make substantial changes in the current workplace design strategy. This belief is based on their perceptions that there is not a 'company' appetite to make quantum changes, which would be perceived as costly. An example they cited was for the renovation of US Manufacturing Organisation's Optimal film Division, a group within the Film Group. Their new facility was designed within the current standards program ('status quo' as expressed by the group) even though this group was highly profitable and could have made the financial case to adopt a different strategy initiative and depart from the current standards program. In addition to requiring a business case, the interview group feels they do not have adequate research to substantiate any significant cases in the strategy.

The participant's felt that organisational change is not a component of the corporate decision-making processes within US Manufacturing Organisation. While parts of US Manufacturing Organisation want to change as an integral part of the process, other parts of the organisation do not. Change is not occurring on a strategic basis. It is done on a group-by-group basis, ignoring organisational wide needs.

While US Manufacturing Organisation has been written up as best practice examples of an innovative company, one that appreciates and rewards innovation, innovation is centred within the Research Group, who are also averse to using the workplace innovatively, an observation made at the interview. Overall discussion about change management has not occurred within US Manufacturing Organisation. The company's belief is that 'if it's not broken, why fix it?' there is a reluctance on the part of US Manufacturing Organisation senior management to engage in change management initiatives based on legacy issues related to the standards program. They relate the current financial success of the organisation, along with their ability to attract and retain staff as an example indicating that more progressive forms of workplace design strategies are not linked to organisational success or hiring and retention issues. Currently there is no driver to change, at least on the surface.

Perceptions at US Manufacturing Organisation are a blend of entitlements. The organisation is older demographically than many companies of this kind. The perceptions of employees is that how they do their work is more important than where. It was noted however, that with global demographics becoming younger, perceptions might change. As an innovative technology organisation, giving people good projects is important, not where they do it. The perception is that exciting and interesting projects are motivators for employees, not the workplace.

Managements view of the workplace is that the role of the workplace is too keep employees happy but not make a 'big deal out of it.' Some senior

management understand the potential role of the workplace better than others. There are ego and entitlement issues that affect the perceptions of most of the US Manufacturing Organisation management. Legacy issues relating to the historical context of the standards program prevails in maintaining an influence over informing perceptions and ultimately decisions regarding strategies.

US Government Mortgage Organisation

In the case of this organisation (the other organisation within the low value/conventional standards quadrant) responsibility for strategy direction is through a group entitled Administration & Corporate Properties. The group is comprised of in-house designers who engage outside design consultants. They are responsible for creating a quarterly report on workplace strategy needs, which is given to the Chairman. Any of the changes that have occurred within have emanated from the Chairman. While this group has been given what was termed as 'loose reign' in developing workplace design strategies, drivers of workplace design strategies are the result of growth and cost issues relating to real estate.

There has been in shift in perception of what drivers are of paramount importance as informing strategy direction. The interview deemed this shift as likening it more to a financial institution: the focus of decision making being increasingly more on financial drivers. This direction relies on occupancy costs being ascertained in order to develop a strategy that takes into account personal numbers with required space. There is a perceived vacuum in the decision making process according to the interviewee. While the strategy direction is based on 'densification' of the facilities, fitting more personal into less space, HR has been reluctant to provide this information to the Administration & Corporate Properties

group, therefore creating a vacuum in the decision making processes. This has hindered the group in creating a long-range campus plan.

The interviewee expressed the belief that cost efficiencies are the prime motivator and driver in developing workplace strategies. The focus is on accounting issues. While there is a need for change to keep pace with changes in personnel's changing roles and responsibilities, financial metrics and a perceived operating mode of saying no strongly influences the resulting strategy decisions. Judy sees the drive to reduce real estate costs as evidence that management's perception of the role of the workplace is marginal and purely a tangible expense in need of reducing.

There is a perceived need to allocate financial resources in areas that show a direct correlation and cost benefit to the business. The design of trading rooms is viewed as important in that it directly influences money streams, and therefore it has spent money on the design of these facilities. Conversely, the view is that rows of cubicles are a sign of efficiency and therefore good for the organization.

The perception that amenity spaces (cafeterias) create value through bettering morale and keeping employees on the campus, leads to approving spending on these types of areas, whereas there is no outward perception of the role of actual workspaces in facilitating synergies and needed change, and therefore Freddie Mac ignores this component as a key strategic endeavour. While the firm are believers in physical co-location of synergistic groups, co locations have been abandoned because it conflicts with the densification process. Amenity spaces keep workers on campus, which is more evidence based.

The lack of interface with HR especially in strategy planning was cited as endemic of management perceptions. The design team never thought about aligning these two organizational resources. Judy expressed the belief that the Administration group and space needs for the organization are the last things to be thought about at the corporate level. An example

offered of this mind-set was the need to find space for a certain amount of staff within two weeks time with no time allocated for analysis or strategy planning. The perception here is that by confronting workplace issues at the 'last minute', the company acts in a reactive mode, rather than in a strategic mode.

A change in the approval process has occurred. Planning and Budgeting controls head counts, not HR. the Management team consists of the Chairman, CFO, COO, a committee of division heads, and the SVP of Administration. The Resource Allocation Committee (RAC) reviews budgets and approves all real estate projects. The RAC has become the defacto arbiter of workplace strategy decisions.

High value + conventional

Both Global Media Organization and Global Entertainment Organization., perceived a high value (Figs. 31, 32) in the use of workplace strategies, while employing a more conventional standards approach. HSBC perceived a high value in the use of workplace strategies and at the time of these interviews was

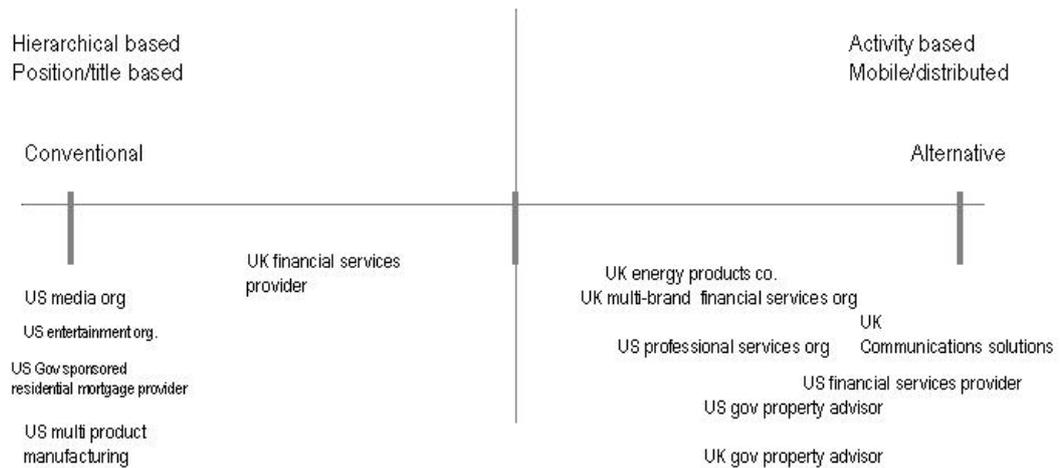


Fig. 32 Workplace Design Strategy Spectrum

engaged in determining the best approach, and could be said to be struggling between legacy issues and the desire to adopt a more alternative form of strategy. The UK Global Energy Organisation also perceived a high value in workplace strategies, starting from a more alternative mode and at the time of these interviews also being in a state of flux as to what strategy to pursue.

Global Media Organization

The Executive Design Committee and executive Vice Presidents at Global Media Organization were the ultimate decision makers on the workplace strategy to pursue for their new headquarters project. The CEO and Chairman were not involved in these decisions, and limited their decision-making involvement to the Executive Suite. They did however review decisions of the Executive Design Committee.

Presentations employing comparative analysis models were prepared for the Committee to assist in informing their decisions. The factors that most influenced the decision making process involved adjacency issues, work flow, the rate of change within the organization and the rate of churn or whether a culture of churn existed within the organization. In the end, Global Media Organization chose a less flexible approach sacrificing flexibility for perceived quality and permanence.

The design of the workplace is high on the management agenda according to the interviewee. This is evidenced through the amenity spaces (i.e. employee cafeteria with prime views towards Central Park, fitness centre, etc.) and 'adequate' office sizes along with the decision not to condense. Philip attributed this strategy to avoiding a 'counter revolution or two day revolution' after occupancy. This seemed to be an important contributor to the strategy direction, especially since it was referenced on more than one instance.

Another factor influencing the strategy was the need to recruit and retain what Philip termed 'the best and brightest.' The use of real estate, especially since a significant relocation was involved, was viewed as part of the solution. The head of worldwide recruiting along with HR was consulted along the decision making process for choice of amenities as well as the use of the office space as a recruiting and employee retention tool. HR uses a tour of the facility as a closing tool as part of their recruitment process. It was noted that the HR 'walk and talk' process was built into the design.

Perceptions of employee satisfaction are not measured in direct ways, but through individual focus groups designed to speak with employee groups to obtain feedback along with face-to-face meetings with employees. There are also customer satisfaction surveys and comment cards to seek out opinions from staff. Philip termed the Global Media Organization employees as a vocal population with a strong sense of entitlement. The

need to avoid what Philip called a revolution, along with staff retention and recruitment led to the perception that what this called for was maintaining larger size offices over a financial pay back with a compressed workplace strategy.

Philip called the decision-making process 'not textbook responses' to workplace strategy issues, but strategy decisions executed with employees in mind (again, citing the location for the cafeteria with the best views and providing what was viewed as generous office sizes and creating double height spaces). It was pointed out that the cafeteria was allocated the same views as the Chairman. The location of the cafeteria occupied prime real estate, which executives could have claimed as rightfully theirs.

The stated concern with keeping employees happy despite potential cost savings with a more compressed strategy, led to office standards that were not downsized. In the end, the decision not to compress, and to maintain the level of amenity spaces caused Global Media Organization to take on two additional floors of space. Of all the study subjects, Global Media Organization was the only organization to not view reduction of real estate costs as an essential component of the workplace strategy, and it certainly did not inform strategy decisions.

Philip believes people at Global Media Organization 'get it' when it comes to understanding the relationship of the workplace to employee effectiveness. He believes people are very perceptive, and that they recognize the need for proper adjacencies and the importance of limiting travel within the facility and in seeing and engaging with other people that they need to work with. Part of this perception is also the allocation of individual space as part of entitlement. This is considered part of the reward system at Global Media Organization, while everyone does understand its limitations. As a result employees are allocated the space that their grade calls for.

Global Entertainment Organization.

Examining Global Media Organization's counterpart in the UK involved two sets of interviews, for the same arena: Warner Brothers Burbank which oversees workplace strategy decisions for Europe, and at the occupier level within the London facility.

According to Michael Mason and Valerie Valdez in Burbank, the decision making process involves Burbank CRE working with the individual business units and the standards for workplace typologies. If there is a disagreement on a course of action or a strategy between the business unit and CRE, the decision making process goes up to a higher level within Burbank.

Financials are developed for the particular project, including operations and capital costs. These are sent to Asset Control for information purposes. The process also includes developing a justification for the particular project, developing project regulations, and developing test fit space plans to ascertain the adequacy of a particular space, and examining how the business unit is occupying that space in contrast to Burbank standards. At this point, the Financial Director from the UK becomes involved and a conceptual framework is developed along with an internal discussion on how potentially compressing a facility will work.

Factors that influence the decision making process on workplace strategies are politics, cost and aesthetics. Other factors include training, the actual building under consideration, culture within the business unit and the organization, individual personalities (though it was noted that this is not as important a factor now), availability of space and the financial condition of the company. Regarding the consolidation of groups, it was noted that there is not always agreement. Each division is responsible for their own P+L statements, which ultimately affects decisions and

differences in strategies. Various real estate groups get together yearly to benchmark what everyone is doing across the company for learning purposes. Burbank is hands on for all international WB strategy decisions.

Decision making from a UK perspective is through CRE making recommendations, but Operations creating it. Senior management plays a large role in how these strategies operate, whereas CRE just facilitates. There are a lot of traditional working methods imbedded in the UK. Here they take things in steps and stages. Hot desking was rejected for fear of losing staff. Many of the individuals in the London facility are sales people, who Simon pointed out, are not able to look at things differently (when it comes to space occupancy). Territorialism is strong in the London offices. Facilities cannot enforce or impose a policy or strategy. Getting people to change is politically driven. A major strategy objective in the UK is to restack their operations, which the WB UK merger drove. Burbank mandated whom people were to work with rather than allowing them to find their own way of working. Employees will slow the process down if they don't see the benefits. If they see the business need for changing ways of working they could have come to their own conclusions. There is also status issues connected to who is located on what floor. There would be willingness on the part of UK staff to compromise on office space standards in order to maintain status.

From the UK perspective, Simon Green pointed out that within the decision making process, there is not a central reporting system for CRE. Thirteen divisions in Europe report independently to Burbank. This has inhibited one voice to address any potential problems in a united voice. Compared to the US applications of workplace strategies, standards have been compromised in the UK as a result of space restrictions, and this lack of unity has made approaching Burbank difficult.

Simon also noted that while perceptions on workplace strategies are industry driven (i.e. entertainment and media), there is also a distinct

dichotomy in the cost of real estate between the US and the UK. Costs being substantially higher in the UK have created an imbalance in the way space is viewed and therefore strategies executed. It has resulted in far greater compression in the occupancy of space in the UK in contrast to the US. Space standards are no longer understandable to UK employees. As an example, Simon pointed to WB Consumer Products leaving the organization when 60% of the staff lost their offices due to a compression strategy. A large turnover problem is resulting in staff retention issues. Simon again noted that a strange dynamic exists in being able to understand why there are differences in the way things are done between the US and the UK, pointing out that even though there are so-called corporate standards, when it comes to UK operations, these standards are pushed down.

There is reluctance on the part of UK operations to knock on the CFO's door in Burbank to intercede, though Simon did not offer an explanation. Staff are very aware of the space they occupy. People measure their offices for comparison to each other, and want to know why theirs is different. The naiveté in this awareness seems to Simon to be personality driven. There is a conflict between a UK mindset and Burbank's 'me too' view. He feels that this conflict is a dilemma for the organization. The UK feels they should take on more space to create parity with the US but Burbank has inhibited this.

WB is in a predicament in how they perceive rational business decisions regarding workplace strategies emanating from the US. They cannot plan for staff growth due to external perceptions. One needs to factor in all of these considerations in order to function. WB does not look at innovating and innovation as to how to best utilize space more effectively and efficiency. In comparison to Turner Broadcasting (another Global Media Organization company), WB is more formal in spite of being a creative industry.

WB London is neither in a formal or creative work environment and has not found itself in creating the work environment that works. The managerial structure is like a pyramid with the top chopped off. This pyramid ends in Burbank. There are thirteen division heads, all believing that they are as senior as each other. This is another factor that contributes to compromising space strategy issues. Also, WB has people who will not give up space to others even if they do not need it. The lack of one person being in charge of organizational resources inhibits a strategic approach. The lack of stakeholder involvement in the previous move resulted in the former head of facilities to leave the organisation.

Additionally, the way the organisation has created the working environment does not match how employees work. The organization is not in touch with changing how they work. The model is driven on spending money for the making of movies, not about how they can change the work environment to make better movies (an important observation on perceptions of value of the workplace) or making people more productive. No one is looking at the big picture. The organisation is a reactionary culture. The fact that this company and the movie industry are making so much money has allowed it not to rethink how they make use of real estate assets. It is all ego driven.

Simon feels that potentially things could change for the better if people would share ideas and resources. There is no strategy to accommodate new changes across the company. Some of the communication strategies are not where they need to be. They could be far better at communicating. He would like to see change, but restrictions are the result of how the managerial structure is set up. Simon questions if a global culture permeates down to CRE. As a result, there is not global entity for implementing long-term strategy decisions. They have a long way to go in getting to the point where everyone feels they are doing the right thing. He does not know what is behind not setting global standards. The workplace is not seen as a value added resource. WB is resistant to change. CRE is

politicised as a resource group. They should be looking at the media and film industry for inspiration.

In contrast to this view, Burbank noted that an appreciation has evolved concerning the importance of workplace design strategies. It has become more important, and management acknowledges that the workplace is an important component to the employee experience. When there is a negative issue, it comes to the forefront quickly. As the organization becomes more global, the territories (an interesting use of words) become more aware of the importance of the workplace. Michael and Valerie discussed the view that the UK is used to working in lesser conditions than their US counter parts. This perception will factor into the company's view of they are putting more focus on its international growth. There is a willingness to put more money into the territories, primarily because the foreign units make more money than the domestic units (this is interesting in light of the views and comments of Simon).

On the Burbank side, Michael and Valerie noted that the UK reported to Finance and that they did not want to spend more money on real estate. It is acknowledged that they (UK) do deserve better, and that the workplace is important. It is difficult however to quantify how important it is. Expectations are set which establish a new standard. UK concerns and issues are made known (a potential reference to some of the issues raised by Simon). Perceptions of office accommodations as part of employee reward systems and beliefs and entitlement issues are a large part in the UK. While this made the consolidation project in London a challenge, space needs drove the final decisions.

From the UK perspective, the process for project allocations is to go to the divisions for their space needs and put a justification together for a project. This request then goes to Burbank (Facilities and Corporate Finance). This along with the financials on the proposed project then goes to Ed Romano (CFO). Once a project budget has been approved, UK

works with Michael Mason and Valerie Valdez in Burbank to develop a definition and assignment of project costs. At this point, they then go out to tender (bid) for actual project costs. These then go to Burbank for final approvals. For all major projects, Barry Meyer (Chairman and CEO), Alan Horne (President and COO) and Ed Romano (EVP and CFO) need to be convinced of a financial strategy for it to happen. Simon expressed the perception that this shows that the organisation micro manages at every level.

Simon also discussed the need for accommodating change and how the competing needs (accommodating change vs. micro management structure) can be addressed. The organisation is not set up to accommodate dealing with it effectively.

Simon provided an example of conflicting interests:

A concept to provide a more centralized facilities management service structure to serve various organisational operations (Global Media Organization, Broadcasting, Media.) was developed. It was felt that this would speed the delivery process for facilities projects and expedite the supply chain management structure. A matrix of services was developed that indicated what would need to go together for decisions, and what would not need to be shared. This matrix was expanded to about eighteen categories. The proposal was put together combining a Facilities Management structure in order to share knowledge and take advantage of economies of scale. When the senior real estate executives met in New York to discuss the proposal, the feeling was that they did not want to share this information due to the perception that it would compromise delivery of services. The prime resistance came from CRE in Burbank. They viewed this proposal as a potential loss of functionality and control. As a result, the proposal failed, and now no one is prepared to share vital information.

High value + struggling

The two organizations that exhibited a perception towards a high value for workplace strategies, but for different reasons were struggling on the strategy approach, were UK Financial Organisation 1 and Global Energy company. In the case of the latter, they had an extremely robust workplace strategy, one that was published and written about extensively, but as the result of reorganizations within the company, is currently in a state of uncertainty regarding strategy direction and implementation. With the former, the US group is attempting to take its lead from its UK headquarters, but is faced with two factors impeding a more progressive strategy approach: no impending relocation to bring the issue to the forefront, as well as create the climate for potential change unencumbered by existing physical assets, and a US banking culture that is change adverse and grounded in entitlement issues.

UK Financial Organisation 1

The decision to pursue an Alternative Workplace Strategy within the bank was made in the UK and at its highest levels. With this decision in place, and the overall workplace strategy of the bank based on reducing real estate holdings, the strategy for the US organization was how best to implement the strategy within the current cultural climate of the bank. Their workplace strategy consultant, DEGW, has developed a brochure detailing the AWS pilot strategy and how to use the new form of working. HR has taken the brochure and is developing it further to deal with human resource issues. They have begun working with CRE to develop policies concerning implementing an AWS program within the US operation. HR and IT have had an active role in this process. Bringing these two organizational resources together was viewed as critical to the

introduction of the strategy initiative. Even with this in place, the final decision is from the top down. The message from the president in London is that this is what people have to begin implementing within their work and practice areas. This is an across the board policy, and is not being looked at as a case-by-case situation. As of the time of these interviews, criteria have not been developed for implementing the AWS pilot project within the US, and the New York facility in particular.

The CRE group for the US is headed up in Buffalo, New York. This group is responsible for implementing workplace strategy decisions for Canada, the US, Panama, South America and the Caribbean (excluding Mexico). An EVP from this group reports directly to the company COO. This group operates the same as HR within the organization without representation on the Board (whereas IT has the CIO on the Board). The facilities personnel report to Operations. This is one level down from the HR EVP in terms of reporting structure. CRE is not perceived at the same organizational level as HR or IT ('a shame'). HR is perceived as the power behind the throne. IT is perceived as a necessity, while facilities is perceived as the group responsible for cleaning up the floors and subsequently does not get the credit it deserves. It is still viewed as overhead. Because of this perception, CRE does not have the representation at the table and is reactive in its operating procedures rather than being proactive in its dealings with other groups. When CRE is proactive, the perception is that dollars are involved with any strategy or policy decisions.

From the employee side, the perception of CRE is that it is too vanilla, too plain and too uniform in its operational decisions. Perceptions on change break down by age demographics. Younger staff will take advantage of organizational change while older staff will be traumatized no matter what kind of change occurs. Older workers have the perception that they deserve their space.

The Trade Center, and 9/11 have also had an affect on employee's perceptions. Having been located within the Trade Centre at the time of 911, people were forced to double up in temporary relocated space in its aftermath. Productivity went up due to being cramped together, along with the lack of privacy for personal telephone calls and the use of the Internet for personal use. This has resulted in a more accommodating perception of AWS based on this experience.

At this moment in time, employees want a place to work. They have gotten past the desire for bells and whistles. Work cycles are different as evidenced by working on weekends, which has become a normal course of business activity. No one questions the amount of time people work (this is attributed to the widespread use of Blackberries and mobile telephones). With AWS, employees don't want to work from home, but would prefer face time. Additionally, they have become somewhat numb to their physical surroundings – they are more concerned about monetary compensation. Physical space has not been a real issue with employees. The dense space they have been occupying post 9/11 has contributed to this perception. These are not good or bad times, just different and more ruthless. Jobs have shifted to a different side to the business, with a focus on outsourcing and consulting. Jobs are being redesigned. All of this has contributed to this numbness. Additionally, not having an actual relocation project from which to base an AWS program places employees perceptions at a different level of expectations.

People view HSBC as being practical: not cutting edge. They have been shell-shocked and as a result will accept anything you give them. In the end, they will adapt. This shell-shocked attitude has been the result of both the organization downsizing and outsourcing jobs. There are long hours, extensive use of blackberries and pc's, working weekends and getting messages at 11pm on a Saturday night. Some view this mobility as a status symbol, while others see their jobs as merely a place to work.

UK Global Energy Organisation

The organisation, which prior to my interviews was among the leaders in value driven workplace strategies with its Blue Chalk initiatives, was in a state of flux at the time of this interview along with a massive reorganization of the CRE group. That Blue Chalk was not a formal strategy but an initiative based on 'selling' the concept to the business units was cited by Juliet as one of the reasons for it failing in the face of an internal reorganization. She also viewed it as an example of an ineptness of leadership within. As a large organization, they can't wait for strategies to be signed off at the business unit level. Juliet's opinion as to why Blue Chalk was disbanded is the lack of connectivity to these business units from the corporate entity. Blue Chalk was not about grade levels and associated space she explained, but about what your business unit does and what makes them effective. It was not about forcing people to comply with an organisational standard, but about having an understanding of what people need to do their business effectively.

Juliet expressed the feeling that working in that manner within got stranger as time went on (prior to the reorganization). With the reorganization, all transactions will have to be approved by the new central team of eight. She is not sure where it is all going and what part she will play in the process as a result of the reorganisation. One result she noted will be that leveraging relationships will be more intense. This new group's ability to tap into best practices regarding workplace strategy applications will be critical to coach management and business leaders to make change. In this new structure, Juliet will no longer be responsible for executing projects. At the time of the interview, the organisation was still developing the plan for this team.

As a result, the business model will influence the decision making process in a more connected way. Decisions will be made with the local director

and with HR, but not at the strategic level. The implications are that workplace strategy decisions will be fragmented and not connected to a firm-wide strategy.

An example Juliet provided was a 300,000 square foot project in Aberdeen, Scotland. The lead person to head up the project (the project director) was sourced to GPM&S from Aberdeen. That person became an employee of GPM&S. This person created a project team consisting of various groups within GPM&S (a director plus the team). A gatekeeper along with a governance team (comprised of a senior person with the business unit from the occupier). GPM&S became responsible for delivering the project. They transitioned to different groups within the organisation depending on the particular stage of the project (real estate procurement, design, construction, etc.). A business case was created for this project to demonstrate the ability of the workplace to serve as an agent of change. The greatest change in this new organizational scheme was leveraging a third party to influence business leaders. They will now have to work only on the larger projects. Spending more time on the business relationships and ensuring performance will dominate their time. The largest asset of the group is having a strategic perspective and an ability to set direction for particular projects. There will now have to be more leveraging of offices in this decision process. The effect of this is to further decentralize decision-making and strategy implementation. Rolling out a single workplace strategy policy within the organisation is not the company style.

Both in the past, and probably in the future, workplace strategy decisions are most influenced by business change and cost of the strategy to the business (though this can be mutually separate). Being able to manage risk and safety is a critical driver of what also influences perceptions within the culture. Finally, there is the 'time thing': issues relating to schedules such as lease expirations, and time to market are influential drivers of workplace strategy decisions.

Organizationally Juliet believes there is a respect for the importance of the design of the workplace. It shows that the organisation cares for its employees, though design is not natural territory for them. They find it difficult to make the connections and links with what motivates people and how this translates to the design of the workplace. She attributes this to BP having an engineering focus as an organization.

High perceived value + progressive strategy

The following organisations expressed a high perception of value in workplace strategies as well as adopting a more progressive strategy approach (Figs. 31, 32).

UK Telecommunications Organisation

Strategy decisions are driven by the business model. The business model asks questions that are business related: understanding the business drivers and what are the solutions to these drivers. Using the business model as the foundation allows the user occupier to look at both the effectiveness and efficiencies of the strategy. Most organizations just look at cost savings (efficiencies) as the strategy driver, even though there very well may be additional costs incurred down the road.

Alan White, the head of Corporate Real Estate was a champion of this effort. He held the belief that what the organisation was doing with its workplace strategy was critical to the success of the business. They also had a champion on the Board: the Finance Director who also controlled the purse strings for all facility projects. Business cases that were property decisions had to be challenged: what is the business justification for this project? What will you be giving up to achieve this justification? Commitment at the Board level was critical in developing what Chris

termed 'creative thinking.' 'The business needs to do this' became the thinking mode for the organization. Large numbers of people within the property group spoke to the business units in business language. This usage of language became critical in selling the strategy.

As an example, Simon cites a business unit in South Wales. The property group wanted to sell a site for two million pounds Sterling. The occupying group did not want to move. The Property Group demonstrated that the site was wrong for user profitability and that by selling the site the sale would pay for the relocation expenses. This demonstrates that the winning over for a particular strategy is in the use of language. You have to give the business unit a business proposition. In the case of workplace strategies, the business proposition is that real estate will support the business.

This particular project involved three years of development time. The first two properties were seen as something to learn from. Employees were moved from the North and West of London to the Westside and Central London. Property worked with the business units involved in the relocation, and devised a role that the only people who would occupy offices would be directors and direct reports unless as case could prove a different need. An information packet was created to explain how this new workplace strategy would work. Hard copies in addition to electronic copies were distributed to all employees involved. This choice was based on the perception that people need to touch and feel the information in order to own it.

Since the workplace strategy was a radical departure, the strategy was also viewed as a change management endeavour. As such, it was also driven by HR who understood where the strengths needed to support this strategy lay: people, technology and real estate. There was an understanding of what technology could do to support the strategy and business model of the organization. HR used this to focus on the real

estate side. There were good real estate people who could question the business needs and make the necessary connections and linkages. This was backed up by Finance. They all had an understanding of how the business works in order to develop the appropriate solutions. An ancillary driver to the strategy decision chain was if you had good technology, customers would also use it for themselves. This resulted in exporting their distributed work model as a consulting business. Being able to align the real estate strategy with what the business model does was a critical component of implementing the workplace strategy.

Chris also provided a strategy decision that was not successful. It involved their facility at Stockley Park, which was vacated a few years ago. It represented an engagement model from the 1990's. It was aggressively open in its workplace strategy. According to Chris, the designers were provided with the wrong brief: to create density as the overall strategy. It was based on a work style documentation process, which was useful, but became an obstacle in the end in terms of understanding just how the staff needed to occupy space. Stockley Park was occupied by staff working globally. The level of space utilization was already low since most staff travelled. There is no point working in a facility designed for collaboration when occupancy rates were extremely low due to travel schedules. While big corporate executives were present in the facility, they too travelled to customers. The site became isolated: it was too close to the airport, and too far from appropriate staff home demographics to be useful as a facility. The result was a soulless work environment.

After this initiative, buildings were designed for mobility. They used the mistake to modify their workplace strategy. Provisions for space became task related rather than grade related. People were assigned workspace typologies based on their work rather than their title. The core of this strategy has evolved over time. Originally, it was pretty simplistic: utilization of new technology and two principle work setting types

(typologies). These two were open and a single person enclosed office. There were also better technologically equipped meeting facilities. These included social meeting areas, which served to institutionalize the workplace strategy concept that work did not have to take place at your desk. They did not expect this space to be used at first, until employees learned how to use it. The strategy was driven by the concept that work is an activity, not a place.

This strategy has progressed to where they are currently, which is based on a home enabled workforce utilizing 'flexi-design.' This involves touch down spaces and a wider range of social settings within their facilities to enable various forms of work and meetings. The organisation is now providing more shared facilities and fewer allocated desks within their facilities. The strategy still supports a collaborative work style, but now includes more distributed work teams, working from home or across the UK.

Part of the decision process involved the Finance Director seeing the connection between real estate and organizational change. Both were work driven and work facilitated. Now the status within the organisation has shifted from having an office to what can I do for the organisation? The new status of being available is more important than being in a private office. This has become the new status symbol. Being the most mobile has replaced the large private office on the window. There has been a switch in status from private space to mobility. This strategy creates more resilience within the organization, and has enabled them to withstand issues affecting work disruption, especially within an organization comprising 80,000 people.

This strategy has also served to reinforce their business solution practice, by providing good service to customers and the need to show confidence in these business solutions. It has also, as referenced above, provided an additional source of business revenue: consulting on mobile work and

providing the technology solutions to support this strategy. This strategy has in essence allowed the organisation to live these solutions. Distributed work requires a change in culture. The perception of how one looks at work needs to be altered. One needs to switch the culture to managing by results rather than by presence. Currently, 11,500 employees work from home, which translates into 12.5 % of the total workforce working in a distributed manner.

Chris' perception is that employees have embraced this strategy. A culture that is driven by what he termed a 'that's my office' mentality no longer exists. Employees need to get into a culture of working away from a physical office, and that this strategy is best for the work one is engaged with, rather than working away from the office because one does not want to be in the office. This has been the result of a determined change in the work culture. The drivers have been employee privilege being transferred into 'I can live wherever I want.' Technology has also served as an enabler of this strategy and culture shift. Technology has become an enabler rather than the end view. Staff perceives that they will be valued by their contributions, as free thinkers, investing in knowledge as a source of pride.

The organisation has developed performance metrics to measure the success of this workplace strategy based on reviewing absence rates and levels of desk occupancy utilization. This is done by taking the square footage required to support each individual desk and the related cost per desk to operate. Distributed work is viewed through energy costs saved; employee retention rates (which are currently at 100%) and maternity leave returns. The absentee rate is currently fifty percent of the UK average.

Financial Group

Financial Group's FOW program is evolutionary. The first campus strategy project broke down the walls and brought employees together in a campus setting (West Creek, Richmond, VA.). This strategy was viewed through the Campus Governing Committee comprised of high-level personnel (tier 1, 2 and 3's). In addition, there was involvement by HR and the CFO, with CRE engaged in the legwork.

After the first campus FOW program, Ed Lawrence was brought on as a workplace strategist, based on his work with Ernst & Young. The Corporate Infrastructure Committee further developed the campus model strategy, which evolved into what is now known as FOW. Pilot projects were initiated to test the strategy's implementation and to obtain buy in by occupiers. These initiatives found their way to the top of the organization through the EVP of HR and the CEO.

After completion of the West Creek pilot, a business case was completed and high level approvals obtained. Two additional pilot studies were conducted in buildings 4 and 7 at West Creek. Another pilot project is currently underway on one floor at the Headquarters campus in McLean, VA.

Financial Group measures the success of these pilot projects through one-year studies and extensive on-line employee surveys. Measurements attempt to isolate groups within the pilot projects. Employees (Associates as they are termed) are rated on competencies resulting from the performance metrics. The impact of performance, retention and lower absenteeism is examined and scored. Numerical attributes are associated with these metrics. The bar for performance ratings is then increased for the next surveys. Performance is differentiated among different areas of work. By testing both campuses, Financial Group established that the pilot studies scored similarly high at equal performance attributes.

Additionally, employee surveys support the data outlined in the power point (see references in the Literature Review). At the highest levels within the organization, employees were questioned as to the success of the FOW program. The CEO's perception is that FOW works for certain types of Financial Group worker. There is concern over how different types of functions will adapt to FOW. There is recognition that the work environment will have to be customized to support different functions.

Associate satisfaction surveys drive the engagement of the pilots. Surveys have indicated that Financial Group associates are loyal, and proud to be employed at Financial Group. One tries to ask questions in the surveys that lift associate satisfaction and engagement.

With the performance measurements developed, productivity is measured through self-reporting systems. CRE examines the time cycles within the decision making process as a critical component of productivity. If the cycle times have been reduced, this can be equated into dollars saved. Financial Group is still trying to work this measurement out.

The application of FOW within Financial Group has benefited from the direct involvement between HR, IT and CRE. This has served as a strong influencing factor in the strategy's implementation and perceived success. It has resulted in an adaptable and customizable FOW strategy that supports Financial Group's work processes. However, the primary influencing factor in the decision process is the reduction of real estate costs. These cost reductions enable the strategy to be sold and approved at the Board and Executive level. Financial benefits drive the sale. Along with this, the strategy is not considered successful if you have not provided an environment that includes associate satisfaction and engagement. Success is partially measured through the surveys and observations referenced above. The combination of these two factors (financials and survey results) associated with the strategy, FOW largely sells itself. The strategy promotes itself if it is executed correctly.

At the highest levels of the organization, there is a perception that the use of real estate is a competitive advantage for Financial Group. They have won numerous awards, such a Best Place to Work. This has been associated with positive results in attracting and retaining what Financial Group refers to as the best and brightest. The awards programs they have entered have been so successful, Financial Group is considering not submitting for any additional awards programs to keep the competition from finding out about their competitive advantage (the utilization of real estate through FOW). Lawrence attributes this thinking to proof that the use of real estate at Financial Group is indeed viewed as an organizational competitive advantage. Lawrence continually gives tours of the pilot areas to Board members. The combination of the financials, the surveys and that the strategy is lean and agile in its composition and application, has management convinced, according to Lawrence, that FOW is a strategic resource.

Employees view Financial Group as having an innovative culture. Most view the workplace differently than employees at other organizations. Financial Group is always developing 'cool stuff' which is now expected by employees. The challenge for the organization is in developing work related performance rewards to maintain the cultural energy and engagement. While there is some resistance at the management level to the organizational culture associated with FOW, at the younger staff levels, employees are easier to adapt to new ways of working and adapt easier to programs such as FOW.

Job quality and compensation are both important factors to associates. Some see the allocation of physical space as part of their reward system. At the McLean campus, the existing structure and physical planning concept, includes tiers of staff structure and a hierarchical reward system. In spite of the FOW strategy, there still exists within the Financial Group McLean campus the top floor devoted to Tier 1 staff, along with an

Executive Suite even though there has been some discussion as to its merits.

Workplace strategy decisions for Financial Group's UK operations appear to be more localized than other international organizations participating in this study. Partially due to the organizations culture, and in part due to the relatively youth of the firm, the UK is more of an influence than one delegated by the US headquarters operations.

The Loxley facility was an example offered by Mason and Gary. It was driven by a UK perspective (denser use of space, less perceptions of entitlement). The project taught them about behaviour and what will and will not work. The US has sufficient confidence in what the UK is doing regarding facilities and workplace strategies that they typically do not interfere with strategy decisions. (At first, when the UK was a relatively new operation for Financial Group, seventy percent of the strategy decisions were driven by the US CRE group.) The use of swing space (unoccupied space used to temporarily house staff while their space is being fitted out) during construction at Loxley resulted in lessons that subsequently influenced the design of the London office. The customer (Financial Group occupier) was involved in the decision making process through the head of operations. That person needed to get comfortable with the concepts for it to be approved. In addition, Ed Lawrence also needed to be comfortable with the project strategy. There was business case approval from the US, but currently, the UK operates pretty much autonomously from the US.

Associates also played a role in the selection of a direction in a new sales centre in Trent House. The project comprised 40,000 square feet of office space. Trent House is part of the Nottingham campus, which is considered the UK headquarters of Financial Group. The Trent House project was a refurbishment of an existing building, which was originally influenced by the US model and Loxley, which was 250,000 square feet of

new construction (also part of the Nottingham campus). Swing space comprised 50,000 square feet of porto cabins, two to three storeys high. The project team comprised of staff from IT, CRE and security. They conducted focus groups to obtain input from associates. The UK head of operations became the champion of the project. Responsibility for the implementation of the project was also delegated to him.

UK management originally recognized the importance of a good workplace strategy. It gets taken for granted when it works very well, and is usually condemned when it fails. Because the strategy is working, the organization becomes blasé about it (deviance of culture). They do not now recognize the value of it. If a critical financial decision had to be made, IT would win over workplace strategies as a venue for spending money. The workplace is in the Stone Age compared to IT when it comes to proving and identifying productivity. IT, Marketing, and HR all use NPV to measure success of initiatives, which places workplace at a disadvantage perceptually.

An increase in productivity and a reduction in attrition rates are organizational goals. In terms of the role of the workplace, none of these can be tied directly to the workplace, and strategy decisions put forth. Too many ancillary drivers contribute to the desired outcomes. As a result, the workplace does not prove itself in this area of performance.

A paradox to this that the two interviewees cited was with the acquisition of HFS in Manchester. The firm is an older company than Financial Group, and in their workplace strategy is more dense than Financial Group, bordering on an illegal 65 square feet per person. There is low turnover and greater buzz than at Financial Group. In operationalising the merger, HFS senior leadership do not want to change the density of their spaces out of fear of losing the 'buzz.' They feel that changing the density will alter this buzz culture. The firm is currently working in a low down, old-fashioned mill structure, but the organization is profitable and productive.

It was recently ranked seventh in a London survey of the best places to work in the UK. This may be more telling on the value of workplace strategies than anything on the real value of the workplace.

As noted earlier, UK employees have different perceptions regarding reward systems than their US counterparts. The UK average age is twenty-seven with mostly first time workers in the market. They do not know any differently in terms of workplace typologies. People who are older appreciate what they are getting in Financial Group. The quality of the work environment should be commensurate with pay and benefits. You have to provide an environment that goes with that mind-set.

With the recently acquired commercial bank, the education levels of their workers (non-college graduates), there is a different perception of expectations about the workplace. Individual workers externally worldwide shapes their expectations concerning the workplace. There is also provincialism within the UK. Loxley and Trent House are common occurrences outside of London. The perception is that all businesses should be located inside of London. Nottingham was chosen as the site for Financial Group because of the cost of labour, availability of labour and the attitude of the local government. These drove the decision to be Nottingham. They did not expect to actually hire 3,000 people.

Mason and Greene offered their view of US perceptions regarding the workplace. The US real estate team has a grander attitude of the role of the workplace than it really has. The UK view is more pragmatic, and more down to earth. Someone would say, 'the emperor does not have any clothes.' The UK view shows a willingness to be more realistic in their approach to workplace design strategies. Much of this is attitudinal. The role of CRE in the US is far more developed and institutionalized. Greene pointed out a significant difference in approach between the two locations being that the UK does not take themselves too seriously.

Global Professional Services Firm

The discussions with this organisation differed between the US and UK interviewees. With Nancy Tine the conversation entered on more strategic issues of decision-making, where as Lisanne and Robert provided a more project-based perspective.

On the US side, as part of the strategy implementation process, quarterly meetings are held with business leaders to obtain feedback on workplace strategy issues. There are two-way conversations involving discussions on what is the people strategy. However, since its implementation (the Global Workplace Strategy), it has been difficult to get HR to the table. HR was part of the original Global Workplace initiative, but they have not been involved in any of the more recent changes underway. The view is that they were initially involved as a result of the global Workplace initiative representing a major change management project, where as subsequent changes stemming from the strategy are perceived as not being as much of an imperative. The unfinished business is getting HR involved in the continuing strategy decision process.

There are four generations of workforce represented at the organisation, which poses its own challenges: how does an organization build a workplace strategy around a multigenerational group of workers. In surveys of interns, collaboration issues are ranked second in importance, and a secure environment is ranked first. In contrast, the older generations have a different perspective. For them, collaboration takes place in a room with a door, while for the interns; collaboration translates to informal, impromptu meetings with more access to firm wide management.

From this, the challenge becomes meeting the needs of future as well as existing business leaders who perceive these issues differently. They are in the process of looking at collaborative space differently. In looking at collaborative spaces, they looked at knowledge workers to understand

what was most important to them. They view different levels of collaborative meeting spaces. First, where you can move the furniture; second, more structured meeting environments; and third, creating alcoves and informal meeting spaces. This is currently being executed throughout the organization. In viewing different generations of workers, and their perceptions of the strategy rollout, feedback has been initially positive across generational lines. To make this work, Real Estate Services has to continually be able to think ahead.

Management perceptions on the role and value of workplace strategies has evolved over time. Before the Global Workplace initiative, management was more negative in its perceptions of the value of these strategies. The Global Workplace initiative changed that so the strategy was more than just driving costs down. As a result, awareness was heightened among leadership. What assisted this perception was firm leadership recognizing the importance of workplace strategies, and believing they were doing the right thing in adopting this particular strategic initiative. Both the CEO and Chairman are in the same size office as every other partner, which aids in the perceptions from lower management leaders. The Global CEO was part of the original Global Workplace initiative having come from the Tax practice group. Even so, the organisation is not quite at the level of workplace strategy initiatives that they could be. Issues pertaining to workplace strategies are not in the top two priorities of management. It is still not viewed or perceived in strategic importance at the same level as HR. Despite this, they are seen as being in a good place currently regarding workplace strategies and in the perceptions of management in supporting these strategic initiatives. As a result of space being viewed as currently working, and not in the way, there is not as much focus on the workplace and workplace strategy initiatives as if there were problems. It is important, but still they are not represented at the leadership table like HR and IT. Being able to define a

high value for workplace strategy initiatives would help in changing that perception and could bring Real Estate Services to the board table.

Management perceptions according to Brian were that the design of the workplace is indeed perceived as being of high importance, with each operating group looking to it for different reasons (the CFO for financial areas, HR for supporting current personal initiatives, and branding for environmental reinforcement messages). They perceive the role of workplace strategies as creating efficiency of operations, safety of partners and staff, and creating a pleasant work environment while enabling cost reductions.

Brian added that in addition to input from leadership, surveys are undertaken both pre and post occupancy to obtain direct user feedback on the strategy needs and the strategy successes. Active metric analysis is constantly being updated to measure trends and attainment of target goals established within firm wide leadership. The benchmarking of metrics and industry practices are ongoing activities within PWC Real Estate. In addition to this benchmarking, Balanced Scorecard assessments are also ongoing activities. Successful outcomes are measured financially through cost management and flexibility for future decision-making through metric reports. Other measurement initiatives include HR satisfaction surveys, and collaboration enhancement observations. Brian also noted that he was uncertain if this benchmarking and performance metrics are being utilized in the UK.

Firm wide, David Jarman and Nancy Tine are responsible for communication on strategy issues within the leadership. They are responsible for translating the strategy direction into workplace language as well as obtaining collaborative input from HR and IT. There is also an ongoing consultant advisory board. Strategy for the organization is developed through cross collaboration at senior management levels. The initial development of the Global Workplace initiative as well as ongoing

decision making on workplace strategy, are influenced by input on these initiatives and trends in HR, IT, Branding/Marketing, Support Services, the real estate marketplace, measuring culture and change issues, and firm politics.

An example offered of a decision making process within the UK operations was clear desking and digitalizing compliance activities which was a global decision to ensure client files and information are not left out while staff are not in attendance in conjunction with a paperless tax preparation program. Compliance issues are a strong component of the workplace strategy within the organisation. The strategy that was developed included:

- Consulting with Risk Management/Security staff to understand the definition of items to be secured and the scope to the total workplace challenge.
- Consult with TAX and IT consultants to understand the scope, timing and implications of a paperless approach.
- Audit current PWC offices to determine current document management needs.
- Develop new metrics for quantity and character of the storage required.
- Develop communications and rollout strategy teams.

On the consultant side, they are selected for either their strategic or tactical execution skills and are retained in each capacity as the project requires. Cross services are not discouraged. Consultants tend to be strong in one category or the other, so the best consultant is sought out in each category. Larger firms are required to handle client workload and swing moves. Demonstrated design skills are also an important qualification, as well as an ability to provide national services so as to work on more than one location. Consultants need to demonstrate skills at client service and communication with large firms settings.

Nancy pointed out that for the UK, the workplace strategy as well as decision-making regarding that strategy should be the same as in the US. Brian suggested that in the UK there is a similar emphasis as the strategy rolled out in the US, but formal coordination in details in the Real Estate Group are not as strong as they were five years ago.

Lisanne and Robert offered the Gatwick project as an example of decision making on strategy matters. The Gatwick location represents a new market area. In a conscious strategic decision to build the practice in that location, they tested the marketplace prior to committing to a final outlay of expenditures for office space.

In contrast, the organisation according to the interviewees has done some innovative practices that have not worked. The so-called club concept that worked well in one location, failed in other locations. The club concept involved space – like pods that were created utilizing beanbag seating and white boards. In many instances, Staff did not take to the concept. It was far too relaxed an atmosphere to match the organisational work culture.

Sharing ratios (shared work areas/offices) also resulted in resentments from staff. Employees felt that they were being pushed too hard on accepting a hoteling strategy. Additionally, a game room concept (familiar in high tech organizations) created in the Midlands facility, was not a success because it was perceived as not conducive to the work processes and culture. As a result, they learned from these mistakes and from the strategic initiatives that they represent.

Seventy five percent of the vested partners, many of who are ready to retire, have a subtle influence in strategy decisions regarding the workplace. (Legacy as well as Global Workplace initiatives). The partnership structure of the firm creates a dynamic environment in which to make these decisions. There is a convergence of strategies (legacy and Global Workplace initiative) and recognition that the two will never

completely merge or be on a par with each other. This is the result of different motivators. Real estate is factual based in its decision making, with black and white reasoning involved. One looks at required square footage occupancies and the cost per square foot for operations – all tangible issues. Workplace on the other hand is very much about the possibilities: where is this office facility going and associated image issues. However one cannot do without the other. If they could create the ideal internal group, there would be a convergence between workplace strategies and future of work strategies.

When it comes to organizational change, they are adaptive rather than innovative. The Workforce Strategy Group is an attempt to move away from being reactive and move towards being more aware so that they can be more proactive in its decision-making. This is evidenced in the decision-making processes as well as the decision results as illustrated above.

Lisanne and Robert expressed the perception that the organisation is moving towards being a US organization as it regards workplace perceptions. Twenty percent of the partners see office allocation as a component of their entitlement (which is not typically a UK perception). However, in contrast to this, below the partner level, flexible working is viewed as more important. Consolidation of facilities is the result of recruiting which is causing a need for more office space. This has indirectly created an opportunity for change regarding the workplace.

The perception regarding employees is that workplace strategies are embraced. The organisation is not a culture driven by 'that's my office', which should result in a tendency to embrace mobile working strategies. The organization needs to get into a culture that working at home is best for the work that one is engaged in, rather than working at home is done because one does not want to come into work. This involves changing the

work culture. Some of the drivers of employee perceptions are employee privilege.

They consider change to be a fundamental potential influence on the strategy decision-making processes. Lisanne and Robert expressed the belief that the organization needs to recognize this potential influence. Change opportunities can be property driven (increase in rent, property damage, breaking leases) or organizational variances (staff growth, staff reduction or organizational restructuring). The internal group looks at all of these variables, implications, options available and potential recommendations prior to presenting to a series of decision making bodies. Depending on the project scale, its visibility within the organization and its benefit to the organization, strategy decisions could be made at the local level with partners and staff, or at the UK Board level. This being a partnership structure, the organization has to work with many important stakeholders to gain consensus for a decision before taking any actions.

Building trust is considered to be a key to this process. By demonstrating that they (internal property group and FM advisors) understand the business and their working patterns, trust helps build the relationship and assists in the change management process. It is crucial to get the decision makers involved in this process, communicating their vision of the new office facility and ensuring that this vision is consistent with the organisational message.

As considered free thinkers, the organisation invests in knowledge and as such, facilities are a source of pride for employees. Overall there is not a lot of value placed on workplace strategies until it is an element that is taken away, eliminated or changed. Perceptions from employees are difficult to quantify. One area that has been recognised is that perceptions pretty much depend on ones own individual frame of reference. If the office was formerly traditional in design (space allocation based on status with static, dark colours and stand alone furniture) then moving to a modern designed

environment will be a significant change and may be a shock to the occupants.

This could also be sending a message to occupiers that the organization is changing which appeals to some but not to others. If one moves too far from the original workplace standards, it could be disorienting and uncomfortable to those occupying the facility. For instance, in attempting the bean bag strategy that was considered being a step too far a field. The organisation has engaged in five significant projects (valued over three million pounds Sterling) over the last four years and conducted a post occupancy survey on three of these. Overall there were overwhelmingly positive results, but each had learning points to bring to the next project.

Property/FM has built on their own experiences as to what has worked well, and then improved on it for the next project(s). They have toured parties involved in the next project through the last one so they (the occupier) could build up their understanding of the possibilities; and begin articulating their expectations for the project, thereby providing a clearer project brief. Having changed the standards with each facility project, they are moving further forward towards a more flexible and collaborative work environment strategy, which appears to be working well for the business units.

Another area they are attempting to evaluate is quantifying productivity/profitability changes that are a result of any changes to the work environment. This would enable the organization to examine if the investment in the property has had a payback as a result of the strategy. In the Birmingham project, the senior partner has stated that there has been an increase in business and a perception that this is the result of the staff being more productive in their new facility. At the same time, during the first year of occupancy, there was also a 12% increase in staff headcounts. While there are market forces and considerations as well as

other intangibles that might have contributed to this affect, there is a perception within the organisation that the changes to the workplace were influential in affecting the results.

UK Financial Organisation 2

In the case of this organisation, the workplace strategy branding initiative was a joint effort conducted with HR (HR being a head office function). The initiative is comprised of an HR partner with a Real Estate functioning person. HR came in at the branding concept from a different angle than Real Estate. They were concerned with examining the impact of the workplace strategy on staff retention and staff satisfaction. Utilizing the user surveys to measure success and impact was additionally a joint HR/Real Estate initiative. These surveys were conducted by division and by city, and were distributed to occupiers by HR.

The approval process for workplace strategy projects includes selling to executives from other brands in order to help move the concept. The business case to these executives demonstrates what can be delivered through workplace initiatives, and what the investment and savings benefits will be, as well examining how it will support the group culture. Individual projects are sanctioned on an individual basis.

There is interface between HR, IT and Group Workplace Operations in determining direction for workplace strategies. From this group, it then goes to Group Chief Executive for review, who then hopefully buys into the concept and its values. It then goes on to Group executives for final reviews, finally rolling out as a workplace design solution. Executive access is critical to the success of this process. Executives get involved in key workplace decisions. As an example, an eighteen month pilot project took one year for the approval process to be completed, commencing with

presentations to different division heads and then finally on to the Chief Executive.

An enabler of the workplace strategy initiative, and what informs internal decision-making, is that organizational change is ingrained within the organisational culture. People feed off of change, and embrace change as a breath of fresh air. Over the past twelve months there have been thirty-two major change programs. These programs include restructuring, new series of offerings, and new IT systems integration. Employee surveys included questions on the rate of change within the organisation, and whether that rate of change could be considered high or low. The culture is the result of executive leadership.

The staff perceptions on the value of workplace strategy initiatives by senior management are very switched on, primarily at the executive level. They are committed to providing world-class business centres. Senior management believes in ensuring that employees understand the value of this process. As a result, morale, productivity and output of staff, are fundamentally important to this group. The majority of employees view the organisation as a great place to work. If Gorgarbum (World Headquarters) were implemented throughout all the facilities, it would have more of an affect on staff perceptions. People generally buy into the role of workplace strategy initiatives partly because they are supported by HR, the caveat being that business objectives are delivered. As long as this is delivered, the perception exists that people can work anywhere. Entitlement has never been an issue. Previously to the original pilot project, only the upper one percent of executives were situated in enclosed offices. Directors, however, still feel entitled to having private offices, but this is becoming less and less.

US Government Property Advocacy Group + UK Government Property Advocacy Group

On the public sector side, the US's Government Property Advocay Group and the UK's Group serve in an advocacy role to their constituent occupiers, which differs from their private enterprise counterparts. As such, both the strategy decision and the decision-making processes also differ.

For the US group, the engagement process has involved selling Workplace 2020 as a research program. Workplace 2020 serves as consultants to individual occupiers on workplace projects, but they are not a given mandate. What one learns from one project is brought to the next. As projects are undertaken and executed, one takes tools developed from the research and then develops more abbreviated methods for the specific projects. You seek out the problems that will drive each project. This is a huge growth industry within the facilities/real estate arena. More and more groups within the government are coming to Workplace 2020, even though they are no longer mandated to be the provider of choice. This research-focused approach is viewed as having been a good way of proving that the workplace can be more effective. This has been especially the case with older stock of real estate products. These products are government owned space, and these owners do not want to lose their tenants.

The mandate has been to create pilot projects to assist in selling the concepts. These pilots explore principles of bringing people and place together (like 'ying and yang'). Work and workplace are intertwined among each other. Workplace 2020 is learning about issues relating to the hand off of projects at certain stages of responsibility to external architectural consultants for project implementation. One of the central issues has been how one gets these architectural consultants to buy into the strategy concepts at the time of project hand off. It is also difficult to get the old-line guard of government employees to buy into this concept. Often an abbreviated form of the strategy becomes the way to sell the concept.

Part of this process is what Kevin refers to as 'deep dive.' This has been an evolution of the 2020 concept. With this concept, you have all of your ducks in a row prior to visiting the occupier's site, including dealing with the minutia of drawings, organizational charts and other relevant supporting data. It makes use of the 'blink' model where one identifies key project themes. You begin with a theme for the project, as opposed to a design concept (i.e. one asks the question 'is this a theme of this organization?')

Maintaining enthusiasm with the project team is critical to its success. One starts with visioning sessions and a GAP analysis. Design consultants are brought in to execute this part of the engagement. With large groups, you use a design charrette process, which involves individual as well as group interviews; focus groups as well as observation. These tasks involve one and a half day charrettes where you develop approaches to the specific project. The overall intention of this process is that a learning focus consultation will inform the design approach or strategy.

Perceptions among government workers are affected by unions. These unions affect the role and perception of entitlement of workplace designations even though middle level employees fare better in public sector space designations than in the private sector. Age demographics also affect these perceptions. There is a far greater aesthetic sense today that affects workplace strategies in a positive way. People are expecting higher levels of design than previously, even though, people still need convincing. The unions are inertly suspicious of motives of workplace transformation.

Kevin expressed that the perceptions of employees towards workplace strategy value was 'an interesting question.' One can only make so much money working in the public sector. Being promoted has only so much money associated with it. Therefore the allocation of space has become a

status symbol within the government. The allocation of individual office space is seen as an 'atta boy.' Office space is viewed as merely overhead, and people as 'canon fodder.' Workers are desks, not people. Employee costs are fixed since it is difficult to fire employees within the government sector. To counter this, Workplace 2020 will put their best foot forward to demonstrate to potential clients that this is what Workplace 2020 can do for them. 'Leading by Example,' a book to be published by Workplace 2020 will help demonstrate this approach. This involves a change in thinking, which is attributed to the current administration of the organisation. Kevin views space and HR as joined at the hip, and sees space and HR opportunities.

This change in paradigm involves a change in thinking which is attributed to the current administration (Kevin). He views space and HR as joined, and sees space and HR as opportunities. The Deep Dive process concentrates on organizational goals and objectives. This is opposite of former views where allocation of space was based on an employee per square foot ratio (400 square feet per person). Everyone has a room, but no value was demonstrated.

Workplace 2020 involved the consultancy firm DEGW in a particular project. DEGW detailed what was important to the group through a decision matrix. They also walked the client group through various design scenarios. The staff ultimately voted for the smaller square foot per person (230 square feet per person), which was a major paradigm shift of thinking in these areas of decision-making. Additionally, there was a savings in revenue in the space savings alone.

As noted above, the unions have also had an affect on ones expectations of workplace utilization. These unions have impacted the implementation of tele-working strategies and mandating offices to certain levels of personnel. Two elements will begin to affect changes in perceptions: lack of money to keep people and changes in perceptions of space utilization.

Saving money on real estate utilization is a primary driver and working within the budget you have. Currently, there is no incentive to reduce space. The only pressure is coming from the client side, and not from the advocacy group. Security issues also affect how blocks of space are used or can be reduced.

Currently, allocation of workplace designations are based on grade level. This has changed within the advocacy group. Space allocation now depends on what one does not on who you are. 2020 is not tethered to standards based on grade. They are facing more perceptions based on entitlement rather than legal or published standards. If one goes through the process with individuals, perceptions can be changed or modified. When brought together as a group, individuals will subjugate themselves for the good of the community. Kevin attributes this change in perception to processes employed. A change in office standards ten years ago was attributed to changes in thinking of the use of space based on need.

Within what the UK Advocacy Group describes as the 'civil estate', workplace strategy decisions are made based on demonstrating value for money expended, combining both the occupiers need for efficiency and effectiveness of workplace utilization. They recently established a property performance measurement service to promote the use of standard KPI's and benchmarking for workplaces within the government. This was done to enable decisions to be made based on evidence through scoring of efficiency and effectiveness as well as comparison data with other similar workplace projects within the private and public sectors.

The organisation sees that the perceptions of the government towards workplace strategies are changing. In the last two to three years, the work environment is perceived as being a positive factor in developing and executing business goals. In prior years, there were very little positive perceptions towards connecting the utilization of the workplace and these

business objectives. The organisation credits this change in perception to changing workplace strategy trends within the private sector and working with specific workplace consultancies such as DEGW that have influenced perceptions of government occupiers through actual work on specific projects. These engagements have forced departments to think differently about the long-term value of their real estate utilization, and not just to think in terms of immediate outcomes.

Bridget noted that the primary issue affecting these perceptions has been the affordability of property over a thirty-year time frame. This has favoured a change in thinking about property decisions in general, and workplace strategy decisions specifically. This has resulted in a report that was issued, sponsored by this group and that has since become a reference book on framing government occupier perceptions (*Working Without Walls, an insight into the transforming government workplace*. Tim Allen; Adryan Bell; Richard Graham; Bridget Hardy; Felicity Shaffer. Crown; 2004). The initial report outlined the need to change the culture and work environment at the top most levels of government organizations. At the Director level there was too much concentration on business issues, ignoring operational understanding. Below the director level, individuals are more involved in work processes and have better perceptions of the value of workplace strategies and space utilization issues. If perceptions are to be changed, it must be championed at the most senior levels within the organization.

With increased successful projects within the government sectors, there is now a body of evidence that is working towards changing more perceptions. The organisation has been fighting for a long time to get recognition that would assist in focusing attention on these issues and thus affect perceptions deeper within the government field. The publication of *Working Without Walls* is viewed as being invaluable in assisting in this effort to change perceptions of the value and role of the workplace.

Michael Lyons has led and provided two reports that established direction for government policy regarding workplace efficiencies. This Treasury Department report established direction for government attitudes for the utilization of property and has led the way for the organisation to serve as a change agent and assist in shaping perceptions. The greatest challenge has been to find the anecdotal evidence that change within the workplace will positively affect the way one works. There has been a lot of scepticism regarding this, which equally affects perceptions within government occupiers.

Perceptions are also influenced within the civil estate by seeing what others have done previously: what has been done, and what is working elsewhere. Their strategy has been to influence decision making and perceptions, based around the concept of raising awareness, sharing best practices, demonstrating value, and understanding that efficiencies and effectiveness are not mutually exclusive, nor do they run counter to each other.

Within many departments, there still exists a problem of entitlement towards space utilization by individuals. These perceptions are affected by how traditional a particular department's culture is. Different departments have different cultures, which greatly affects these perceptions of entitlement. Many departments have moved towards open work environment strategies years ago, despite this entitlement factor.

5.3 Data analysis

5.3.1 Introduction

From the interviews there are three primary areas that uncover the fundamental issues relating to workplace design strategies within organizations: the workplace design strategies themselves and in particular how each organization defines workplace design strategies;

how workplace design strategies are perceived both by those responsible for defining those strategies and by their respective organizations; and how decisions are made concerning adopting and or implementing these strategies which play out as decisions to initiate and to implement. While each of these areas can be viewed independently, one begins to see that they are interrelated to each other (reference the relationship between Fig. 30, approaches; 17, strategy enablers; and 32, strategy spectrum).

One of the problems that this study reveals is that in the body of research on workplace strategies, these three components are most often examined independently and viewed as separate issues. It is almost as if there existed a certain neutrality about each area (existing within a vacuum and not being aware of their connectivity) which in fact is the furthest thing from the truth and becomes in and of itself an area for further study which would involve an area of Critical Theory discussed later in this chapter. In *Making Sense of Management* (Alvesson and Willmot, 1996) the authors address this as it relates to organizations themselves. They discuss that in textbooks and training courses, management disciplines and skills are each presented as neutral techniques that guide and empower individual employees to work more effectively (The authors' writing in *Studying Management Critically* contend, these practices and discourses that comprise organizations are never politically neutral. Alvesson and Willmot, 2003).

By acknowledging that there is indeed a relationship and that each component informs and serves to affect not just one but all. I have structured this section of the chapter to first briefly discuss the three focus areas and then in more detail to examine these areas as they relate to the study groups by examining them in relation to the components of Critical Theory, Structuration and finally Giddens' five ideological criteria.

One comes away from these interviews with three observations. First and possibly most importantly, viewing workplace design strategies as directly

connected to an organizations' real estate decisions, the drivers clearly are cost reductions (Fig. 18). The final decisions as to specific strategies are solely cost driven with minimal if any in-depth analysis of other factors (implications to HR policy come into play in several instances but not as primary strategic drivers). In other words, strategies are not the result of research. Second in many of the organizations where there exists a negative if not non-committed view towards workplace design strategies, there is expressed conflict between the respective corporate real estate groups and either other organizational resources within that organization (i.e. HR) and sometimes extending to the 'C' suite. Finally, in those examples with adopted strategies that would be considered the most progressive, there is a champion within the 'C' suite.

5.3.2 Workplace design strategies, decision-making and perceptions: overview

Figures 18 and 31 summarizes what drives value and perceptions of workplace strategies for each of the study groups. Within each of these categories, a decision process was involved, sometimes formally and sometimes informally as a result of not taking any action. However, in all of those organizations where a strategy was adopted there were pivotal decision processes involved which served to inform the choice of strategy.

Finally, in the absence of any formal empirical research, these decisions were the result of financial analysis in the form of business cases. One can see through this analysis the role of perceptions as they affect both those in the CRE groups ultimately responsible for these strategies as well as the perceptions of management and employees for both the strategies in concept and those specific strategies. That cost is the fundamental driver of all of these strategies creates an argument that this represents an underlying perception within organizations that speaks to the value and role of workplace design strategies. Regardless of the

outcomes, and as evidenced by the results of some of the strategies progressive benefits from the end result, (which could be viewed as 'unintended consequences' and discussed later within Structuration) there is a consistent view or perception expressed by the drivers of these strategy decisions that workplace strategies are primarily there to assist in cost reductions.

This leads to a perspective that aside from cost based decisions, workplace design strategies are not developed through a rational process. This is a view discussed by Nils Brunsson in a paper entitled The Irrationality of Action and Action Rationality (Brunsson, 1982) where he notes that organizational decision-making tends to be irrational.

5.3.3 Layer 2: Workplace design strategies, decision-making and perceptions: viewed through Critical Theory

Critical Theory here is used as a conceptual tool for understanding the workplace environment and organizational politics that affect perceptions and decision making within the environment of the study groups. With Critical Theory, as noted in Chapter 3, one can examine assumptions and context as a framework for analysis. As such, it helps to explain what is wrong with current realities, and in the situation of these study groups it is intended to question some basic assumptions related to workplace design strategy development.

On the surface and as viewed in Layer 1, each of the study organizations engage in internal struggles regarding the use and role of workplace design strategies. In some instances the individuals interviewed as part of Corporate Real Estate groups see a need and believe in the role of certain workplace design strategies. They have become the front line for championing this cause. This was a role played by Ed Lawrence of Financial Group, Michael Mason of the UK Telecommunication

Organisation and Julianne Filose of the UK Global Energy Organisation. Existing forces within those organizations, and economic drivers, created the environment for these individuals to champion progressive workplace design strategies. In other of the organizations these very same struggles never came to fruition due to obstacles within these organizations. The US Government Mortgage organisation and the US Manufacturing the UK Financial Organisation 1 and US Professional Services Organisation engaged in struggles to implement strategies within vast entities of organizational contexts that in the absence of either 'C' suite champions and or immediate economic drivers make it more difficult o make progress towards adopting a desired strategy. The narrative examines these struggles and successes as results of forces identified by the interviewees. Underlying issues and alternative perspectives do not come into the context of this examination. As discussed in the Literature Review, this is much the same way that most of the literature on the topic of workplace design strategies focuses on the concepts.

Critical theory here is being used to examine these strategies as they explain the interrelationships of strategy, decision-making and perceptions and how they additionally contribute to the ideological, political and economic structures of control within these organizations. In addition to this, by looking critically at the three components, we can also examine them as they relate to the management of meaning, metaphors and language that is developed as part of managing meaning, the role of these areas in contributing to and becoming a component of power and control struggles within organizations, the role of identity and perception, and issues of neutrality and ideology.

To add to this, we can also view this study group from the perspective that workplace designs strategies have failed to inform management practices and have in deed have been informed by these same practices. Global Media Organization's Philip Petruzzulu argued that the role of workplace design strategies was not to create organizational strategy but if one were

to look critically at the failure of the potentiality of workplace design strategies it would be its relegation to a secondary supporting role at best within the organization and not as an informer of strategy.

In the instances of UK Telecommunications Organisation and Financial Services Group the management theory is collaboration and distributed work. The workplace design strategies developed for these organizations effectively support this desired theory though the driver as noted earlier, was financial. However, the adoption and employment of these strategies based on given management theories was of interest because of the belief of these individuals in the benefits of 'collaboration' and 'mobility' and not as the result of any formal research or even informal examination of what is best to enable organizational strategy. There existed an acceptance and embracement of current management theories and how workplace design strategies best enable these areas of thought, and not as drivers of more robust and potentially in depth management strategies.

So first one needs to examine the true potential role of workplace design strategies. In the course of all of the interviews and in examining the strategies under consideration, these factors were never considered or discussed. The role of workplace design strategies becomes marginalized and limited and serves as an agent of management theory. The role that workplace design strategies take on as components of these management theories is as managers of meaning. Just as the areas of strategy, decision-making and perception are synergistic. The five components of Critical Theory noted above are not independent but are equally interdependent.

Metaphors + language

Metaphors and language become a means to manage meaning; identity and perception informs the need to and the direction to the management

of meaning; all of which manifest themselves as forms of power and control within organizations (both the strategies themselves become elements of power and control, while the perceptions that inform these strategies and the decision process become components of and manifestations of this same power and control through enabling these areas to affect and exert power and control within organizations. Finally, all of these serve to reveal the political role that workplace strategies serve within these organizations and demonstrate that they are not neutral actions played out within these same organizations.

Within organizations, Alvesson and Willmott note that managers and those organizations construct reality through the management of meaning (Alvesson and Willmott, 1996). This concept plays a critical role with workplace design strategies. Once a strategy has been selected, in most instances organizations go through the process of explaining the strategy to employees with the objective of not only disseminating information, but seeking out their support and embracing that strategy. The more divergent the strategy is from the current status, the more important this becomes. In this effort, the strategies are framed to construct a certain reality that those who have developed them want employees to buy into. As a result, those corporate real estate groups engage in a process designed to construct their view of reality around those strategies. It becomes important for employees to identify with that reality.

In examining the range of activities around this concept within the study groups, one can see how the approaches differ in scale from Global Media Organization's approach in the move to their new headquarters facility to those of UK Telecommunications, UK Global Energy or Financial Services Group. The level and intensity of the programs designed around their respective strategies reflects the magnitude of change that is represented by those strategies.

Global Media Organization's strategy involved minor changes to the status quo regarding changing peoples individual work settings. There were relatively few instances where employees who occupied private offices in the original facility were relocated to open settings. The largest change that affected most staff was the reduction of office sizes. To counter this change, the focus on communicating this strategy to Global Media Organization employees was on the amenity spaces (coffee bars, fitness centre, and cafeteria) that were provided and how much money was allocated to this effort. Additionally, that more space was taken in order to locate many of these spaces on the window line with Central Park views became a strong message that Global Media Organization wanted to communicate to their staff.

Conversely, UK Telecommunications, UK Global Energy, Financial Group and US Professional Services all engaged in a branding program to both communicate their specific message and shape a view of reality as well as to serve as a component of a change management program to create the change and to create a new culture around that change with the expressed purpose of institutionalizing those changes. These change management programs involve a shaping of a certain reality though defining an identity around these changes. This reality then becomes organizational reality as time goes by. UK Telecommunication's 'Productive Office', UK Global Energy's 'Blue Chalk,' Financial Group's 'Future of Work,' as well as UK Financial Organisation 2's 'Good to Great' are all examples of these efforts. Alternative workplace strategies make extensive use of metaphors to help shape employee's realities concerning the workplace. From the interviews and the examination of the collateral material, the use of these metaphors are not a deliberate attempt to deceive but none the less their intention is to obtain support and buy-in from stakeholders that the organizations realize may not be supportive. However this does not lessen the controlling role that they do play and as noted by Alvesson and Willmott, metaphors are widely employed in more

or less self-conscious ways to represent reconstructed realities (Alvesson and Willmott. 1996).

These branding exercises and the change management activities that went along with them made use of metaphors as well as language to help shape employees' realities along the lines of those specific programs. The branding programs were very much like an advertising campaign making use of print and electronic media to begin shaping the image of the message. As the programs evolved, more intense activities went along with it ranging from newsletters to workshops and town hall meetings.

The goal of these exercises was to create a new reality of the workplace around these efforts. In most instances these strategies represented fundamental shifts in both how individuals were situated (moving from private space to open space) and how they were to use the workplace. The belief on the part of those interviewed was that these programs were designed to explain the programs to employees, ward off negativity and create a new culture. In so doing, the result whether acknowledged or not was to shape a reality of a new world represented by these strategies, a reality that employees would identify with in order to embrace. This new reality needed to become organizational reality in order to maintain this new culture. As evidenced by the names associated with the branding efforts, metaphors become pivotal components of the strategies. Working at Financial Group embodied the 'future of work.' UK Global Energy's metaphor of Blue Chalk was formulated to have employees see themselves as at the cutting edge of business. One of UK Global Energy's supporting materials creates a picture of employees engaging in this strategy as being 'brave enough to take a leap of faith.'

Managing meaning

Critical Management Studies points out that it is not how people use language to accomplish these sorts of goals but how language contributes to the identity of groups and their respective relations (Alvesson and Willmott, 1992). The use of language as shaping organizational reality and its purpose as objectifying, institutionalizing and making legitimate a specific set of realities is part of the problems analyzed by the sociology of language, theories of social action and institutions as well as the sociology of religions (Berger and Luckmann, 1967). The process that these study organizations engaged in beyond the branding programs aimed at creating a new culture around them is a form of what Berger and Luckmann term secondary socialization which involves the acquisition of role-specific vocabularies, which then translates to the internalization of semantic fields in order to structure routine interactions and conduct (ibid).

Organizational psychologist Karl Weick describes the process through which one shapes and structures our realities as a process of enactment (Morgan, 1997). This role of our position as part of 'reality' requires that we take an active role in bringing our realities into being and which in turn these 'realities' serve to impose themselves on each of us as becoming the 'way things are' regardless of whether they indeed are (ibid). This points to a discussion of just what reality is, the role in the case of these organizations in shaping reality and subsequently the recipient's role in identifying with that reality. The language of workplace strategies, especially as they relate to change management programs employed to make the strategies real serves to mediate between individuals and the conditions of their existence, in the case of the workplace, their existence being work life (Alvesson and Willmott, 1996).

The role of the workplace as a tangible component of reality serves as a means to make real a certain reality, in the instances of the study organizations, a reality of work life. This role of physicality as a

contributing factor of forming and changing realities is discussed by Leach. In framing space in specific ways and abstracting it from its original context, it (the workplace) changes its meaning. Language plays a critical role in this decontextualising the position of the workplace (Leach, 1999). This decontextualisation works to desemanticise that space resulting in its recontextualization in order to invent it with another meaning (ibid). In these instances of the branded study group recontextualisation would refer to the evocative nature that the branding efforts attempt to create. One can work smarter, work with an organization that embodies the future of work or be a blue chalk thinker, someone who takes risks and is not interested in the status quo. It resonates with the types of advertising organizations utilize to sell image and life styles while the product itself may only be a car or a watch. One cannot also ignore the role that the actual physical space has in contributing to the shaping of one's reality.

Elements of power + control

While enclosed and hierarchically designed office spaces speak volumes on the controlling forces of many organizations even when unintended, the use of alternative workplace strategies often masks the nature of the management structure that exists within. Alternative workplace strategies such as those used by Financial Group and UK Telecommunications are offered and presented as representational of the 'openness' and non-hierarchical nature of the organizations. Its very appearance through the elimination of private offices, placing those private offices where they do exist, on the interior of the floor rather than on the window line, the abundance of open break out spaces, are all intended to define an organization as being open in its management style. The openness and lack of apparent hierarchical layouts of the FOW program on the office floors is in contrast to the executive suite that remains on the top floor of their executive headquarters. This demonstrates the way in which there is

a concerted use of the design of the physical space to offer a certain vision of the organization that may not necessarily reflect the true nature of that organization. This is a point discussed by Dale who points to the deliberate manipulation of social and spatial organization in order to affect a certain vision of work and organizational form (Dale. 2005). She goes on to argue that the representation or physical aspect of space as evidenced through its design cannot be separated from the 'imaginary' space that is contained within it (ibid).

The consultative roles that both the US and UK Government Property Advocacy's program play is another form of managing meaning or shaping reality. Unlike the other organizations of the study groups, both of these organizations are not involved directly in developing workplace design strategies. Both are mandated to influence decisions. In so doing they take on the roles of shaping the meanings of respective workplace strategies in order to influence government user's of the benefits of adopting alternative strategies. Working Without Walls was conceived as a work with the specific intent of aiding in the influencing of these decisions. As noted in the previous chapter, this work was referenced in the interview with assisting in selling the role of the Advocacy Group and innovative ways of work.

This is in line with what Dale refers to as a new wave of management concerned with changing people's values, norms and attitudes so that they make the right and necessary decision (Dale. 2005). Whether with the mission of these two government organizations or any of the study group organizations that have engaged in change management activities to enable alternative workplace strategies, this 'right' decision is viewed as contributing to the success of the organizations (ibid). The stories and ideologies that go along with these metaphors become what Dale refers to as 'story cultures' (ibid). the metaphors take on a life of their own and become stories for both the present workforce but if successful, for future employees in order to adopt the strategy as exhibited through the culture.

These 'story cultures' are patterns of meaning which enable all members of an organization to identify with the goals and objectives of the company for which they work (ibid) which is the primary focus of each of the branding programs associated with the study groups.

Managing meaning

Language also serves to take on an ideological role of discourse (Alvesson and Willmott. 1996). Ideology also playing a contributing role in the managing of meaning. This ideological role mediates between employees and the organizational and physical conditions of the businesses they are part of (ibid). As these strategies are branded, the images and messages that evolve take on the role of an ideology that employees not only relate to and ideally support, but which takes on the role of that ideology. As with any ideology, it serves a function as it relates to exerting influence over tacit decisions, those that reference deliberate act's relating to workplace strategy development and implicit strategies that affect decisions relating to implementation. Tacit decisions reference governing and or decision making bodies within the organization while implicit references those decisions that relate to how to implement those decisions.

Language and the use of metaphors attributed to specific workplace strategies serve as a means through which organizations actually create its bureaucratic characteristics. Organizations end up being what they think and say they are through the use of those ideas and ideologies. (Morgan. 1997) If an organization says they represent the future of work, then that becomes the organizational reality.

The use of language to manage meaning, and create an ideology goes beyond the branding programs of these organizations. The use of different collateral materials as provided by the study groups to support

the interviews offers insight into just how language can be used as described as well to help foster an ideology.

Financial Group through Future of Work has the most developed and evolved use of language to support its strategy initiatives. From the overt connotation's of 'future of work,' to the daily references utilizing language to support and in actuality institutionalize their organizational culture, language is very much part of the strategy. The Future of Work program is linked in many instances to being one of the 'best places to work.' On one power point presentation, reference is made to Financial Group being positioned as a 'maverick brand for smart consumers.' The mix of 'maverick' with connotations of being a rebel along with 'smart consumers' being associated with thought driven and above average is a clever mix of potentially contradictory metaphors. The 'maverick' provides association with the organizations consumer television advertisements, which with the 'what's in your wallet' edginess provides a counterpoint to an employee who sees him or herself as crossing both areas. One can be both a bit beyond the safeness of the typical worker, somewhat of a free spirit yet be associated with an organization that views you as smart and feeling valued.

Another presentation used for making the case for the FOW program uses the term 'university' as a metaphor for the workplace. It is related as a means of envisioning the shift in thinking necessary for working in the new environment. It relates the negative connotations of 'scheduled classes' to the more positive associations of 'optional attendance' and 'freedom to complete course work wherever and whenever one chooses.'

The Workplace 2020 materials uses terms such as 'the promise of a world class workplace' to sell their use of alternative workplace strategies. Geared to government workforces who normally see their workplaces as far below those of the private sector, the ability to associate their workplace with 'world-class' evokes powerful imagery. With their

counterpart within the public sector in the UK, the UK Government Property documents make use of a published book formatted to place both language and visual imagery in juxtaposition to shape their view of reality. Beginning with a history of the workplace focusing on the UK, the imagery of Thatcher and the 'welfare state' is positioned to using the workplace to 'drive business change.' The book is introduced as 'the redesign of the government workplace...' It also makes use of bringing in so-called experts (Dr. Michael Hynd of Scottish Enterprise and Dave Woods of the Ministry of Defence) to offer their views of workplace change. This serves to legitimize the program with those who would potentially adopt these strategies.

Depending on the respective audiences, each of the supporting materials focuses on what they view as their targeted listeners. For the technology driven younger worker, the metaphors and language offer visions of change and out of the box thinking. Where statistics would potentially serve better to achieve support, references are made to 'effectiveness' and 'efficiency' (UK Financial Org. 2). In most instances there is not one approach over the other. Where a more qualitative language is used as in the case of UK Financial Organisation 2, the counterpoint of the term 'innovation' is also used: 'innovation simply is embedded in everything Group Property does.' This line of language is pared with the addition of an 'innovation manager' to the Group Property team.

On the more traditional side, Global Media Organization who chose a traditional workplace strategy focused on the amenities that were provided as part of the strategy. Since it did not represent a change in work the desired focus on the company ('picnic in the park') was to earn employee loyalty. 'Picnic in the Park' references the extensive views that were part of positioning the largest of the amenity spaces, the cafeteria, on the window wall facing Central Park with the consistent reminder that the organization took on two additional floors to accommodate the use of this portion of real estate for employees. The two additional floors were

used to house executives who also needed to have their views of Central Park.

Building on this, one can begin to link these issues to see a picture of strategy development as it relates to each of the organizations. This use of ideology also speaks to the role of the three contributing factors (strategy, perceptions and decision making) as they relate both to the exercising of power and control. This interrelationship between the physical and the metaphorical was in part addressed by Lefebvre who showed the domination of the organization through both the carefully conceived use of space and also through the construction of an imaginative space (Dale. 2005). This imaginative space would in the instance of this research be the metaphorical use of language to describe the workplace. Lefebvre views this as a space created through both physical and discursive effects with the result that the employee can understand themselves as a successful individual in relation to the organization (ibid.).

One can examine the role the workplace strategies play as means of control within organizations based on the strategies themselves. Another additional perspective would be to examine the role that the branding of these strategies as another means of exerting power and control. By using Critical Theory as a way of exploring these concepts, an interesting perspective comes to light. In the literature on workplace strategies the discourse on the role of architecture and the workplace as both metaphors and actual facilitators of organizational control, have focused primarily on those strategies that resemble Taylorist philosophies and how certain conventional and hierarchical approaches to the workplace reflect and resemble the controlling aspects of Taylorism. Progressive or Alternative Workplace Strategies are often used as examples of converse approaches to this and as a means of creating workspaces that are just the opposite of control oriented strategies – workplaces that reflect more open, collaborative or liberated approaches to the work. By placing open

Starbuck - like coffee areas within work areas, and allowing workers to not be tethered to their desks, the assumption is that this is a positive response to and a move away from control focused workplaces.

The workplace approaches that would traditionally be noted to reflect power and control with organizations from the study groups would be US Mortgage Organisation, UK Financial Organisation 1, Global Media Organization and Global Entertainment Organization. Usually offered as prime examples of workplace strategies that were not reflective of power and control aspects of the organization, UK Telecommunication, Financial Group as well as UK Financial Organisation 2 are examples: those organizations that have adopted alternative and mobile strategies. Because these strategies have been branded to reflect specific life style associations, life styles associated with freedom, breaking the mould and looking towards the future, coupled with strategies that because of their built in freedom as expressed in mobile work and choice, the assumption is that these strategies are the furthest thing from control oriented organizations and in fact reflect organizations that are moving away from exerting power and controlling employees towards actually liberating them.

By using Critical Theory to examine the underlying issues associated with these strategies you uncover aspects of these strategies and the approaches to implementing them that very much reveal as many aspects of the exertion of power and control traditionally reserved for the conventional workplace strategies. One can even say that this represent a more cynical form of power and control in that they are positioned as strategies that will liberate. This demonstrates what Alvesson and Willmott consider to be a more pervasive form of control within organizations, uncovering the use of power and control in areas that have not been recognized as being so (Alvesson and Willmott, 1992). What is most interesting here is that this new perspective breaks down certain myths within the world of workplace design strategy that positions hierarchical

forms of strategies as reflective of power within organizations, and non-hierarchical strategies as having an absence of organizational control. In fact the literature provided by the study organizations that support the branding of these initiatives and their capacity to create a new meaning and an ideology are very much a form of control as the more obvious strategies.

If one were to look at the subtle interrelationships between the above components of Critical Theory (the managing of meaning, power and control, the use of language as well as the use of metaphors to influence employees perceptions and to influence their behaviour) a picture comes to view of the use of strategies that are rooted while providing aspects of freedom through the apparent absence of a control-based workplace, in the use of power and control to sell these strategies to employees.

What contributes to making these strategies more pervasive than the open hierarchical standard based strategies is that as Alvesson and Willmott suggest above, while not necessarily controlling workers actions, they serve to influence what one would consider to be one's personal identity within the organization (Alvesson & Willmott, 2003). Employees become obedient within the confines of their own ways, establishing sets of practices, which form ideologies, ultimately constructing identities (Alvesson and Willmott. 2003). These strategies are very much conceived of and planned around informing one's sense of reality. While these are extremely subtle forms of power and control, just as forms of advertising can be used to often subtly create meaning and influence perceptions of a targeted audience, these forms of workplace strategies through their implementation programs are no less so.

Neutrality

All of this logically leads to the next component of Critical Theory that reveals another flaw in the perspective of workplace design strategies – that they are in their most progressive form neutral and devoid of organizational politics. As with the case of power and control, the issues and perspectives of neutrality has been reserved for those strategies that take the form of and support more rigid forms of organizational structures. This is reflected and expressed even within the interviews by the study group participants in the way they express their perceptions of the roles and value of strategies within their organizations.

Control

Control as a component of organizational power is also supported by the physical workplace that results from strategies and is not reserved for the more conservative approaches. Within even one of the more outwardly progressive of the study groups, UK Telecommunications, the strategy exhibits its role as a means of organizational control. Dale references this organisation in her paper on Building a Spatial Materiality (Dale. 2005) where she notes that organizational control can also be viewed as being reinforced through both the social and the material (physicality of the workplace) in the developing conceptualization of what she terms 'aesthetic labour.' This is a reference to employees having to embody the value of the company as part of their labour process. She uses the organisation as an example, noting that it describes those who design their workspaces as 'imagers,' like the Disney animators and creators of iconic consumption spaces (ibid.). Both the spatial and the material can be used to conflate the distinctions between spheres of productivity and consumption to become embedded in and strengthen organizational control (ibid.).

On the surface the subtleties of alternative workplace strategies representing forms of organizational control may not be as obvious as the more overt status driven strategies as employed by Global Media Organisation. None the less its influence is just as pervasive. Again Dale hones in on this by noting that although control systems have changed from the overt power invested in the space itself, time and material conditions are as integral to power as it ever was, although constituted in different ways. (ibid).

Foucault's conceptualization of power sees power as constituting all social relations rather than being a monopoly of a privileged elite and institutions (Clegg and Kornbergerger. 2006) can be transferred to his views on power as transcending to organizational control and to the forms of power from the very use of particular strategies within workplace design and to the ways of instituting and institutionalizing them as forms of power. Foucault's approach is useful because it allows analysis on how organizational subjectivity is produced by involvement in everyday life, micro relations, as well as through the subtle use of power (ibid). Important to note here also is the role workplace strategies have not only in the immediate but also in the institutionalization (a form of power) of desired cultures within organizations.

Supporting this view of physical space embodying organizational control, Clegg and Kornberger reference Fligstein who notes that there have been primarily four conceptions of control used by leaders of the largest American firms: direct control of competitors, manufacturing control, sales and marketing control, and financial control. It is through financial control as an instrument of measurable indicators that form a physical space for action and interaction (ibid). The workplace as a physical form of the organization represents a form of financial control. One can view this both as the result of the financial aspects informing these strategies (reductions of costs) and the strategies themselves as extensions of

financial control. Cost reduction as primary influences of workplace strategies reinforces this concept.

The perspective that even alternative workplace strategies are in reality a form of organizational control is an area not encountered in any of the literature. In fact it puts these strategies in a different light than the one that is offered here. These alternative workplace strategies create a form of control that is unique to its form of strategy but beyond this, provide a new form of control. Powell and Burrell refer to this as a form of control requiring flexibility from workers and a form of control that extends to the concepts of teaming through multi-functional teams which they quote authors such as Baldry as terming 'team Taylorism.' Partially due to its newness as an accepted form of workplace strategy (alternative may no longer be a descriptive term) little has been written that begins to examine critically these aspects of the strategy. However when we begin to look at its application through UK Telecommunications and Financial Group in terms of Critical Theory, the instances cited in this research begin to support this view.

Another aspect of alternative workplace strategies that causes one to see it in a different perspective and one that begins to form a new type of organizational control is that it validates a view held by Foucault. Conventionally it has been easy to ascribe forms of organizational control to strategies that architecturally create spaces that are overtly reflective of command and control management. This can be seen again through the strategy at Global Media Organization. However, with alternative workplace strategies the workplace and architecture take on a different form of control. The strategy itself is part of organizational control. Foucault believed that architectural form in itself cannot determine the conditions of control. Referencing the Panopticon, he [Foucault] believed that the architectural layout affords various techniques of control but that it is not the architectural form in itself which might act as a force of liberation or control (Leach. 1999). This is extremely relevant in the cases of

alternative workplace strategies, which on the surface and through its interpretations are presented as a form of workplace liberation. The very act of the strategy as a form of control, along with the means of branding it to internal stakeholders supports Foucault's observation.

From the literature there appears to be a belief within the design industry that workplace strategy decisions are either made for work process purposes devoid of the management issues associated with them or are not made because of an organizations lack of understanding as to how and why these decisions are actually made. That much if not all that is written about workplace strategies ignores it's use as an element of organizational control in its 'alternative' use, ignores the underlying issues discussed above that look beyond the metaphors (an exception to this is Reinhold Martin's work on the Organizational Complex (Martin. 1999, 2003).

US Manufacturing and US Government Mortgage Organisation expressed the frustrations of establishing alternative workplace strategies within their respective organizations. Organizations they categorized as status driven, and standards driven, associating these with the agendas of political status. Conversely, Financial Group and UK Telecommunications presented their strategies and their organizational environment as being not about ideology, ingoing that ideology as not necessarily positive or negative but associating negative controlling strategies to the conventional strategies. These are offered as reflecting and supporting specific agendas and means of management, agendas that allow for entitlement through the formal approaches to work settings and the means of deploying them within the workplace.

One could also make the case around the fact that the underlying triggers of any of these alternative strategies is cost reductions and not the benefits of these strategies as also a form using the strategies themselves to conceal organizational political agendas and by so doing, these

strategies are far from neutral activities within these organisations. As the opposite of conventional status driven strategies, alternative workplace strategies are presented as neutral or apolitical.

Another form of organizational control evidenced through workplace strategies are the workplace standards that form a component of these strategies. The more formal standards such as those exemplified by US Manufacturing and US Government Mortgage Organisations are the overt forms usually associated with organizational power. However, any form of 'standard' could be considered a form of control when not associating a value to them (positive or negative). Standards are rules that regulate activities in organizations [and are not dependent on what form those standards take] and are essentially instruments of control (Clegg and Kornberger. 2006). Therefore the standards of alternative strategies such as those of Financial Group or UK Global Energy Organisation take on this additional perspective.

Neutrality

All of this further supports Deetz' perspective that all organizations are political systems which are articulate and embodied in decisions, structures and practices (Alvesson and Willmott, 1992). This is also reinforced through another argument made by Alvesson and Willmott in that organizations reduce the political to the technical as a means of making seem neutral decision making (Alvesson and Willmott. 1996). We see in all of the study groups not only issues of cost reduction as instrumental in triggering workplace strategy decisions but that an equally important component of justifying a particular strategy is its productivity. How will adopting a particular strategy affect productivity within these organizations?

The decision to make use of mobile workplace strategies by UK Telecommunications and Financial Group in part were ascribed to making employees more productive. In fact Financial Group as part of their robust employee survey process measure productivity through activity patterns, employee downtime and deterring the time spent in meetings. Conversely, the struggle many of the study organizations had with getting senior management to see the validity of adopting more progressive workplace strategies was the actual inability to make a measured case for productivity. This was the case with both US Manufacturing and US Government Mortgage Organisations. Reverting decision making to the technical versus the need to justify strategies on productivity rather than on issues that have the potential to question management and organisational structures, depoliticizes the root causes of the need to make better strategy decisions.

The other approach to workplace design views the outcomes of design strategies as an aesthetic endeavour devoid of the organizational politics that they serve to house. As culture, identity and power become central to the understanding of management and organizations. Spatial practices produce people and how organizational aesthetics is much more than a simple beautifying of the workplace but an issue of politics and power (Dale and Burrell. 2008).

While attempting to maintain a neutral place in the organizational agenda, all spectrums of workplace strategies serve to reinforce organizational and individual agendas. Organizationally in that even the most progressive strategies as demonstrated above are forms of organizational control (in this instance they become unwilling accomplices). Individually through the ways in which they are developed or not developed, they reinforce the perceptions of those individuals who are charged with developing and implementing them.

5.3.4 Layer 3: Workplace design strategies, decision-making and perceptions: viewed through Structuration Theory

While Critical Theory provided the framework to examine areas of workplace strategies to uncover underlying concepts that have often been overlooked, Structuration further helps in understanding these issues within the context of the organization. Structuration Theory concerns itself with understanding how all action occurs within certain contexts. In this case the context of the organization. More specifically, these actions and or activities have neither been created by participants (actors) who also have no control over these strategies. These are what Giddens refers to as constraining and enabling activities or the duality of structure.

Understanding the three areas of focus (workplace design strategies, decision-making and perceptions) in the context of this duality of structure provides added meaning to the issues examined in the above section on Critical Theory. Importantly, it raises the possibility of viewing these factors as sinister or the products of some organizational scheme and acknowledges that indeed there are complex factors at work within organizations and the individuals who comprise those entities that affect perceptions, decision making and ultimately the workplace design strategies that are their result.

Agency

On the one hand, agency reflects the roles of individuals (in the areas of this study these individuals are both the interview subjects of the case studies and those individuals with whom the subjects interact); and structure, which are the roles and resources within these organizations. As I will discuss later on, often the result of these relationships or the duality of structure are unintended consequences, or results stemming

from the workplace strategy decision and processes that were not part of any previous discussions or framework.

In the instance of the study groups here, Structuration suggests that the environments in which employees operate in, and which decisions about workplace strategies are made respond to conditions that the participants of those strategies did not make and which they have little or no control over. As with all of Structuration Theory, the competing and often conflicting forces within organizations are equally prevalent within the concept of unintended consequences of agency and structure. This can be viewed through the workplace strategy process internally through the processes within the specific organizations and externally through the actions and participation of design consultants who serve to assist organizations in these processes.

Unintended consequences

Historically, when IBM limited the role of Watson in working directly with its architect in developing the design strategy at its headquarters (see Chapter 2) it resulted in their internal design director, Elliot Noyes having limited influence over the design direction of the organization. As noted this also led to the creation of a facilities management group to serve as the translators of IBM's design strategy to external consultants with the result being a compromised architectural solution. A further unintended consequence of this event was the influence of this facilities group as being the beginning of the FM profession, with most large organizations adopting similar groups to serve as the link between the 'C' suite and design consultants. This one action has had a profound and lasting impact on the course of workplace strategy development and perceptions of workplace strategies since.

A component of unintended consequences are the results of seemingly isolated actions on non-anticipated influences and decision-making. At the external level, the preoccupation of the design profession on form and aesthetics served to both remove designers from influential positions on the strategy decision team as well as to influence perceptions of the value of workplace strategies as being associated with the aesthetic rather than enablers of business. Leach in the *Anaesthetics of Architecture* writes about the tendency by architects to 'privilege the image' which serves to distance architects from users of their buildings by encouraging them to adopt a 'highly aestheticized outlook' distanced from the needs and concerns of their clients (Leach. 1999). He cites this as an explanation of the failure of modern architecture of being viewed by the public as abstract and aesthetically driven and out of touch with their needs (ibid.). It is easy to see how this view of design carries over first to the early post-war corporate headquarters buildings described in Chapter 3 and subsequently with the results filtering down to the workplace designs contained within.

Within the study groups themselves the very alternative workplace strategies that were adopted by UK Telecommunications, UK Global Energy and Financial Group are the direct result of the unintended consequences of these organizations being forced to look at real estate as a means of reducing costs. The mandate from these organizations to cut expenses through real estate resulted in individuals within their respective CRE groups to recommend alternative workplace strategies as viable solutions. These forward thinking strategies were not the original mandate of these organizations but an unintended consequence of a financial decision. At a deeper level, one can take the analysis from the previous section where implementing workplace strategies being contingent on the shaping of ones realities to see how the unintended consequence become an extension of organizational control.

A further extension of this can be made to the actual unintended consequences of the physical workspaces themselves and the affect they have on workers. While not observed in the study group interviews, Dale notes that material objects [the physical workplace] are constitutive and not simply a reflection of social relations [a concept not acknowledged in any of the workplace strategy decision processes] and there was a need to recognize that they play an active part in a process of social self-creation [managing meaning] in which they are directly constitutive of ones understanding of not only ourselves but others (Dale. 2005).

Making use of human agency are those individuals along the workplace strategy supply chain that affect strategy decision making policies (design practitioners, CRE personnel, management, executive management and employees). We can examine how decisions are made always with this agency in mind. These relationships make up agency, which put into context many of these strategy decisions. It also helps to understand issues of power as discussed in the previous section in a somewhat broader context. While I discussed the role of power in the section on Critical Theory as it related to its manifestation as exerting control over employees through managing meaning and influencing perceptions through shaping their realities, with Structuration, Giddens also views human agency as the capacity to make a difference (Giddens, 1984). Giddens sees the role of agency and power as the ability of agents to possess transformational capacities through exploiting the very resources of structured properties contained in the case of workplace strategies within organizations. Certainly one could view AWS as a transformational activity.

Structure

The structure that Giddens refers to is the roles and resources within organizations that enable those organizations to continue and replicate.

Workplace strategies become components of these rules and resources enabling the organization through its culture, work processes and imaging or branding. This is the enabling component of Structuration. The constraining portion deals with actions and or activities that serve to constrain or enable behaviour, which are a role well played out on both ends of the spectrum by the study groups.

Duality of structure

Duality of structure views the organization (structure) as possessing dual and conflicting purposes, constraining and enabling forces. This can be viewed within two contexts from the study groups. On the one hand are the desires of those individuals within the CRE groups that believe adopting a more progressive form of workplace strategy would be beneficial to that organization and are faced with the struggle to get other stakeholders to perceive the same value. This was the case with US Government Mortgage and US Manufacturing. In both instances you have individuals within the CRE groups having a perception that moving towards and adopting some form of alternative workplace strategy would be of benefit to the organization. At the same time there is a management perception that is opposed to this. With US Manufacturing Organisation the discussion turned to the perception of management that there was no need to change due to the referenced observation that the organization has had no problem attracting innovative individuals to the company within the present structure. In US Government Mortgage's case, new management perceiving any workplace program to be a cost issue blocked any new initiatives. UK Financial Organisation 1 is a hybrid view of this duality. While there was a mandate from the UK to initiative forms of alternative workplace strategies (already in place in Europe) American perceptions of this form of strategy became constraining forces in moving towards its acceptance.

Global Media Organization's explorations into forms of workplace strategies at the start of their New York headquarters project resulted in a strategy that some might deem as compromised due to this duality of structure. Believing that adopting a form of alternative strategy would not align with the status driven culture of the organizations, and as indicated in the interview, the media industry, the existing strategy was employed in the new facility, though with some modification of office and workplace sizes. Constraining forces resulted in enabling force to be limited.

Within organizations across US-UK locations, the effects of this duality can be observed with Global Media Organization and Global Entertainment Organization. Simon noted that while the media industry in the UK tended to be far more progressive in its application of workplace design strategies than their counterparts in the US, forces within Global Entertainment Organization. UK pushed to adopt the US Global Media Organization standards based on parity issues. Another example of duality of structure noted in the interview with Simon was his discussion of the need to accommodate change and the competing needs of Global Entertainment Organization. Through accommodating change vs. a structure of micro management often led to compromised decisions.

Which leads to the second form of this duality being the financial factors as both drivers of (enabling) workplace design strategies as well as the constraining forces as discussed above. Clearly with UK Telecommunications, UK Global Energy and Financial Group, financial constraints led to seemingly enabling workplace strategies. Within this context, UK Government Property Advocacy and Workplace 2020 continually play roles that fall within enabling and constraining forces as they are not directly responsible for developing workplace design strategies but serve as resources to enable and facilitate as well as influence decisions. Taken as a whole, these examples serve to show both the complexities of the three aspects and how there exist layers of contradictions within organizations that serve to impact each or all of

these. Whittington writing in the *Journal of Management Studies* notes that a structurationist account of managerial agency that is founded on the contradictions within and between different social systems (Whittington, 1992) offers a model to examine the external influences on individuals and organizations which can be used to view decision making and perceptions relating to workplace design strategies.

Social structure and human interaction can also be viewed in three dimensions: signification/communication, domination/power and legitimization/sanction (Rose, 1998). These three dimensions serve to view the interrelationships between strategy, decision-making and perceptions discussed in this chapter. It takes the discussion from the previous section on Critical Theory and places it into the realities of the complexities of organizational life.

Signification and communication are parts of developing the workplace design strategies and subsequently communicating that strategy both to obtain approval from senior management and then to gain acceptance from workers. Creating 'truth' from these strategies is part of this signification. Goff discusses alethic truth as a 'caused structure' or a 'caused relationship' between a structure and that to which it gives rise (Goff, 2000). This is the relationship to the organizational structure resulting from a particular strategy and the actual structure that workplace design strategies take on.

Domination and power is exemplified through the roles each of the processes play in organizational control and legitimization and sanction is the very process of managing meaning, and shaping realities in order to institute these strategies. As noted throughout this paper, physical space plays a role in this, willingly and unwillingly. Zanoni and Janssens point to productive spaces being distinct configurations of discursive and non-discursive organizational practices and that such practices become spatial

in that they give both a material and a symbolic form to the organization (Clegg and Kornberger. 2006)

Using Financial Group as an example, the FOW process can be seen as an example of these three dimensions. In developing the strategy as a result of senior managements mandate to find ways to reduce their real estate holdings, a business case was made by CRE and presented as a means of obtaining approval. As examined previously, the standards developed as part of the strategy could be construed as a form of organizational power and domination. And finally the change management program developed around the strategy to initiate it and institutionalize it is the very process of legitimizing the strategy within Financial Group and finally to obtain sanction from current and future employees.

The Structuration Theory of duality of structure and the inherent conflicts represented therein are evidenced throughout the narratives of the study groups. It also serves to inform those issues viewed in the previous section. While examining the three frameworks for this analysis, many seemingly disparate influences came to light: managing meaning and shaping realities, power and organizational control, and the use of metaphors and language. When using Structuration Theory to view these influences, the contradictions and conflicts are understood in the perspective in which individuals within these organizations experience them. Through this structurationist view of structure and resources a common framework is offered for analyzing the disparate social influences existing within organizations (Whittington. 1992). Unique to this theory is that this duality and conflict is ongoing. Whittington notes that structurationist acceptance of structural conflict and tension as opposed to institutionalist assumptions based on resolution and accommodation, provides leverage on the uniqueness of the problems and the nature of change (ibid). Adopting this perspective brings into question some of the assumptions of change management programs as it relates to those

engaged in by UK Telecommunications and Financial Group where change is perceived to be institutionalized as opposed to being an ongoing process.

Space + time

Space and time places Structuration Theory in the context that social practices are constructed across time and space, as opposed to remaining frozen in a particular point of time. The issues of time as it relates to the issues of space are reflected throughout many of the interviews. Lawrence from Financial Group noted that one of the obstacles to workplace strategy development involved the fact that while strategy looks towards long term issues, space is based on time frames informed by leases, time frames involved in designing and construction and often by the time these projects are completed assumptions that the strategies are based on become outdated.

These time-related issues pervade the discussions and serve to shape perceptions of workplace design strategies. Often they are used to limit the scope or depth of a strategy. Global Media Organization's Petruzzulu also referenced the limitations of workplace strategies in general due to senior management's perceptions of lease frameworks limiting what they perceive to be the effectiveness of a strategy. However it should be noted that references by both Financial Group and Global Media Organization interviewees are out of the context of their particular situations where time was not of immediate importance. This more so with Financial Group than Global Media Organization. In the case of Global Media Organization the issues of time from strategy inception to occupancy played a part in limiting the time frames of the strategy outlook. Strategy decisions were isolated to the immediate and not to the long view.

But issues of time and space affect strategy decisions and perceptions on a breadth of levels. Aside from the immediacy of particular situations, often the way in which strategies are developed do not take into consideration issues of time, though an argument for alternative workplace strategies is in its adaptability over time to enable organizations to deal with future unexpected change.

However the design profession has potentially added to the negative perceptions of workplace strategies by failing to address fully those issues of time in their design responses. Brand observes in *How Buildings Learn* that the architectural profession has emasculated itself and suggests a new dimensions that architects need to consider with architecture moving from elements associated with artefacts of space to 'artists of time' (Brand.1994).

This entire issue of time and space is largely ignored architecturally and is one of the features of alternative workplace strategies that offer positive perceptions to potential users. However, that buildings in general and workspaces in particular are perceived as being incapable of dealing with time, impacts perceptions of the value of workplace strategies as can be seen in the responses cited above. This is even more relevant as the nature of work changes, which is reflected in the alternative workplace strategies of UK Telecommunications, UK Global Energy, Financial Group and US Professional Services organisations. Brand again addresses this by noting that as office work becomes less role based and more project based the office environment needs to be more 'liquid' (Brand. 1994). He quotes Duffy as pointing to this factor as accelerating and destabilizing the entire workplace strategy process (Brand. 1994).

Here again there is conflict as to the perceptions of time on projects. Developers see five year spans as long, while occupiers of space view those same time frames as limiting. Stroink writing in *Time Based Architecture* (Leupen, Heijne and van Znoj. 2005) reflects on the process

from design inception to completed construction drawings as being six months to a year and the construction process an additional eighteen months. For a developer he notes, this time frame can be closer to five years and that in the context of the business world that is in constant movement and in which demands change rapidly along with the demands of tenants design flexibility, these five years is a very long time.

This is in contrast to Duffy's view that buildings are anything but timeless. He notes that some elements of buildings are long lasting, capable of lasting for centuries while others are designed to respond to corporate clients medium term requirements. Still others are intended to satisfy individual users very short term needs (Duffy. 2008). This time – space relationship is something that Duffy addressed in 1998 noting that it is an issue that both builders and architects need to come to terms with. He further reflects that this will require a shift from a profession and industry based on synchronic relationship between the architect and client with each project being a unique moment in time to a diachronic relationship, which is continuing and developing through time (Duffy. 1998). Giedion confronts this issue of time and space in his seminal work *Space Time and Architecture* first published in 1941. Giedion saw the possibility of a syntheses in the development of a new awareness of time and space with this new approach no longer considering them as separate dimensions but as related phenomena (Heynen. 1999).

Current organizational and technology driven needs with business organizations further adds conflict to the pressures of time. This has increasingly created perceptions associated with physical space as being inert and a constraining element rather than an enabling element of work. The concept of the networked office and its use of space and time is addressed by Duffy in *Work and the City* (2008). He points to the reconfiguration of the workplace in combination with the rethinking of the patterns of use of both work and living spaces over time that will be supported by the introduction of a user based and responsible demand

led system of procurement and project delivery (Duffy. 2008). This shifts back to the Giddens' concept of human agency as part of a supply chain which currently relating to workplace strategies becomes constraining and through which Duffy attempts to reposition tin order to become enabling.

These conflicts between time and space at many levels within the workplace strategy process affect the concept of structure as possessing properties that ultimately allow the binding of time and space in social systems or in the case of this study, organizations. If structure possesses the properties which make it possible for similar practices to exist across varying spans of time and space (Rose. 1998) thus allowing organizations to continue and reproduce, the conflicts associated with current organizational needs and workplace strategy responses to them can either be viewed as enabling or constraining depending on how one makes use of them. Based on this, a case can be made for a renewed sense of urgency in using workplace strategies that respond to these critical issues of time and space so as to enable structure.

Authoritive + allocative resources

Giddens' believes that organizational resources are comprised of two types of structures of control. These are authoritative and allocative. Authoritative involves the storage of resources that support domination across time and space. It is the management of a projected future and recall into the past. It could be associated with an organizations culture where it is designed to engage the organization into the future, but builds on stories of the past. Allocative resources reference those resources that consist of material features of the environment such as material power sources needed for production and reproduction. It ensures the continuity of the organization across time. Both involve the retention and control of information or knowledge perpetuating social relations across time (Giddens. 1984).

The results of workplace design strategies represent authoritative resources in that they are designed to create the culture and structures used to enable the organization to exist across time. The strategies themselves and the processes that developed and enable them are allocative resources, which in essence produce the frameworks for the authoritative resources. For these authoritative resources to exist within the study group organizations, allocative resources are needed to create them. They are dependent on creating ideologies around them, which have as their foundation the realities that form those strategies. Both the realities that are shaped to enable these strategies and the ideologies that result from them form allocative resources.

With Financial Group the Future of Work program becomes more than a workplace strategy. The change management program that was developed around it served to create a continuing culture. Out of that culture an ideology of work was formulated based on a mix of technology and mobility which were interdependent. The technology was needed to support the mobility. The ideology that grew from this was of a mobile technology driven organization formulated to be considered the organization of choice for employment purposes.

It becomes important in understanding the role of these strategies that extend beyond the surface of these strategies to see ideologies as a by-product. Without this, the strategies could not extend to becoming real and more importantly, be reproducible across time. These ideologies serve to legitimize the strategies thus becoming the source of organizational power. Giddens five ideologies (Shrivastava. 1986) work to explain these relationships and uncover new meaning. They support the findings of the previous section on Critical Theory.

Factual underdetermination of action norms is when a field of knowledge claims that its actions or policies [strategies] are factually determined when they have neither been or cannot be proven. It misrepresents reality

and exhibits ideological characteristics (ibid). This is can be seen throughout all of the workplace strategies within the study groups and is perhaps the most significant finding of this research. While all of the alternative workplace strategies may have been developed for the benefit of their respective organizations and may also have beneficial outcomes, each was represented as factually determined when in reality no research beyond the financial business cases were presented. Despite good intentions these strategies go on to misrepresent certain realities.

Universalisation of sectional interests are represented as universal truths by this body of knowledge. It serves to legitimize narrow sets of interests and to expand the domain over which sectional interests have influences (ibid). Each of the strategies are presented as a form of universal truth in that they benefit all areas within the organization. In fact the Financial Group UK interview group pointed to the fact that the US counterpart of implementing FOW universally was not in the best interest of many of the more conventional banking groups being absorbed into the organization and pointed to the UK as deviating from this direction.

Denial of contradictions occurs when strategies are portrayed as neutral, lateral and instrumental agencies without contradiction or conflict. It serves to disguise conflict and protects organizations from having to face the need for change (ibid). The strategies discussed in the study groups are portrayed as above the internal politics of their organizations. In reality conflict existed in many of the organizations and was openly discussed in the interviews. The interviews with Global Entertainment Organization. in the UK brought out conflict between themselves and their US counterparts. Conflict also existed within UK Global Energy to the point where the CRE group, which Filose represented, was being disbanded at the very time of our interview.

The normative idealization of goals is a more blatant form of protection of dominant groups and is viewed as the way social theories assume or

accept sectional goals as normatively correct. It further adds to legitimization of ideologies (ibid). This is the very process whereby allocative resources enable authoritative resources through the managing of meaning and the strategies taking on the form of an ideology. Management within US Manufacturing Organisation makes the claim that employees are attracted to 3M because of what they work on, and not where they work.

Finally, the naturalization of the status quo is the extent to which social theories or bodies of knowledge preserve existing dominant structures and constrain change by describing the existing order as the natural order (ibid). This is in fact what occurred within US Manufacturing and US Government Mortgage organisations where the status quo was used to justify not pursuing any form of alternative workplace strategy. Global Media Organization also made use of this by stating that the culture of media organizations were status driven thereby limiting the form and range of workplace strategies under consideration.

However, by viewing the above five ideologies in isolation one could come away with an interpretation that the strategy processes the study organizations engaged in were somewhat predetermined and devious if not sinister. What this form of analysis does not make clear and could be considered somewhat misleading is the role that irrational decision processes played in all of these strategy decisions. While factual underdetermination of action norms did indeed occur, it was within the context of strategy decisions being based on perceptions rather than empirical evidence. While the result is to misrepresent in part the strategy development process, one can equally come away from these interviews with the view that all of these strategy decisions were made not with the intent to mislead but as a result of an irrational decision making process brought about by a number of factors. These factors ranged from issues of time (bringing strategies on line quickly to meet schedules); lack of any fundamental existing research on strategies under consideration; and to

some extent the backgrounds of those interviewees. With some exception most of those individuals interviewed and who are in some of the highest positions within their respective CRE groups have little or no education or experience with strategy development, organizational development and workplace design. Most came from either a real estate or legal background (Appendices A and C for detailed descriptions of the interview participants), which could lead one to question how this impacted the decision-making and perceptual issues discussed in this study.

This is a view expressed by Brunson in noting that organizational decision-making tends to be irrational and organizational ideologies result in biasing organizations' perceptions (Brunson. 1982). Brunson also discusses the relationship between decision-making and ideologies. Both aspects he notes tend to be irrational in the traditional definition of the word. Many decisions are based on biased information about a biased set of two alternatives and even sometimes one (ibid). Finally and a point made by Brunson that would question some of the assertions contained within Structuration theory, the irrationalities that appear both harmful and difficult to explain occurs when the primary purpose is to choose the right action when the primary problem is not choice but taking organized actions. Decision-making and ideologies form bases for action and can be fully understood by recognizing this function. In this regards an argument could be made that irrational decision-making and narrow predicted ideologies become necessary for making radical change (ibid) such as those of UK Telecommunications, Financial Group or US Professional Services organisations.

6. Summary + conclusions

6.1 Summary

This research has attempted to examine the workplace design strategy process, and how individuals responsible for developing and implementing these strategies are influenced by perceptions as part of that process. Its primary focus has been first to understand the organizational dynamics within businesses that these individuals must work with, and to further understand if there are forces at play contained in undercurrents, personal and organizational, that affect these perceptions and which have been overlooked or ignored in previous research. With increased focus on knowledge work, the role that workplace design strategies perform within organizations remains an enigma. Some organizations tout their strategies as if they have found the Holy Grail while others remain locked in workplaces reminiscent of a cross between the office set in '9 to 5' and Brasilia. Why has it been so difficult to secure some universality in acknowledging its importance as an organizational resource, and equally important, for these organizations that have embraced the use of workplace design strategies as an important component of their business, how have these decisions been made and can they be quantified for a wider audience?

The inquiry focused on two primary areas within each of the study organizations to form the basis of the analysis: the context (Fig. 30) of the strategy process and influences (Fig. 18) affecting the process. In all instances, the research cantered on these two areas as perceived by the interview subjects. These areas were not studied to look at the factual elements of these two components with the intent of creating a portrait of an unbiased account of workplace design strategies within organizations. With the focus on those individuals within each of the study organizations as the vehicle through which strategies are either implemented or ignored, the goal was to look at these processes through their eyes to better understand the process from a different perspective. Creating an evidence-based case for workplace design strategies has not been the intent of this research. Uncovering new meaning with the purpose of

being able to better understand all of the hidden facets of this process so that strategies can be made more meaningful, has been its intent.

Critical theory and structuration theory proved to be ideal lenses into layers of information leading that exposed areas not previously considered. By viewing workplace design strategies through these frameworks, I was able to question how these strategies are developed. I was also able to show how individual perceptions of both clients and design practitioners are most often at the root of the decision process. At the beginning of this thesis I stated how the research would focus on two factors: the role of the individual and human factors (perceptions) in affecting workplace design strategy decisions; and the apparent lack of evidence based research in formulating strategies.

The research has highlighted a number of salient issues relating to both of these factors. As opposed to much of the literature on workplace strategy that speaks about 'organizations' as the object of strategy decision, it is individuals within these organizations that are the ones engaged in the process. Not to consider this, and the human centred issues such as perceptions, politics and control as affecting human decisions is to miss an important element in understanding the dynamics of the decision process.

Acknowledging this opens up a more complex view of workplace design strategies than is suggested by past research and the literature. Consequences of actions both historically and in actions within the study organizations play out time and again in unintended ways. Historically the unintentional linkages between Taylorism and modern architecture, the unintended affects have been the very same designers who berate Taylorism for its systemic approach to organizational theory, end up unwittingly conspiring with him through approaching design solutions in a systems and orderly fashion. Additionally, the removal of IBM's Watson from any involvement in the design decisions of its headquarters resulted

in the creation of the facilities management profession which in turn has had a compromising affect from that time forward on workplace perceptions. Within the study organizations, the mandate to reduce the costs of real estate led resulted in the cases of UK Telecommunications and Financial Group to develop a more progressive form of strategy.

When examining those strategies that have been put forth as example of progressive thinking, and the solutions for innovative and collaborative work practices, one sees that within those same strategies forms of control through the manipulation of meaning and reality not usually associated with these strategies. For all of their benefits, the research reveals that in their own way, they exhibit much the same traits of control and power relationships often associated with more hierarchical forms of strategy.

Choices and decisions around workplace strategy therefore become less about analyzing the situation and developing appropriate solutions in the form of strategic initiatives then about the perceptions of particular strategise from the view of those charged with developing them. While cost driven, and approved through developing business cases, these cases focus on financial analysis for approval. In fact, the research shows that the decision process is very much tied up in the politics of the organizations and the individual perspectives of those involved. They are very much as Brunson discusses, irrational (Brunson. 1982, 1989), in that they are so often based on perspectives and perceptions linked to individuals. As such they are inextricably linked to one's view of reality and reality is subjective, very often informed by factors one is unaware of and not related to one's present circumstances.

6.2 Gaps

While focusing on these issues as evidenced through the study organizations there remains areas meriting further research. The study in uncovering the relationship between decision-making and one's perspective of reality only begins to make these connections opening the way for possible further research focusing on what one's reality is and its ability to be affected by new information is reshaping that very reality.

What is also missing that would add to one's understanding of the issues revealed in this study, is a more in-depth analysis of the dynamics between individuals involved in the strategy process and how multiple realities interact to ultimately impact this process. For this reason, this thesis should be viewed as only the beginning of this process, hopefully establishing arguments for further research that will lead through this understanding, more meaningful ways to approach workplace design strategies.

6.3 Lessons

While highlighting in this thesis the impact of individual's perceptions of realities focusing around the role of the workplace, the most fundamental lesson I came away with is the complexities of this process. While hoping for a rational decision making process that would be able to make better informed cases involving strategy decisions, these are not easy or simplistic issues. Because they are so entwined with the individuals within an organizational setting, with it's own influences, I came to realize that expecting such a rational approach is perhaps not realistic, and that the associated complexities may call for very different responses as to how one approaches workplace strategies. In addition when one puts the results of the research into the perspective of it's historical context, you see the complexities of previous decisions affecting a vast array of

professions operating in different settings, and all within what should be considered a relatively young profession.

6.4 Reflections

Some observations and reflections on conclusions and benefits of this research:

The research has shown that decisions on workplace design strategies are not as simple nor as rational as they may be portrayed in writings. The use of critical theory and structuration theory has brought to the surface underlying issues that point to these complexities. From the role of perception to the role that even the most progressive workplace strategies play within organizations, a whole new perspective is open for further investigation.

The hypotheses of this theses is that there are elements influencing workplace strategy decision making that are well under the surface and have for the most part, not been uncovered or acknowledged. Many of these influences involve the perceptions of individuals who are directly and often indirectly involved in this process. Researching and writing this paper has been a journey that as noted in the introduction, has taken me from my own perceptions of workplace strategy to a view that is broadened as a result of using Structuration and Critical Theory to view workplace strategy in an entirely new light. What we take as a given or truth has many nuances that when uncovered add new meaning to what one has assumed to be reality. In the end, that is the value of this theses. As I have journeyed from a world view of the 'righteousness ' and thoughtfulness of workplace strategy decision making to understanding the role of unintended consequences of these decisions to underpinning's of far subtler subtexts in terms of control and power as well as relationships between the worker and the organization, it is my hope that

this expanded view of this process will add new meaning to the use of these strategies and prompt an exploration of both the way these decisions are developed in the future as well as the consequences of the actions of the actual strategies.

What this research shows is that the undercurrents of agendas (both personal and organisational) and the means for change within the organisation pertaining to the workplace are often thwarted (often inadvertently) due do socialisation pressures on the individual side (agent) and are subverted on the organisation side (structure) due to the way workplace design strategies have been perceived and utilised. Understanding these conflicts and enabling those involved in workplace strategy decisions to understand and be aware of the dynamics that influence these decisions, will potentially allow for change to occur by strategic choice.

If the precepts behind using Critical Theory as a research methodology are to initiate change (Alvesson & Willmott. 1992), then by using Critical Theory as the methodology for this research the hope is that the resulting benefits will be in enabling change in the way workplace design strategies are developed, assessed and finally infused within the operational structures of design organisations and ultimately business organisations.

The very nature of this research in its qualitative form has been as a developing reflection on the role of perceptions and realities on the workplace strategy process. It is hoped that by uncovering a new way of viewing this decision process, the tendency to take the obvious for granted is as Martin suggests 'defeated' and, through this reflection process experience is given meaning (Martin. 2007).

6.5 Implications for practice

The implications for the practice of workplace design strategy can be viewed both in theoretical terms and practical applications. The two fundamental underlying issues derived from the research are the profound role of perception in the decision making process, and the absence of evidence based research to assist in or to inform in a more meaningful manner this decision making process.

As a theoretical framework, the research suggests that more attention needs to be applied to helping inform decision maker's perceptions of choices and opportunities. This is a bit more entangled than is obvious because it has linkages to how strategy schemes are presented and framed; the way information and recommendations are formatted (from 'design cases' to 'business cases'); and providing tangible connections to performance metrics to take what is intangible (the relationship of particular workplace strategies to business success) and make it tangible by actually linking these strategies to how they will indeed contribute to organizational success.

However there is a somewhat more profound and to a certain extent more disturbing implication stemming from the research. This affects both the practice of workplace design strategies as well as the business organizations to whom workplace strategies are the recipient of these strategies. The notion that workplace strategies for the most part, and at least as evidenced by the study groups in this paper, are the result of perception rather than evidence based research suggests how prevalent irrational decision making is in business organizations, at least when it comes to workplace strategy decisions. It calls to question how successful these strategies are both in their ability to be sustained over a long period of time and how successful they are in going beyond resolving immediate financial issues through the reduction of real estate costs. That is, without this evidence based research to tangibly link a proposed strategy to the

business with the goal of using this strategy to enable business performance, identifying performance metrics becomes difficult or at best, tenuous. Without these metrics, it becomes impossible to demonstrate business value and therefore serves to perpetuate the negative perceptual issues outlined in this research.

At the macro level, the research calls into question the efforts of the design and consulting profession charged with developing these workplace design strategies. The systemic preoccupation with focusing on the physical aspects of design over the business aspects serves to also continue the cycle of perceptual value. That this profession is in part responsible for creating the environment that has at its core the unintended consequence of informing perceptions of the value of workplace design strategies, one has to wonder if the fundamental approach of design and architecture firms is the problem. And here is where the implications become deep rooted. Not only does this affect the design processes associated with this profession, it also questions the education of this design profession since it can be argued that much of the way designers go about their processes is informed and developed during and as a result of the design/architecture education system.

It suggests that a new way of developing workplace design strategies needs to be sought, and that the ways in which these strategy initiatives are developed needs to be rooted in the very business of those who these strategies are intended to serve. Design problems are indeed business problems and therefore design solutions in the form of workplace strategies should be framed as business cases.

The second element while separate in its findings can be directly linked to resolving the latter issue. By repeating the cycle of decision making in an irrational manner, and not relying on research, the notion of workplace strategies as being disconnected to business performance is replicated in an unending cycle. Developing workplace design strategy process that is

rooted in evidence based research has the potential of both resolving this conflict of duality and actually developing strategic initiatives that provide more meaningful solutions and at the same time move towards actually changing perceptions in a positive manner.

Finally, that this vacuum is actually recognized and of concern to many of these decision makers cited throughout the research process as well as to others involved in their organizations with strategy development and implementation, is evidenced by my being invited to present the results of this research to a number of real estate and facilities management organizations (Corenet Global Summit in Las Vegas, 2009; Corenet Seattle chapter, 2010) where there has been positive feedback and genuine recognition of the problems. Additionally, in presenting initiatives on workplace design strategies to potential clients currently, the universal point of interest, and concern of the missing link, is that design firms are not providing change management services as components of their work. This gap or vacuum reinforces the research findings and its implications, but also provides direction and answers to resolving the critical issues highlighted in this body of work.

The research results point to both gaps to the body of knowledge surrounding workplace design strategies as well as to its practice within those professions involved with developing and implementing those strategies. To remedy these findings, a number of recommendations could be gleaned from the research. On the theoretical framework side which is reflected in the gaps, a fundamental attitude shift needs to be adopted by those parties involved in the process. This framework needs to adopt an attitude of inquiry that continually brings to question the underlying impact of these strategy initiatives on their particular project. What is the causal relationship between this strategy and the organization and stakeholders? This should be the result of assessing unintended consequences of these activities along with perceptual issues of control and managing meaning.

With strategy development, the underlying concerns that need addressing are in the areas of assessment processes and research as well as implementation. Given the lack of evidence based research associated with any of the study group's projects, workplace strategy recommendations need to be developed as a result of evidence based research. There needs to be better connections to a business model through developing a business case. Research informing the strategy would be useful in overcoming these shortfalls. These two features point to a real need for educating practitioners beyond traditional design education. An understanding and appreciation of business processes and organizational strategy becomes increasingly imperative in creating this new design practitioner equipped to developing strategies using methodologies that enable the linkages referenced above. These areas of recommended change will affect the education of the practitioner and how workplace design consulting is practiced. Clients on the other hand need to expect more research on proposed outcomes of proposed strategies and to use this research to frame a business case, which points to the last area of change. Workplace strategy initiatives need to be viewed, developed and presented as business cases identifying impact as well as proposed outcomes. The result of these initiatives will potentially be an entirely new profile of design professional, but based on the findings, one that is definitely required in moving ahead with these critical aspects of workplace design strategy decisions.

Section C: Support materials

A. Overview of study group organizations and interviewees

UK Global Energy Organisation

Overview

This organisation has transformed from a local UK based oil company to a global organization focusing on products relating to energy. Operating in over 100 countries, and employing 96,000 people, Their core brands are Castrol, Arco, Aral, am/pm and Wild Bean Café. The business units are organized around two key markets: exploration and production, and refining and marketing. This organisation is headquartered in the UK.

Interview date: 26 April 2006

Interviewee:

Juliet Filose

Global Real Estate General Manager, Global Property Management & Solutions (GPM&S)

Background:

Juliet Filose came to her present position in 1989. She has a degree in Estate Management (land use planning) from South Bank University. Her first job out of University was with Sun Life in estate management. She was responsible for the organisations property portfolio in southwest England. At Sun Life she was one of eight people in similar positions. Juliet moved on after seeing no changes to the approach of the organisation in their treatment of their workplace strategies.

Position within organisation

Juliet holds the title of Global Real Estate General Manager (at the time of this interview). As such, she is responsible for managing all of the office real estate worldwide, including procuring space and managing strategy.

From there, she went to work with Jones Lang LaSalle (JLL) an American based real estate and project management firm. She worked with a JLL partner involved with Japanese businesses. One of her projects there was the development of Canary Wharf which she found to be very professional. The organisational structure of JLL was a hierarchical partnership, which did not suit her, and at that point in her career she joined BP.

She started as part of a small property team involved with major merger activities as the organisation was growing. Their growth at that time shifted her activities and role to a more global one. Juliet became involved in the portfolio management and strategy development for their eastern hemisphere activities. Up to the point of this interview, she headed all of global real estate. As this interview was being conducted, her group's role, and in particular, her position and function was being re-evaluated. She expressed uncertainty as to the outcome of this re-evaluation, and what affect this will have on the structure of her group as well as her position within the organisation. Her responses during the interview clearly reflected the uncertainties caused by this unsettled shifting of roles and responsibilities.

UK Telecommunications Organisation

Overview

This organisation is a provider of communications solutions and services operating in 170 countries. Their principal activities include networked IT services, local, national and international telecommunications services, and broadband and Internet products and services. The organisation consists of four primary business lines: Global Services, Openreach,

Retail and Wholesale. They date back to being the first telecommunications company in the United Kingdom. All of the UK telecommunications companies went under the control of the Post Office in the nineteenth century. Prior to this, private sector companies such as the National Telephone Company (NTC) and the General Post Office (GPO) were in competition. In 1896 the GPO took over the NTC trunk service. In 1984 they were privatized through the Telecommunication Act. The organisation is headquartered in London and is now a privatized company.

Interview dates: 23 January 2006, 19 April 2006

Interviewee

Chris Webber

Background

Came from being a Chartered Surveyor. Always worked on the client side of corporate real estate through a number of industries: retail, industrial and telecommunications. Always focused on real estate contributing to the business. This is not where the core real estate profession is coin from. Being at BT is a golden spot: 80% refer using property to deliver returns for the business. This is a retail perspective, not a typical corporate real estate perspective. This approach should be taken by all industries.

Joined the organisation in the early 90's, and ran the retail acquisition programme. Then moved on to a regional portfolio management role. Then ran a region prior to moving to international property. First, moving to a position researching use, and technology and impact on the workplace; then onto the current role of advising clients on best practices for flexible and agile workforces.

Financial Group: A fictitious name for a Global US headquartered financial service provider

Overview

Financial Group was established in 1988 and became a Fortune 500 company within ten years. They are a global diversified financial service provider with operations in the U.S., Canada and the United Kingdom. The company was founded on the belief that the power of information, technology, testing and employees could be combined to bring customized financial products directly to customers. Starting off as a credit card company, they have since diversified into the banking business with subsidiaries including Financial Group Bank, Financial Group, N.A., and Financial Group Auto Finance Inc. They provide a variety of consumer lending and deposit products such as credit cards, auto loans, small business loans, home equity loans, instalment loans, and savings products. Financial Group's executive headquarters is located in McLean Virginia and their operations headquarters is located in Richmond (West Creek), Virginia.

US

Interview dates: 15 February 2005, 03 March 2005, 21 June 2006

Interviewee

Ed Lawrence, SVP CRE

Background

Law school. Became an attorney, hired by a paper product company in their legal department supporting real estate transactions. Turned to real estate as an interest. From there, went to Boise Cascade in Corporate

Real Estate. Became very involved in Corenet Global. Joined Ernst & Young and from there, Financial Group. Basically segued into CRE through law background and experience through work assignments.

UK

Interview date: 18 April 2005

Interviewee

William Mason

Paul Greene

Position within organisation

William Mason: Manager International CRE

Paul Greene: Workspace Manager

US Government Mortgage Organisation

Overview

This organisation helps 'connect' Main Street (the residential mortgage market) to Wall Street, dealers and investors through mortgage purchase, credit guarantees and portfolio investment activities. Their customers are primarily lenders in the primary mortgage market. In addition, they initiate community-lending projects and promote customer education to provide financial understanding. The Congress of the United States chartered them in 1970 as a private company to provide continuous and low cost sources of capital to finance housing in the United States. The United States Office of Federal Housing Enterprise Oversight regulates them and the U.S. Department of Housing and Urban Development (HUD) oversees their mission. It is HUD that establishes affordable housing goals for this organisation which is based on income and population diversity. Their goals include the requirement that a percentage of the mortgages purchased by the organisation go towards providing housing for low and moderate income families. They are a shareholder owned company, and

a government sponsored enterprise. The organisation is headquartered in McLean, Virginia.

Interview date: 26 May 2005

Interviewee

Judy Douglas, Director Property Development

Background

Education is an MA in Modern French History. Judy taught high school for three years, then worked as a travel agent and then became a computer-programming consultant prior to joining the organisation. She has been at the organisation for almost twenty years. The first three years she managed the installation of financial software systems for the organisation. In 1989 she became the Director of Property Development and assumed responsibility for space planning, design, construction, cabling, moves, asset management tracking and furniture service requests.

Her current boss was on the project management review committee for two of her financial software system installations and was looking for someone who knew how to run projects and manage people, schedules and budgets. Everything else she knows about her job was gained through working with outside design consultants.

UK Financial Organisation 1

Overview

The organisation, named after its founding bank, The Hong Kong and Shanghai Banking Corporation Limited, is headquartered in London. It is comprised internationally of over 10,000 offices in 83 countries and

territories in Europe, the Asia-Pacific region, the Americas, the Middle East and Africa. While operating in minimal capacity in the US since 1865, their purchase of Marine Midland Bank in 1987 was part of a strategy to create an influential presence in the States. In 1996 it purchased the East River Savings Bank, followed in 1999 with the purchase of the Federal Savings and Loans Association of Rochester. Several additional US financial institutions were added in the 1990's and in 1999, Republic National Bank was acquired. In 2003, the consumer finance company, Household International Inc was acquired broadening the organisations US coverage.

Interviewee

Ronald Winchester

Position within organisation

Vice President, Corporate Real Estate, North America

US Government Property Advocacy Group: Workplace 20/20

Overview

Workplace 2020 was developed by the General Services Administration (GSA) Public Buildings Service to help drive decisions about workplace strategies and processes, space, furniture and technology based on an organizations mission, business goals, and the nature of work. Business strategy, organizational function, decision support and measurement are key elements to their process. The mission of Workplace 2020 is to develop innovative strategies to mainstream integrated design, sustainability, teleworking and performance measurements in the Federal workplace.

Interview date: 12 August 2005

Interviewee

Kevin Kelly

Position within organisation

UK Government Property Advocacy Group

Overview

This organisation resides within the British HM Treasury and is charged with driving up standards and capabilities in procurement with the goal of improving value for monies spent on projects. Procurement includes commodities buying to the delivery of major capital projects. The organisation is tasked with transforming procurement processes through setting standards and monitoring performance; developing a cadre of skilled procurement professionals across Government; driving value for money through collaborative procurement policies; playing a stronger role in the successful delivery of major projects; and improving management and the use of Government real estate. They are an independent Office within the Treasury with its own Chief Executive appointed at Permanent Secretary level, who is responsible for the delivery of the Transforming Government Procurement agenda. It is governed by the Board, which is made up of the Chief Executive, executive directors, the Chief Executive of building solutions (the organisation's trading arm) and three non-executive directors. In addition to its responsibilities in implementing the Transforming Government Procurement agenda, they offer a range of services covering best practice methodologies; and offers guidance to improve the way the public sector manages programmes and projects with the goal of making them more successful, thereby enhancing the quality of new initiatives and making the UK government organizations more effective and efficient. As part of their responsibility for implementing improvement processes, they provide advise on how to achieve project success. Additionally, they provide direct support to departments through its consultancy service.

Interview date: 05 July 2005

Interviewee

Bridget Hardy

Background

Educated at an independent school in Birmingham, UK to A level. Has a BSc Hons Physics degree from Bristol University, UK. MRICS qualified through The College of Estate Management and CPD with the UK Civil Service as a general practice valuation surveyor.

Had always worked in the British Civil Service. Trained with the Valuation Office Agency, an agency of the Inland Revenue, and a valuer and carried out valuation and advisory work for government departments and other public bodies. Gained promotion several times with the VOA. Then moved on promotion to be the Estates Advice Manager of the Central Advice Unit in the Property Advisors to the Civil Estate (PACE), which amalgamated with other agencies in 2000 to become the Office of Government Commerce (OCG).

Held positions of Assistant Director for Strategy Development, and Head of Workplace Strategy Development, and Head of Workplace Strategies best practice before a recent promotion to Head of government Asset Management in the Government Relocation and Asset Management division of OCG. Since leaving the VOA, the role has been to manage advisory services in relation to property and workplace management within central civil government.

US Professional Services Organisation

Overview

This organisation is a professional services firm that was created by the merger of two professional service firms in 1998. As of 2007, the organisation has offices in 766 cities in 150 countries. Their service

sectors include Audit and Assurance, Crisis Management, Human Resources, Performance Improvement' Tax, and Transactions.

US

Interview date: 22 March 2006

Interviewee

Nancy J. Tine

Position within organisation

Director, Real Estate Services

Interview date: 30 May 2006

Interviewee

Brian Ferguson

Background

BArch, University of Illinois. President and founder of Kent Associates in Chicago. Studio Director of PHH Avenue in Chicago. Vice President of Occupancy Planning for First Chicago Corporation. Senior vice President, National Accounts for ISI, Chicago. Global Director, Workplace, at this professional services organisation. Currently President, Workplace. Incorporated, Tampa, Florida.

Was hired from outside the organisation as Director, Planning and Design. Through the merger of two of the 'big 5' accounting firms, became global Director. Resigned in 2001 to establish WPI.

UK

Interview date: 24 January 2006, 19 April 2006

Interviewee

Lisanne Schloss

Robert McLean

Background

Lisanne Schloss: BA in the States; lived in UK for eighteen years; started in industrial design, then went on to commercial design to facilities management and then on to corporate facilities management; with the organisation for eighteen years.

Born in Washington, DC. BA degree from Virginia Tech. Member British Institute of Facilities Management. Holds dual passport: USA and Republic of Germany.

Worked in architecture in Washington DC, then technical manager for commercial office furniture company. Moved to London with the same company, Geiger, to start tier first overseas office. Started doing project management for Geiger in Kuwait, France and Russia. Helped establish Geiger's second office in Moscow.

Moved into facilities management with London Transport (first public sector role) working on a multitude of office buildings that had had no investment, did whole life cycle costing and investment proposals as well as project managed a total M&E refurbishment of their corporate offices.

Started working for a contract service provider, and worked on two sites, project managing and establishing FM contracts for Discovery Channel overseas HQ and then PolyGram as the head of facilities. Tendered and set up all their outsource service contracts whilst managing their portfolio. Started working for here in 1998 as one of their regional facilities managers. Moved the London offices resulting from the merger between two of the 'big 5' accounting firms. Worked on the largest move project in Europe that year. Through various promotions, now Head of Facilities for UK in charge of 107 staff, 9 reporting line managers, managing 4 contracts for outsourced services and a budget of £142m (including

property rent costs). Additionally, providing services for 31 buildings occupied by 17,000 employees.

Came to the organisation originally as a trouble-shooter for five of their offices in the west. After completing that assignment in eight months, was offered a position-managing half of the London properties becoming one of five regional managers. As the organisation changed and colleagues left or changed positions he, was offered the current position.

Robert McLean: eight years with the organisation; design background in interior design; practised interior design prior to his present position.

UK Financial Organisation 2

Overview

This organisation operates under seven brands: Corporate Markets, Citizens Financial Group, Insurance, Retail Banking, Retail – Direct Channels, an Irish Bank Group and Wealth Management. Corporate Markets provides banking services to corporate clients in the UK and to financial institutions and corporations globally; Insurance is the second largest general insurer in the UK and a provider of general insurance to Spain, Italy and Germany; The Irish Bank Group operates in Ireland, providing banking, financial products and services for personal and corporate customers; and Citizens Financial Group is the eight largest bank in 2000, making it the largest takeover in the history of British banking, though the Us retail bank operates as a separate brand.

Interview date: 31 October 2005

Interviewee

Steve Herridge

Position within organisation

Head of Strategy & Performance Management, Group Workplace Operations

US Global Media Organisation

Overview

This organisation is a media and entertainment company involved in interactive services, cable systems, film entertainment, television networks and publishing. They are headquartered in New York City.

Interview dates: 12 December 2004; 07 January, 27 January 2005

Interviewee

Philip Petruzzulo, SVP

US Manufacturing Organisation

Overview

This organisation is headquartered in St. Paul Minnesota and involves six business segments: Consumer and Office Business, Display and Graphic Business, Electro and Communications Business, Health Care Business, Industrial and Transportation Business, and Safety, Security and Protection Services Business. It is a science-based company located in more than 60 countries with 75,000 employees. Their web site states that they employ mostly local nationals, with fewer than 300 employees worldwide being employees not residing within their home countries. 3m was founded in 1902.

Interview date: 25 February 2005

Interviewee(s)

Waltraud Brogen, Gary Haugen, Robert Jacobs

Position within organisation

Waltraud Brogen: Workplace Strategist

Gary Haugen: Manager, Global Facilities Management

US Global Entertainment Organization

Overview

This organisation is an entertainment company involved in the creation, production, distribution, licensing and marketing of feature films, television, home entertainment/DVD, animation, product and brand licensing and interactive entertainment. Founded in 1923, the present structure is the result of the 1990 merger between entertainment and media organisations. Their industry focus includes: motion pictures, television, home entertainment, consumer products, DC Comics, studio facilities, international cinema and live theatre. While the media organisations headquarters (the parent organization) is located in New York City, the entertainment organisation is headquartered in Burbank, California.

Burbank

Interview dates: 03 August 2005; 29 June 2006; 25 April 2006

Interviewee

Michael Mason

Valerie Valdez

Background

Michael Mason: law background; learning curve in this position; with WB for five years. Graduated Loyola Marymount University with a BA, followed by a law degree from Loyola Law School. Became a licensed California attorney practicing business and real estate law for approximately sixteen years (still active but not practicing law as of approximately five years ago when assumed current position).

After working for WB Legal for four years, was asked by WB senior management to join the Corporate Real Estate group. Nine months following this move took over as head of the department.

Valerie Valdez: with WB since 1993; went straight from architecture school at UCLA. Had done graduate work at UCLA and did her internship at WB during school, never left.

UK

Interview date: 04 November 2005

Interviewee

Simon Green

Background

Chartered building surveyor. Twenty-five years experience in project management, construction Management and construction technology. In other positions, never knew if value was being created. Found people do not always ask the right questions. Went into the corporate side to find out more information.

Position within organisation

Director of Facilities, WBCRE UK

B. Context

The individuals, who participated in this research, represent key participants in the corporate real estate and or facility departments within each of the organizations they represent. I chose these persons because they represented the highest-level individuals within each of these organisations who had responsibility for workplace design strategies. In some cases, these individuals recommended I speak with other persons in their place, or in some instances, in addition to them, or in conjunction with them. As previously stated, the primary goal in their selection was to reach the most senior point person on the supply chain who both was in some way responsible for workplace design strategies and interfaced with both senior management at the one level, and employees on the other level. Prior to conducting the interviews, a questionnaire was electronically submitted to each participant outlining the purpose of the research, the manner in which the interview would be conducted, and a guideline of the questions that may be covered. After this, the interviews were scheduled and conducted at the offices of each participating organisation. Upon completion of the first interviews, additional questions were electronically sent to the participants to follow up on issues that were raised at the initial sessions and which warranted further clarification or explanation. In some cases, follow up interviews were also conducted, some in person and some by telephone.

The interview questions were structured on the following themes:

- Background of interviewee
- Definition of workplace strategy
- Influences on workplace strategy decisions; workplace strategy perceptions.
- Influences on interviewee views and perceptions
- Current state of workplace strategy within their organisation
- How workplace strategies are developed within their organisations

- What is the organisations perception of change
- How are strategy decisions carried out
- Factors that influence workplace strategy decision-making
- Organisational resources that directly affect the workplace strategy process
- Importance of the design of the workplace within the organisation and what contributes to this perception
- Systems for measuring successful outcomes of workplace strategies
- The culture of the organisation
- Employee perceptions of the role of workplace design
- Management perceptions of the role of workplace design
- Do employees perceive the allocation of space as part of their compensation

While there were different approaches to workplace design strategies, and differing definitions, there were consistent factors that each respondent cited as influencing these perceptions.

The general consensus was that perceptions of workplace design strategies as a value-added organisational component (see Fig. 18, 30) were triggered and influenced by the need for relocation or change to existing real estate holdings; and a need to reduce real estate costs. Even with those organisations that adopted a more progressive workplace design strategy, the prevailing belief was that without the before mentioned criteria being present, none of these strategies would have come about and been approved. Recognition of and approval for any particular strategy was the result of presenting the strategy to senior management as a business case.

A secondary level of influence involved the title of the group within each organisation that is responsible for workplace strategies; the level of the individual within the organisation responsible for interfacing with senior management and carrying out the particular strategy initiative; and the group's relationship primarily to Human Resources, and secondarily to IT.

A further influencing factor cited was the issue of time. Time as it relates to perceiving workplace design strategy as being obsolete before it is implemented due to the time involved in developing the strategy, and the issues of time spans of real estate leases and occupancy. The pressures to complete the design of the premises within a specific time frame when the point of beginning this portion has been delayed to the last minute due to not enough time being allocated, coupled with the time frames for actual construction of the premises, already puts any strategy eight to twenty four months (depending on the size of the project) behind fruition. Overlaid onto this is the limited time frames of leases that typically range from ten to fifteen years, (unless an organisation is occupying a building that they own) strategy decisions, or strategy value is undermined. This involves the position of workplace design strategies within the supply chain of place making, what Duffy refers to as the sequence of activities within this chain: from investors through developers, real estate brokers, corporate real estate practitioners, to tenants, facilities managers, furniture manufacturers, and other suppliers to the actual occupying of the completed premise (Duffy.2007).

C. Interviews

For this section I have constructed the narrative to reflect as closely as possible the respondent's answers to the questions and topics posed. To try to maintain and transmit the 'flavour' of the discussion, where possible the narrative uses the actual language and imagery used by the interview subject. I have noted these responses in quotations.

UK Global Energy Organization

Juliet Filose, Global Real Estate General Manager

Structure

The group started as a small property team. As major merger activities occurred, the group grew ten fold. This accelerated growth also resulted in activities of the group in a more global role within the organisation. All of this reflected the dramatic changes occurring within the organisation. At the time of this interview the structure of the group was being reviewed and potentially changed, and with the interviewee uncertain as to her new location and responsibilities within the organization.

Definition of workplace strategy

Filose reflected that it starts with the business at the highest level and begins also with the group strategy. A one-size fits all approach does not work. There needs to be different strategies to work with different situations. The challenge is to really understand that as well as spending enough time within the business (a business that often does not want to spend time with you). There should also be no predetermined view towards a workplace strategy approach. You look at how a particular property can be a change agent to develop services of the business. Filose also expressed having not come across many business leaders that get this, the reason being what she termed a left brain – right brain

issue. “You need the right people in your organisation to get the right answers,” says Filose.

Influences

In choosing this direction for her career, pursuing a degree in land use planning, and a career in corporate real estate, she was influenced at the age of 15 by an architect friend of the family, John Wakefield. He provided her with an interest in architecture, which led her to wanting to have a career that in some way was involved in the built environment. It also provided her with a perception of what architecture could do to shape how people lived.

Influence on her views and perceptions (types of strategy to adopt and the importance of having a workplace strategy)

‘A profound question.’ Being able to empower individuals. Would always want to fight a heady cause if there is too much luxury. A belief that there is too big a gulf between rich and poor. Namibia is a good example: in a project there, the question of office size came up in the midst of all the poverty in that country. The idea of wanting a large office was based on excessive luxury in contrast to having only a six-year lease. Ideas of fairness are also an influence. Need to demonstrate productivity. She wonders what is motivating business leaders in these same perceptions. Sometimes their response feels shallow. Working in a risk – adverse culture. The organisation wants others to pilot change. Risk is not rewarded within the organisation.

Organisational culture

Culture starts with performance – performance driven. Focused on performance through finance, safety and the environment. Additionally, the culture is diverse, as evidenced through a company recognition that the company is made up of diverse cultures. There is an appreciation of diversity within the organisation. Decisions are made through a very

thorough evaluative process. Any bold decisions are made on the basis of a risk management assessment, which is an integral part of the culture. Ethics are extremely high on the corporate agenda.

Perceptions of employees

Importance of design of the workplace and what contributes to this perception. Organisationally, there is consistent respect for it. It shows that BP cares about employees. Design is not natural territory to the organisation. It is difficult to make the link with what motivates people and how that translates to the workplace. This is due to a more engineering focus within the company.

UK Telecommunications Organisation

Chris Weber

Definition of workplace strategy

Workplace strategy is providing accommodation solutions to effectively support the business (accommodation = workspace, technology, HR policies and all other influences). Cost and availability of space most influences workplace strategy decisions within the organisation. Perceptions of workplace strategy is equally influenced by a need for construction. They have not progressed internally over the past few years. Users seek quality and ease of use.

Influences

Influences are measuring what works and fails, plus the practical discipline of implementing the solutions which are preached to both internal and external end users. The type of strategy to adopt internally is influenced by making the case for a workplace strategy is far more likely to ensure that it will succeed than a straightforward implementation with no regard for ongoing support. Any innovative solution is likely to require

support to overcome resistance or plain misunderstanding, however, intuitive it might be to the originators. Developing workplace strategies without understanding the business requirement and need isn't just 'dumb, it's negligent as well.' Once the business drivers are understood and clarified with the occupiers, a brief can then be drawn up with which to inform any workplace design. The resultant output should then be ratified by occupiers, aided by interpretation and explanation – as the FM team is the expert in this area.

Organisational culture

The culture is varied, based on a huge range of people. Size makes it more difficult to introduce change. It takes longer. However, with the demographics, there exists great diversity to draw from to develop solutions. There is a reasonable amount of expectation that hierarchy is important. If you do not agree with what your boss is doing you can disagree. There also exists an openness to accepting criticism. Disagreement is listened to. This is a vast departure from the 1990's where the organisation's response would be that it was always done this way.

There is pride. No complacency. The staff embraces change, though embracing it gradually. This is being done through developing the position of how you need to work as a business unit. You feel group pressure. This pressure is used as part of the change management process.

Each group within BT has its own culture and solutions. Demographically, those individuals who were resistant to change have left the organisation. Conversely, innovative people who could get better job opportunities also left. Those who were left had to be managed through the process. BT needed to show people that the change was worth it. There is a core of people at BT who have been with the company for a long time. New

people have come from other organisations. Technology, which is the core of the workplace strategy is culture related, not age related.

Perceptions of organisational change within the organisation and the role of the workplace in facilitating this

Going from a civil service organisation to the private sector forced people to view transition as important. They went from an organisation of .5 million to 125,000 people. Most of the hard change was done by 1995. Having to change was integral to this transition.

Perceptions of employees

The strategy has been embraced by the staff. There does not exist a culture that is driven by a 'that's my office' mentality. Employees need to get into a culture of working at home and that it is best for the work one is doing rather than working at home because they don't want to come to work. This has to a certain extent been a shift in culture. The drivers have been employee privilege being translated into 'I can live wherever I want.' Technology has served as an enabler rather than the end view or a driver. People perceive that they will be valued by their contributions. As free thinkers, investing in knowledge is a source of pride.

US Financial Group, US

Ed Lawrence, SVP CRE

Definition of workplace strategies

Workplace strategy is the way one configures and deploys workspace and technology to facilitate and integrate work processes to enhance productivity. It determines the types of workspace you need, amenities, meeting spaces and support functions. It looks at real estate savings through investing in amenities that can be measured to enhance

productivity such as project rooms, and mobility to drive down real estate costs. Dollar measurements are used.

Questions: can it be strategic? Yes. It goes back to the history of the organisation. Financial Group is an organisation that utilised immense research of costs, market information and client information as a basis of its business. Risk management, was a new platform for the firm. The strategy was based on the exploding growth of Financial Group.

Influences

Enjoyed being innovative – out there. Became interested in doing innovative real estate deals. While at A paper product company, in 1979, put records on a PC, which was far ahead of its time. This is what is exciting. Involvement in Corenet 2000 (Corenet Global) increased awareness of workplace strategy as an area involving hoteling. It created a new world – of real estate being strategic, involving the type of strategy to adopt and support for your organisation. It demonstrated the importance of having a workplace strategy as the basis for implementing workplace design directions.

Organisational culture

The strategy evolved through a ‘cowboy’ culture. The old Financial Group culture is a bank culture; entrepreneurial, wiz kid, over achievers, fun, highly rewarded and with an entitlement mentality. Different cultures will emerge especially with more mergers being done.

This unique culture is not transportable to new diversified lines of business. Some question if it is sustainable in existing work environments. Technology, mobility and telecommuting, in addition to amenities such as fitness centres, food services and seeing bosses out in the open, mitigate issues of entitlement of space. Some people will not accept these changes.

Perception to organisational change

HR and CRE see workplace strategies as the leaders of change management within organisations. A reference was made to Charles Handy's Sigmoid Curve of the need for continuous change management built into organisations. Successful organisations reach a topping off peak from which they either need to reinvent themselves or fail. Financial Group has developed a specific change management model where the workplace plays a critical part.

Drivers are the use of technology through FOW initiatives. These are linked as unifying efforts. With the desire for Financial Group to be 'a great place to work,' everyone needs to have access to the best technology. This is what creates and empowers knowledge leaders. Using all of this to drive staff retention and productivity uses the workplace through facilitating high performance and hiring the best and the brightest, while supporting agility and mobility.

Rather than resisting change, people adapt. Employees have chosen mobility. A component of the FOW offering is extending the workplace through technology tools (extending the workplace to other workplaces, the road, home or a café). This also allows associates to balance work styles with their private lives.

An assessment of FOW has shown three types of workers: resident, mobile and anchor. All three types are represented in the FOW work setting typologies. Over two thirds of the associates have chosen mobile work styles or teleporting. Ninety percent have chosen better or above as to pre and post occupancy evaluations of the new work setting strategies in early assessments of FOW.

Corporate stresses that they want to support new ways of working. The reality is they are supporting existing ways of working at Financial Group. This allows people to do what they are already doing or want to do. In the UK, there is a more dense population, who are not as mobile (i.e. Nottingham facility). They had more aggressive goals than they achieved. The opposite of the US was created in terms of mobility.

Perceptions of management

Employee surveys support the data outlined here. The highest levels within the organisation were questioned as to the success of FOW. The CEOs perception is that FOW is ok for certain types of worker. There is a concern over how different types of functions will adopt to FOW. The environment will have to be customised to support different functions.

The primary influence is reduction of real estate costs. These reductions enable the strategy to be sold at the board or executive level. Financial benefits drive the sale. It is not successful if you haven't provided an environment that includes associate satisfaction and engagement. Success is partly measured through survey results and observations. Then, the strategy sells itself. It promotes itself if done right.

Associate satisfaction surveys drive engagement. Surveys have indicated that Financial Group employees are loyal, and proud to be there; that it is the best place to work, and that they are excited about being at Cap One. You try to ask questions in the surveys that lift satisfaction and engagement.

Productivity is measured through self-reporting systems; examine the decision time cycle and seeing if it has been reduced; and how this equates into dollars. Financial Group is still trying to work this out.

The SVP of HR thinks real estate is a competitive advantage. Incredible results that have been shown through Future of Work. Financial Group has won many awards, such as The Best Place to Work. He has mentioned that we should stop submitting for awards so the competition doesn't find out about it, which is proof of it being viewed as a competitive advantage. Likes it being lean and agile. He gives tours to the board. Management is convinced that this is a strategic thing.

Perceptions of employees

They see Financial Group as having an innovative culture. They view the workplace differently than other organisations. They are always coming up with new 'cool' stuff, which is expected. The challenge is in developing work related performance rewards. While there is resistance at management level, at the younger levels, they are easier to adapt to new ways of working, and adapt easier.

Job and compensation are important to associates. Some people see the allocation of space as part of their reward systems. At the McLean campus, the existing set up includes tiers and a hierarchical reward system.

US Financial Group, UK

William Mason, Manager International CRE

Paul Greene, Workspace Manager

Organisational culture

The strategy has been driven through work processes: Financial Group is a collaboration driven culture (Loxley more than London). The people recruited by the company, and the age of the company has made it less hierarchical. Feelings of entitlement to a private office are not as strong in the UK as it is in the US. The UK approach is more open than in the US.

Perceptions of management

Management originally recognised the importance of a good workplace strategy. It gets taken for granted when it works really well. The organisation becomes blasé about it. They do recognise the value of it though if a critical financial decision had to be made, IT would win over workplace strategies as a place to spend money. The workplace is in the stone age compared to IT when it comes to proving productivity. IT, Marketing, and HR all use NPV to measure success of initiatives, which puts workplace at a disadvantage perceptually.

An increase in productivity and a reduction in attrition rates are organisational goals. In terms of the role of the workplace, none of these can be tied directly to the workplace. Too many other drivers contribute to the desired outcomes. The workplace does not prove itself in this area.

A paradox with the acquisition of a commercial bank in Manchester, which is an older company than Financial Group, is that their workplace is more than half as dense as Financial Group, bordering on the illegal (65 square feet per person). There is low turnover and greater buzz. Senior leadership does not want to change the density for fear of losing the buzz. They feel that changing the density will alter this buzz culture. They are currently working in an 'old-fashioned' mill, but the organisation is profitable and productive. It was recently ranked seventh in a London Times survey of the best places to work in the UK. This may be more telling than anything on the real value of the workplace.

Perceptions of employees

Employees have different perceptions of reward systems than their US counterparts. The UK average age is twenty-seven with mostly first time workers in the market. They don't know any differently in terms of a workable place type. People who are older appreciate what they are

getting in Financial Group. The quality of the environment should be commensurate with pay and benefits. You have to provide an environment that goes with that mid set.

With this commercial bank, and the education levels of their workers (non-college graduates), there is a different perception of expectations about the workplace. Individual workers external worldview shapes their expectations concerning the workplace.

There is provincialism in the UK. Loxley and Trent House are uncommon occurrences outside of London. The perception is that all business is located inside of London. Nottingham was chosen as a site for Financial Group because of the cost of labour, availability of labour and the attitude of the local government. These drove the decision to be in Nottingham. They did not expect to actually hire 3,000 people.

View of US perceptions

The US real estate team has a grander attitude of the role of the workplace than it really has. The UK view is more pragmatic, and more down to earth. Someone would say 'the emperor doesn't have any clothes.' The UK view shows a willingness to be more realistic in their approach to workplace strategies. Much of this is attitudinal. The role of CRE in the US is far more developed and institutionalised

US Government Mortgage Organization

Judy Douglas, Director Property Development

Definition of workplace strategy

Workplace strategy means finding the most functional, efficient and cost effective design for an office environment. It means using the available space and the furniture in it to help optimise employee performance.

Influences

Her perceptions of workplace strategy have been influenced by the culture and history of the organization, input from the design consultants they work with, and interaction with furniture manufacturers. Additionally, having an understanding of the way employees work, knowing how comparable corporations have structured their workplaces and industry publications have all contributed to influencing her perceptions.

Influences on her perceptions of the importance of having a workplace strategy as the basis for implementing workplace design directions is attributed to having a good understanding of how your company operates and its priorities in order to implement space designs and select office furniture that will support achieving the objectives of that strategy.

Organisational culture

The organization has an accounting culture. They are not out there on the edge. They are currently waiting for the other shoe to drop. They all have seen employees been let go and are wondering who is next. Additionally, management has questioned the hours being put in by staff. The attitude is that the new management knows better. People do not now what is going on at the top. As result, people do not feel better. This describes the mental attitude within the organization.

On the other hand, it is a hard working company. People are proud to be working for an organisation involved in housing issues and philanthropic causes. It is competitive and protective of information and turf. Into power. It was not a frugal culture.

Perceptions of organisational change and the role of the workplace as a facilitator

Planning and Budgeting controls head counts, not HR. There is direct feed from HR in terms of actual head counts (exiting head counts only).

The Management Team consists of the Chairman, CFO, COO, a committee of division heads, SVP of Administration. The Resource allocation Committee (RAC) reviews GHA budgets. All real estate and facility projects need approval from RAC. This represents a change from previous projects where this committee did not exist and therefore this approval process was not in effect.

Importance of the design of the workplace with the organisation

The answer to this depends on what part of the organisation you are in. Design of trading rooms was key: spent a lot of time and money on designing these spaces. The company was OK with spending money on this function: state of the art trading function. They see rows of cubicles as being efficient, and therefore good.

The type of work processes that occur at Freddie Mae can effectively be done within an enclosed workstation. Freddie Mae sees value of amenity spaces on morale as well as keeping workers on the campus. There is no outward perception of the role of the workplace in facilitating synergies and needed change. They are believers in physical co-location of synergistic groups and see the workspace in those terms. They cannot do co locations anymore – they are into densifying and the densifying process is expensive. They do see value of amenity spaces on morale as well as keeping workers on campus.

Perceptions of employees

Perceptions depends on the age demographics of the worker. Younger workers are spoiled, and have nothing to compare life with. The older workers are more complacent. Entitlement issues drive where space should go along with title.

GSA 20/20

Kevin Kelly, Director Workplace 20/20

Structure

A program of the Office of Applied Science (OAS).

Perceptions of management

Unions affect the role of entitlement on the workplace even though middle level employees fare better in public sector from the private sector. Age demographics also affect perceptions. There is a greater aesthetic sense today that affects workplace strategies in a positive way. People are expecting higher level of design than in the past. Even though, people still need convincing. The unions are inertly suspicious of motives of workplace transformation.

Perceptions of employees

An interesting question. One can only make so much money in the government sector. Being promoted has only so much money equated with it; therefore space allocation has become a status symbol. The allocation of individual office space is seen as 'atta boy.' Office space is viewed as overhead, and people as canon fodder, they are desks not people. Employee costs are fixed since it is difficult to fire employees within the GSA. To counter this, 2020 will put their best foot forward to demonstrate to clients that this is what we can do for them. 'Leading by Example,' a book to be published by GSA will help demonstrate this approach.

This involves a change in thinking, which is attributed to the current administration of GSA. He views space and HR as joined, and sees space and HR as opportunities. The Deep Dive process concentrates on organisational goals and objectives. This is opposite of the former view

where allocation of space was based on a employee per square foot, at 400 square foot per person, everyone had a room, but not a value.

Workplace 2020 involved the consultancy DEGW in a project. They detailed what was important to the group, and through a decision matrix, walked the client group through various scenarios. The staff voted for the smaller square foot per person solution (230 square foot per person), which was a major paradigm shift in thinking in these areas of decision-making. Additionally there was a savings in revenue through space savings.

The unions have also had an affect on perceptions of workplace utilisation. They have impacted implementing tele-working strategies and mandating offices to certain level of personal. Two elements will begin to affect changes in perceptions: lack of money to keep people and changes in perception of space utilisation. Saving money on real estate utilisation is a primary driver and working within the budget you have. Currently, there is no incentive to reduce space. The only pressure is coming from the client side, not from GSA. Security issues also affect how blocks of space are used or reduced: how the entire facility is being utilised.

Allocation of space based on grade level has changed within GSA. Space allocation now depends on what you do not on who you are. 2020 is not tethered to standards based on grade. They are facing more perceptions based on entitlement rather than legal or published standards. If you go through the process with people in a scientific way, perceptions can be changed. When brought together as a group, people will subjugate themselves for the good of the community. Attribute change of perception to process employed. A change in office standards ten years ago was attributed to change in thinking of the use of space based on need.

UK Financial Organization 1

Ronald Winchester, VP CRE NA

Organisational culture

The Household Finance side of the merger has had a dominating affect. Compared with Republic, and HSBC, Household is more of a blue-collar organisation. The culture is dry, and cutthroat. There are basically two cultures within the bank: banking with more churn, and Household Financial.

Household is more meat and potatoes with not much change. There is a sub culture in Buffalo. This location has become more of a consumer operation where New York is more of a trading function and international banking. New York teams are more collaborative, and not just with people located on the same floor. Ethics are critical.

This has created a culture that makes one look across group lines. This also has emanated from the top down. It is structured. HSBC is not a leader, but is a follower. Ethics are critical. People are perceived as replaceable and behind the outsourcing strategy.

Perceptions of management

CRE is not perceived at the same level as HR and IT (a shame). HR is perceived as the power behind the throne. IT is perceived as a necessity, while facilities is perceived as cleaning up the floor and does not get the credit it deserves. It is still seen as overhead. Because of this, CRE does not have the representation at the table and is reactive as opposed to being proactive in its dealings with other groups. When CRE is proactive, the perception is that dollars are seen being associated with any strategies or policies.

Perceptions of employees

Complaints of it being too vanilla, too plain and too uniform. Perceptions on change break down by age demographics. Younger people will take advantage of it while others (older workers) – no matter what kind of change occurs – will be traumatised. These people want their space.

The Trade Centre, and 9/11 also had an affect on perceptions. Having been in the Trade Centre, people were forced to double up in temporary relocated space. Productivity went up due to being cramped together, along with the lack of private telephone calls and the use of the Internet.

Based on the direction the organisation is going, there is a lack of feedback on what the space should look like. People have gotten past the idea of bells and whistles. All they want is a place to work. People don't go to lunch as much as they used to. Work cycles are different as evidenced by working on weekends, which is a normal course of business activities. No one questions the amount of time people work anymore (mobile telephones and Blackberries have contributed to this change). With AWS, people don't want to work from home, they want face time. People have become somewhat numb to their surroundings. People are more concerned about compensation.

Space has not been an issue. Dense space has contributed to this perception. These are not good or bad times, just different, and more ruthless. Jobs have shifted to a different side: focus is on outsourcing and consulting. Jobs are being redesigned. All of this has contributed to this numbness. Not having an actual relocation project places perceptions at a different level.

People see the organisation as practical; not cutting edge: blue berries, laptops are a big approval cycle. Not cutting edge. People are shell shocked: will accept anything you give them; people will adapt. Being

shell-shocked is due to downsizing and outsourcing. There are long hours, black berries; pc's, working weekdays, getting notes at 11.00 on a Saturday night. Some view this mobility as status while some see it as a place to work.

OGC (Office of Government Commerce)

Bridget Hardy, Government Relocation & Asset Management Division

Structure

OGC acts as a catalyst for change within the property side of government offices. The group serves as an influencing body through improving procurement (of consultant services, office space and construction). They identify and promote best practices within these areas to their clients (government occupiers). With best practices, they encourage departments to adopt these practices as they relate to utilisation of the workplace.

OGC works with the central civil government and core departments within the central civil government. They play various roles in dealing with property: coordinate management of the estate and property. Each department or agency makes their own strategy decisions, with OGC having a consultancy arm to advise the occupier as to best practices in adopting workplace strategies.

On the procurement side, OGC buying solutions establishes controls, frames briefs for implementation, and set up a range of services to establish fixed prices for purchasing furniture and services.

OGC is an amalgamation of three government agencies, and is part of the Treasury Department. It was formed from a former buying agency, CCTA

and Property Audit. They came together as a result of a report on improving government procurement. Since coming together for improvement issues and purposes, they have since been involved in program management. As a result of successes, the group has grown.

Prior to its formation, property owned by the government was managed centrally up until 1996. This consolidation has put decision making with the departments in order to be more accountable. OGC has been a new initiative to improve asset management and to raise the impact of property utilisation.

Influences

Not responsible for the formulation or adoption of workplace strategies in any organisation. Would support strategies that are based on analysis of business needs, including user needs and perceptions, in which expert advice had been employed to procure and design workplaces, and in which the need for proper change management was recognised and planned for, to enable the users to make best use of the new workplaces. Would also support strategies that state the business objectives and design principles underpinning the design and use of the workplaces, and the use of benchmarking KPI measurement to test continuing effectiveness and efficiency. It is important to have a strategy and an understanding of business objectives as a precursor to any design directions.

Perceptions of employees

There still remains a problem of entitlement in some departments. This is dependent on how traditional that department's culture is. Different departments have different cultures, which affects perceptions of entitlement. Many departments have moved to open plan strategies years ago.

US Global Professional Services Organization

In the case of the US component, two interviews were conducted separately with two individuals. Brian Ferguson, former Director of Planning and Design, and the current Director of Real Estate Services.

Brian Ferguson

Director of Planning and Design (former)

Definition of workplace strategy

Workplace strategy is a process of identifying and accessing a broad array of drivers for each organisation including business metrics, branding, market realities, culture, work processes, organisational structure, work style characteristics and the strategies of HR, IT, Operations, and Support Services. It involves clarifying the current realities for each of the above, as well as the aspirations and organisational appetite for change. Workplace strategy is syndicating and developing consensus on the above definitions, and manifesting a response to the above in a set of physical, environmental characteristics and rollout procedures.

Organisational culture

The culture is highly professional, collaborative, proud of its heritage, highly competitive in the marketplace, and centralised in terms of key strategy decisions.

Perceptions of organisational change

As a solution set, the workplace is viewed as a tool to anchor process, cultural and organisational change, reinforce beneficial behaviour, and support desired work patterns. As a process, project implementation delivers messages of centralising authority and decision-making at the grassroots level of each practice office. It plays a major role in

rationalising national and local perspectives. Uncertain about UK perceptions and applications.

Influences on workplace strategy decision within the organisation

Naïve preconceptions about the role of workplace in an organisation and total focus on workplace as a cost centre to be 'managed.'

Influences on workplace strategy perceptions within the organisation

Lack of a comprehensive and sophisticated, empirically based enlightenment program to alter the above attitude among leadership.

Perceptions of management

The design of the workplace is perceived as being very important, with each group looking to it for different reasons (CFO for financial areas, HR supporting current initiatives, and Branding for environmental reinforcement of messages).

They perceive the role of workplace strategies as creating efficiency of operations, safety of partners and staff, creating a pleasant work environment, and enabling cost reductions.

Principally, space is assigned on a functional basis, but some hierarchy is apparent. No one has corner offices (part of the strategy is that there are not offices on any windows), no offices are larger than other counterparts, peers are furnished the same and situated as similarly as possible, and cross level accessibility is reinforced.

Perceptions of employees

To create a safe, efficient place to house them and their activities, achieved in a cost effective manner.

Nancy Tine, Director Real Estate Services

Structure

David Jarman is Manager/Director of Workplace. Workplace consists of Real Estate and Administrative Services, which reports to the head of Infrastructure, who reports to the CFO.

Definition of workplace strategies

The strategy is to reflect absolutely the business and fit into the culture of the organization. It also is to reflect the work styles of the people within. The Financial Group studied here is where they would like the strategy to be, but they are not there yet.

The workplace should not derive behaviours, but needs to reflect the organisations' people strategy. It also needs to work with IT initiatives. There also needs to be a financial aspect to the strategy as it reflects the business.

Organisational culture

The culture is forward thinking while holding onto core values. Ethics are critical. They are competitive in the marketplace, highly professional, and collaborative. They are not slow to make decisions, nor are they risk adverse. They are open to change and good at making decisions. They are more focused on change than on looking back at the past. As an example, look at how much change they want to push at one time. They are also into simplification. From all of this, there have been merger legacy issues, emanating from the merger of the 'big 5 consultants' into this new entity. Organization 1 was more aggressive but held strong similarities with Organization 2 (i.e. both hoteled). From a real estate perspective, the merger was a smooth transition.

Perceptions of management

Management perceptions have evolved over time. Before the global Workplace initiative, management was more negative in its perceptions of the value of workplace strategies. The global Workplace initiative changed that: that workplace strategy involved more than driving cost issues. Awareness was heightened. The organization is in a good place now in terms of implementing workplace strategies, and in perceptions from management.

What assisted this perception was firm leadership recognising the importance of workplace strategies, and feeling they were doing the right thing in adopting this particular strategy initiative. Both the CEO and Chairman are in the same size office as every other partner. The Global CEO was part of the original global workplace initiative because he came from the Tax Practice Group. Even so, the organization is not quite at the level it could be. Issues pertaining to workplace strategies are not in the top two priorities. It is not perceived as the same level as HR.

Because space is viewed as currently working, and not in the way, there is not as much focus on the workplace and strategy initiatives as if there were problems. It is important, but still they are not represented at the leadership table like HR and IT. Defining high value would be that they were part of the table.

UK Financial Organization 2

Steve Herridge, Head of Strategy & Performance Management

Organisational culture

Brands develop their own culture. The overall culture is one of 'can do' and 'make it work.' Risk takers are rewarded. Though it is a culture of command and control, the culture is one of making quick decisions,

partially because of this command and control culture. The belief is to get on with good ideas rather than belabour them.

There is networking between groups, along with cross selling. As part of this support, there is a professor from Harvard University coming over to train managers in cross selling. The organization has built their own business school (Executive Education Centre) as part of a relationship with Harvard University. The school was built in Scotland and houses seventy people. HR was responsible for putting the program together, which again demonstrates the relationship with other organisational resources.

You feel the culture as you mix with the separate brands. A push towards innovation as an integral component of the culture is beginning. Leading by example is a strong component of the culture.

Perceptions of organisational change

Organisational change is ingrained into the culture of the organization. People feed off of change, and see change as a breath of fresh air. Over the past twelve months there were thirty-two major change programs. These included restructuring, new series of offerings, and new IT systems. Employee surveys include questions on the rate of change within, and always respond to whether the rate of change is high or low. This culture exists because of executive leadership.

Perceptions of management

Senior management is very switched onto the workplace strategy initiatives, primarily at the executive level. They are committed to providing world-class business centres. They believe in making sure that employees understand the value of this process. Morale, productivity and output are fundamentally important to this group.

Perceptions of employees

The majority of employees see the organization as a place to work. If the strategy at world headquarters were implemented over all the facilities, it would have more of an affect on perceptions. People generally buy into the role of workplace initiatives partly because they are supported by HR. As long as business objectives are delivered, people can work anywhere. Entitlement has never been an issue: previous to the pilot project, only the top one percent of executives had offices. Directors, however, still feel entitled, though this is less and less.

US Manufacturing Organization

Waltraud Brogen, Workplace Strategist

Gary Haugen, Manager Global Facilities Management

Definition of workplace strategy

It is based on a standards program. Private offices are assigned to managers. All others are in open cubicles. The standards program exists in North America. It is evolving on a global basis. It is individually influenced by operating groups in different locations. There are prenegotiated contracts with two furniture manufacturers to implement the standards. The standards were developed through metrics which were based on benchmarking other organisations. The benchmarking looked at best practices and demonstrable successes. The resulting standard was 'space + cost = standards.' A 225 square foot per employee metric was developed as the core of the standard. This metric creates the envelope and within that metric there is flexibility to create unique solutions. The metric creates a window to view the workplace.

Organisational culture

A diverse company, with no cultural standard. There is a strong legacy issue involving 3m's one hundred year history. The overall culture is both risk adverse, and engineering. It is not a consumer product company. They are diverse and international, but conservative in outlook.

Business focused with mid west values. Innovation is imbedded in the culture. There is not branding internally of the culture, and the facility does not represent the brand. Part of their innovation culture involves allowing employees to spend fifteen percent of their work time for creative endeavours.

Their 6 Sigma policy has influenced their culture, by creating a common language between groups.

Entitlement is a large component of their culture, along with legacy issues associated with entitlement as expressed in their legacy of standards. The challenge is determining if they are a technology company or a manufacturing company and develop a culture that is aligned with that view. There is currently a conflict between the success of the organisation and the design of their workplace.

Perceptions of organisational change and the role of workplace in facilitating this

Organisational change is not a precursor of the corporate decision making process. Parts of the organisation want change as an integral part of the process. Other parts of the organisation do not. Change is not occurring in an organised basis. It is done in a group by group basis.

Innovation takes place in the research group, who are also adverse to workplace issues. Overall discussions about change management have not occurred within the organisation. The company belief is that 'if it's not broke, why fix it?' There is reluctance on the part of 3m to engage in

change management initiatives based on legacy issues reflecting back to the standards program, and the financial success of the organisation. The company has been successful in a time of financial difficulty, and have not had problems hiring or retaining what they consider to be their best and brightest, so why change?

Perceptions of the importance of the design of the workplace

There is a blend of entitlement. This is an important perception. Age wise, the organisation is an older demographic population. This affects perceptions of the role of the workplace. What is taken for granted is that how they do their work is what is important, not where. However, globally, the demographics are younger. As an innovative technology organisation, giving people good projects is important, not where they do it. Having good projects is the motivator for being here, not the workplace.

Perceptions of management

Management's perceptions are that the role of the workplace is to keep employees happy but not making a big deal out of it. Some in senior management understand the role of the workplace, and others do not. There are ego and entitlement issues that affect this perception.

US Global Media Organization

Philip Petruzzulo, SVP CRE

Definition of workplace strategy

The strategy is to implement standards that we developed based on salary grade and to provide a work environment that enhances and assists in hiring and in the retention of employees. This has taken a number of forms and is reflective of the company's heritage (a media company) and what it does today (an entertainment company).

This approach to strategy is similar for UK components, though smaller floor plates drive it because buildings are not as large as in the US. There are also statutory and cultural affinities for employees being in sight of natural light. You cannot replicate policies of the US (density and no access to natural light). In the States, companies tend to pack as many employees in as tightly as possible. In Europe, there is statutory protection.

Organisational culture

The culture drove a more conventional approach to workplace strategies. There is personal creativity and a strong relationship with the building.

The organization is made up of many cultures consisting of several entertainment groups. The parent company is a holding company and coordinates groups. It is not an operating entity. There is a high number of people with highly responsible positions.

There is intellectual autonomy. This differs from banking. If standards were compressed, this would be viewed by Global Media Organization as not being consistent with the culture. There is a sense of permanence. The organisational structure is composed of key people who are consulted along with consensus building as a way of life. Global Media Organization is relationship driven. It is not hierarchical, and there is a sense of individual creativity and entitlement (i.e. 'you hired me because I know my field; "space is important to me;" and "I did not come to work to get screwed." Above all, it is a decentralised company.

Perceptions of organisational change

The organization went through several phases during the course of this project. The rise of the merged organization, the burst of the dot COM bubble and change management issues. Different persons were involved and had different attitudes about the use of space.

Personal belief is that real estate should not be the driver of change. It could be a tool in implementing organisational change. Most users don't care or want to be proselytised to by Real Estate. You run the risk of being sold a concept. This is sometimes designer driven (proselytization by the designer) and sometimes client driven.

An example is the London facility of the US Entertainment Organization. They did a co location consolidation and pushed the compression of people. They embraced non-traditional ways of providing building services. A new method of working was adopted. There were enormous technical problems. They reduced the square footage of workspace but kept the types of standards previously used. This was not a culture that would accept this easily. Phillip had an idea of giving money back to individuals from the cost savings of progressive workplace strategies, if they adopted the concept. Too often change issues are driven by ideas only. Global Media Organization looked at alternative ways of working.

Perkins and Will was hired to design the new headquarters. Global Media Organization was going through turmoil. There was consolidation of many different companies and cultures. They were questioning how to get the fundamental issues and marry these with the planning concepts. They considered bringing in a cultural anthropologist, but could not get anyone from the organisation to sit through the necessary sessions. Perkins and Will drove trends. Furniture vendors also pushed trends. Global Media Organization explored options, but in the end chose a more conventional approach.

The process involved focus groups with management committees, and on line surveys, which resulted in widely, conflicted responses. At the end of the day, people were conscious of realities. The end result reflected a more real cultural view of the organisation.

Main issues were clear work environments, workflow processes, access to natural light, and not pushing the revolution. The Chairman's view of the executive suite was to incorporate the use of glass partitions to promote visibility. Other senior people were more cautious.

Perceptions of management

The design of the workplace is high on the management list. As a result, they provided great amenity spaces along with providing adequate office sizes. This resulted in no counter-revolution or no two-day revolution [a term Philip used to support the decision of the workplace strategy they chose].

Recruiting and retention issues was high on the management list. Real estate was seen as part of the solutions. The head of worldwide recruiting was also consulted on the decision making process of amenities and the use of the office facility as a recruiting tool. HR uses a tour of the facility as a closing tool for new recruits. The walk and talk process was built into the design. There are video monitors throughout the tour area. This was a thought out process.

Successful outcomes are not measured in any direct ways. Individual focus groups are organised to speak with employee groups and obtain feedback, and face-to-face meetings with staff. There are also customer satisfaction surveys and comment cards. They look for comments from the staff. It is a vocal population with a strong sense of entitlement. They examined bench marking and real estate cost estimates to explore the benefits of compression of space. Given a choice between getting a financial pay back for reducing real estate costs or having a larger office, the choice of an office would be taken seriously.

Management would like further customisation of the workplace. The issue became not having enough time in the design process for the level of interest they had. They place a high value on the role of the workplace on business operations. Management weighed in all along the way of the process. They made decisions that were not textbook responses, but were made with employees in mind (i.e. in the deciding the location for the cafeteria, where the best views were considered, providing a generous amount of space and allowing for double height space). The cafeteria ended up with the same views as the Chairman. The location of the cafeteria occupied prime real estate, which executives could have claimed were allocated for them. Distributed media was placed throughout.

Other issues like office standards and not wanting to move people down in office size despite architectural benchmarking were important. They were concerned with making employees happy, despite the cost savings that down sizing would have offered. In the end, the decision not to compress, and to maintain the level of amenity space caused Global Media Organization to take on two additional floors of space. A strategic decision was made that in order to retain and attract their best and brightest, the cost of real estate was the right decision.

Perceptions of employees

Employees understand the relationship of the workplace to effectiveness. People 'get it.' They recognise the need for proper adjacencies, the need to limit travel within the space, and seeing other people that they need to work with. People are very perceptive.

Employees do perceive the allocation of space as entitlement. Rationalising it is the issue. It is considered part of the reward system, but everyone understands the limits. People get the space their grade calls for.

US Global Entertainment Organization, Burbank

The organization contains the business unit that oversees corporate real estate for Europe. For this reason, interviews were conducted with US and UK members of CRE.

Mike Mason

Valerie Valdez

Structure

CRE department comprises thirty + people in Burbank California. Valerie Valdez heads the international group within CRE. The UK has six persons as part of CRE, in a facility comprising 150,000 square feet. The pre-consolidation space was less overall square footage. The driver for consolidation was both real estate costs and the need for better group adjacencies. As projects develop, more space is added and constraints of real estate become less obvious.

Definition of workplace strategy

Valerie Valdez:

Workplace strategies are trying to achieve not just the most efficient approach but thinking about not reinventing. It is understanding what is most important to the employee. Workplace strategies involve maximising productivity, and maximising the utilisation of space. You examine what have you seen today and what might happen in the future. It needs to maximise flexibility while at the same time minimise costs, as well as incorporating what is cost effective for the future. It involves interchangeability: understanding how business is changing and how they do their work and are changing for the future. It takes into consideration culture, politics (which is part of the culture), and drives a whole other part of the strategy process. There are intangible drivers. Changes are difficult

for people to accept, but you cannot give up because of this. You can miss an opportunity if you give up. This is the challenge.

Workplace strategy decisions are most influenced historically by culture. Any changes need to come from the top to change what people are used to. The leader (head of a division) must change also and become part of the model. Cost and economics also play a crucial influencing role. Unhappy people are hard to deal with. Concentration or lack of it also influences decisions [Valerie Valdez].

Workplace strategy perceptions are influenced by cultural issues, country by country. Issues of perceptions of hierarchy and closed offices send messages. Moving to an open environment to be more about collaboration says something to people. People want to be viewed as sub-leaders. There is pressure to support your leader. They have difficulty in believing they are in an open office. This is caused by status perceptions. These perceptions come from what a person has and what they think they could be getting [Valerie Valdez].

Michael Mason:

Workplace strategy means creating the most functional, aesthetically pleasing environment for the business units and its employees, all with the goal of fostering productivity, technology, efficiency, and utilisation. This is tempered by cost mitigation efforts, for not only the business unit, but also the company and other support services as a whole.

Influences

Valerie Valdez:

Views and perceptions were influenced by wanting to be more collaborative. One of the biggest challenges is how many people to involve. The challenge is between the approach of what a space looks like and deciding how much to involve the occupier.

The importance of having a workplace strategy is viewed not from the business sense, because it is difficult to measure. In consolidating offices, people are collaborating whether they were meant to or not. Consolidations have caused a beneficial awareness of the need for collaboration. It makes her realise it does matter.

Organisational culture

More collaborative. They are comfortable with themselves. Interaction with UK CRE. UK CRE takes the majority lead on projects, with involvement from the US.

Perceptions of management

An appreciation has evolved concerning the importance of workplace design strategies. It has become more important, and management acknowledges that the workplace is an important component to the employee experience. When there is a negative issue, it comes to the forefront quickly. As the organisation becomes more global, the territories become more aware of the importance of the workplace.

The UK was used to working in lesser conditions than their US counterparts. International growth is increasing. There is more company focus on international growth. The company is willing to put more money into the territories. The foreign units make more money than the domestic units ['Territories' is a phrase frequently used in the interviews to describe those offices not located in the United States].

Perceptions of employees

The UK reported to Finance that they did not want to spend money. It has evolved into they do deserve better, and that the workspace is important. It is difficult to quantify how important it is. Expectations are set which establish a new standard. Concerns and issues are made known.

Perceptions of office accommodation as part of employee reward systems and entitlement is a large part of WB in the UK. This made the new project a challenge, but space needs drove the final decisions.

US Global Entertainment Organization, UK

Simon Green, Director Facilities, WBCRE UK

Definition of workplace strategy

Corporate Real Estate (CRE) in Burbank California drives workplace strategies. In the UK, they try to emulate those standards as much as they can. Densities that exist in the UK that do not fit the model may cause a different type of application, usually in the form of a downgrade of the standard.

D. An examination of secondary source material

Many of the study group interviewees provided additional materials to further support the discussions around workplace strategies. Some of the materials were developed specifically as organizational developed collateral to promote specific strategies and others were third party pieces such as articles that focused on particular workplace strategies of that organization.

UK Global Energy Organization

Blue Chalk: A guide to innovation in the workplace and new ways of working (Niels K Rasmussen) is considered the foundation of the Blue Chalk workplace strategy. During my interviews, this document was often referenced, and it was also noted that it's author, Niels Rasmussen, who championed the strategy, was no longer with the organization, which was offered as a partial explanation of the strategy's lack of current robustness.

The document, similar to those of OGC and GSA serves to present both the case for their particular workplace strategy, and the workings of that strategy. It is presented in terms of the model as well as through several case studies illustrating its implementation. Somewhat unique to this document, Niels Rasmussen includes sections on project management and change management as supporting functions necessary for the successful implementation of this strategy.

In providing some history of the development and implementation of the strategy, the narrative presents Blue Chalk as a concept that 'has now evolved into a holistic, well-respected and successful concept.' It goes on to point out that at the beginning it was not easy and that the concept had to be sold to the business. Rasmussen terms the early adopters of Blue Chalk as being 'brave enough to take a leap of faith.' In the introduction, Rasmussen goes on to clarify the purpose of the document as not only

describing what the strategy is about, but also to 'inspire' and show 'opportunities.'

Unlike many of the other study group's documents', this publication bases many of its premises on what it cites as research. It references cross sectional studies of occupants of three different office types and also goes on to add that while research forms the basis of much of the materials in the document, there exists a lack of longitudinal testing to support the hypotheses in the research. For this, it is unique in its integration of academic reference and practical implementation methodologies.

The other area that is unique with this document is the reference to the relationship between workplace change and organizational change: "any changes in the workplace represent an opportunity to consider integrating these with other planned or desired changes in the organization...it can also be supportive of other changes in the organization such as its structure, processes and culture." What appears to be missing here is the relationship between a workplace strategy as representative of organizational strategy, and that a workplace strategy that is based on workplace transformation emanates from the need of that organization for change.

UK Telecommunications Organization

The supporting material provided during the interviews was a power point presentation prepared by Chris Weber and titled The Productive Office (The Productive Office, Property Workplace Technology, and 27 July 2001). It is intended to introduce to employees the concept of new officing and as such, it attempts to establish the framework for making the case for the mobile workplace strategy that was being embarked on at the time. It takes the approach that the new way of working is tied to productivity, and the presentation starts off by tackling the definition of

productivity in terms of the workplace. It leads into directly trying to link productivity to greater costs.

Important here is presenting the performance measurements by utilizing 'business measures.' The basis of the presentation is in the form of graphs that use these business measures to examine projects identified as case studies to support the materials. It compares these case studies in terms of time for occupying the completed facility against performance towards certain targets indicated as percentages and compares a specific facility against a national average.

The presentation concludes with adding specific metrics that should be used in evaluating these projects: the built environment; occupant's perceptions; the business' own targets; and utilization of space, to be benchmarked before and after what the presentation terms 'the accommodation event.'

US Global Financial Organisation

Of all the study organizations, Financial Organisation provided the most extensive series of supplemental materials supporting their workplace strategy initiative. The materials centre on power point presentations, press releases, survey result spreadsheets and reprints from business periodicals as well as their annual report.

The documents provide insight into both the internal language used by Financial Group to reinforce and implement their workplace strategy program as well as the external message being transmitted to stakeholders beyond the organization. Taken together they provide a view to how language is used to shape their view and the view they would like internal and external stakeholder to share of the organization and its workplace practices.

Financial Group's 2002 Annual Report establishes a few key concepts in their use of language and its application both internally and externally. The 2002 report is useful in that it represents the point in time that the Future of Work workplace strategy initiative was initiated, and it was also a time marked by a recessionary downturn in the world financial markets.

Two key themes, central to Financial Group's workplace strategy initiatives are identified within the report: creating a leaner and more productive infrastructure, and creating a major competitive advantage:

"Operationally, we continue to make our infrastructure leaner and more productive, creating a major competitive advantage for Financial Group."
(pg 4)

This points to the pivotal driver of the Future of Work program, the creation of a leaner and more productive infrastructure. They then go on to discuss what in later documents is identified to as their major competitive advantage: Financial Group employees. While this (competitive advantage) comes out in later documents, the 2002 Annual Report concludes with a section on Financial Group being a great place to work (pg 15). This continues to be a driver in supporting the Future of Work Program, in that it reinforces the role of the workplace in helping to create the environment that is a contributing factor in being a 'great place to work.' In this report, they cite Financial Group's recognition in Fortune magazines Most Admired Companies list and Forbes Platinum 400 list as well as The Sunday Times of London's list of 'best places to work in 2002. 'They also make the link between their television advertising ('what's in your wallet') campaign with their being a 'maverick' and the concept that their brand also serves as a source of competitive advantage:

"We have positioned Financial Organisation as a maverick brand for smart consumers looking for great value, a strategy that supports our

growth and gives the brand a cachet with consumers in all credit and income brackets.” (pg 9).

Financial Organisation has been extremely savvy in linking the organization to a brand that is employed physically in their workplace strategy (the Future of Work brand), their branding of Financial Group as one of the best places to work, and connecting all of this to their competitive advantage (people, place and brand).

Corporate Real Estate Leader’s interview with Financial Organisation’s Ed Lawrence (the individual interviewed by me for this study) reinforces these themes and highlights the important role that Financial Organisation’s Corporate Real Estate (CRE) group plays in this process. Beginning with the sub-title of the interview, ‘Our Competitive Advantage is Our People,’ Lawrence goes on to say:

“Everybody here passionately believes that our core competitive advantage is the people we hire and the incredible analysis that we bring to our decision-making...” (Pg 53).

The interview also serves to establish the case that senior management at Financial Organisation supports the view of the workplace strategy as a further source of competitive advantage:

“Senior management believes that the work environment is a source of competitive advantage for us...Part of making sure our associates feel valued is the workplace they are in, and so senior management believes we – Corporate Real Estate – are strategy at the core.” (pg 53).

The correlation between the workplace strategy and cost reduction through real estate reductions is also emphasized in the interview:

“Our plan is to drive down costs while helping increase productivity and work-force satisfaction across the company...” (pg 54).

Lawrence outlines three lenses through which CRE views Financial Group’s real estate portfolio:

- The business lens
- The financial perspective
- The market lens (real estate market conditions).

All of this is viewed in terms of aligning with the business plans and corporate strategy of Financial Group which translates to ‘reducing the footprint.’ Lawrence does balance this perspective in the interview with the creation of ‘quality workplaces’ while ‘shrinking the portfolio.’ (pg 55).

From the study groups, Financial Organisation defines CRE’s role differently in this interview. According to Lawrence, they have moved from a traditional real estate competency model to a strategic advisory services model. This has been through focusing the group on what he terms strategic initiatives such as Future of Work, and outsourcing traditional facilities management services which most CRE functions are involved in:

“This is a critical step of our transformation from delivering space too becoming a more strategic partner for Financial Group...” (pg 56).

Lawrence goes on to position to CRE as providing a tangible and differentiating atmosphere that enables Financial Organisation’s associates to feel valued, supported and productive. This is again reinforced by him through framing his comments as the ‘CRE brand.’

On the surface, one has the tacit branding of this workplace initiative of FOW, and in Ed Lawrence’s perspective of the role of CRE within Financial Organisation. An issue to critically examine is how this branding

actually plays out in execution of the desired outcomes aside from cost reductions, and the true role and place of CRE within the organization. Financial Group's press release on the opening of their new London office discusses the role of the new workplace strategy as a move away from the inefficiencies of their previous facility. It cites time utilization studies to reinforce the fact that the previous facility was highly underutilized with an average of 50% of the facility occupied at any one time, with lows of 20% to highs of 80%. This was the impetus of the adoption of the FOW strategy, which the press release terms as its theme: flexibility through the utilization the right technology. In addition, the role of collaboration as a central driver was also cited, and its improvement is duly noted in the press release. The elimination of private offices across the facility, and the fact that even 'board members' share 'open plan meeting tables' is offered as evidence of a resulting 'truly non-hierarchical culture.'

Another telling choice of language is that Financial Organisation views this strategy as encouraging 'all associates to consider the whole office as their home, even without an assigned desk.' The press release ends by pointing to the facilities success by concluding that 'The new office has also demanded innovative working practices and associates have easily adapted to complementing their surroundings by being flexible in their approach; communicating verbally more frequently; promoting an open and honest communication culture; operating a strict clear desk policy; and increasing the teamwork ethic.'

As in other cited categories referenced above, Financial Organisation, of all the study organizations, conducted the most rigorous and documented business cases for their transition to the FOW program. This is evidenced in the power point presentations discussed below and in the creation of a 'Design and Planning Charter' developed for the FOW pilot study that was implemented in the McLean Headquarters as a prelude to implementing the strategy within the entire facility. While the program had been

implemented in their West Creek facility, as well as the UK, Financial Organisation decided that across the board implementation of the program was not the correct course, and opted for more controlled and studied approach for each facility. This was reinforced in the interviews and referenced in the UK interview where it was noted that adaptations to the FOW strategy were made unique to the UK market conditions that did not strictly follow the program.

In McLean, it was decided that a floor of the existing 14-storey facility be used for a pilot study and that CRE would be the group to first test this out by occupying the space. This Charter document served as the basis of the pilot study. Among the goals set forth in the document, the most telling in light of this study and in contrast to the other study organizations was the development of a business case that supports the bottom-line impact of investing in a distributed work program, which was the basis of the FOW initiative.

The Charter defines the project structure through three parallel efforts: People, Place and Process, each with their own work streams. As stated by the document, the results of these work streams will be used to determine the potential that CRE has for distributed work, the challenges faced by the group in this new way of working, and recommendations for the program that include work process changes, organizational structure and required technologies to support the program. The work streams defined within the Charter are:

- Change management: prepare CRE for the migration into a new work environment that will test distributed work.
- Communications plan: establish target audiences, messages to be delivered and the vehicles for delivery.
- The value story: establish the value story based on the business case, anticipated results, and the trends in the market.

- Assessment and readiness: establish the anticipated scope of the distributed work program.
- Behaviours and practices: identify the key behaviour and practices for lessons learned from the UK office.
- Training and development: identify key areas requiring training in a distributed work environment.
- Technology enablers: establish the technologies required to support the program.
- Physical space designs: design concepts for the pilot study.
- Home office: establish the levels of support to be provided for the home office.
- Third place: establish the levels of support to be provided by the home office.
- Space delivery: identification of the project team.
- Business case/value story development: development of the business cases to support the roll out of the distributed work program and ultimately the business case of other business lines.
- Distributed work toolkit: a toolkit that outlines the distributed work program and required processes.
- Service model development: internal services required to deliver a successful distributed work model.
- Web site support: a dedicated web site to support associates moves to distributed work model.
- Training program development: programs to support migration to a distributed work model.
- Alternative work development: development of corporate policies for distributed work program through HR leadership.
- Analysis of test results/modelling: development of metrics to test the data.

Financial Organisation makes extensive use of two messaging tools to support their workplace strategy initiatives: power points as a means to brand and transmit the message both internally and externally of Future of Work, and on-line associate surveys to gather data to support the FOW initiative. In reviewing both tools, three compelling factors stand out:

To develop support for the FOW program, on-line surveys are extensively utilized. This is a feature that is made use of for both internal support and gaining buy-in as well as to demonstrate operational success of the program for internal stakeholders and the external market place. Financial Group has made numerous public presentations at professional corporate real estate and facility management organizations to promote their efforts and to promote the strategy of mobile workplace strategies. It should be noted that the use of these surveys by Financial Group has been an integral component of their workplace strategy development since initiating the FOW program and is continually used to build consensus.

The on-line survey can be viewed as both supporting data for the FOW program as well as a demonstration of how often data can be shaped to reinforce the desired message while ignoring any negative messaging.

Financial Organisation is one of the few organizations that has institutionalized the CRE process to be a component of a firm wide strategic initiative, while developing a business case for CRE strategies (in this case FOW) to support the organizations larger business strategy.

One early power point discusses the role of workplace amenities as part of the CRE strategy and uses a benchmarking process to demonstrate its importance. The study presented benchmarks of 20 companies including Google, 3M, HP, Microsoft and Sun Microsystems. It looks at factors it terms as: 'Cool Factors,' 'Creature Comforts,' 'Fun Factors,' and 'Associate Services.' It then goes into desired outcomes that these

amenity services should provide: improved economics, delighting associates, increasing concentration, providing choice as well as control, accommodating change, increasing collaboration, building community, increasing the speed of decision making, removing silos, decreasing formal meetings and providing rapid access to information. It then concludes with details of how these targeted improvements to Financial Organisation through these desired outcomes move from current practice to 'Future of Work' practice. In an appendix to the document, the desired outcomes are then outlined in terms of their proposed design approach, an explanation of the benefits of the desired approach, and suggestions as to how outcomes will be measured for success.

Another power point presentation establishes a hypothesis for CRE to play a crucial role in 'measurably' increasing the 'success of Financial Organisation by creating a workplace environment and support services that enable workforce productivity and realize greater infrastructure efficiency.' (New Corporate Strategy Highlights). It is one of many documents that serves to position CRE in a proactive role as an integral component of Financial Organisation's overall strategic initiatives, and makes the case for the workplace being not just an enabler of work processes, but a tangible contributor to cost efficiencies. This document outlines those measurable initiatives as:

- Lower operating costs from less overall space and better utilization.
- Removal of identifiable barriers to knowledge worker productivity.
- Reduction in unnecessary travel.
- Better retention of associates.
- Increased morale and satisfaction.
- It frames these goals as being offset by:
- Physical space and technology investments.

- Additional operating costs for new services.
- Training/change management costs.

And it makes the hypotheses that these initiatives will result in a 'positive net value added.' In doing so, CRE 'should seek opportunities to add significant value to Financial Group by investigating physical, behavioural and technological workplace solutions that enable individual and business unit performance.' Through this document, one also sees the only contributing evidence of an organization engaging in workplace strategies that places the role of support services as integral to the success of their workplace strategies. It formulates the need for these services as a result of distributed work, creating a need for 'new workplace services and processes' to support the strategy initiatives. These services include: conference/meeting services; hoteling/concierge services; on-demand connectivity support; one – stop help desk with 24/7 support; and office services.

The 13 June, 2005 presentation on Financial Organisation "Future of Work" identifies four areas: the business case for FOW; challenges to implementing FOW; solutions represented in FOW; and the results from FOW.

The challenges identified speak to those issues that affect all of the outcomes of workplace strategies across the spectrum of the study groups. It poses the challenges as issues to overcome:

- Breaking old habits/behaviours connecting dedicated space to organizational worth.
- Overcoming management class feelings of loss of control/authority.
- Integrate HR, IT and CRE solutions to foster innovation and collaboration.
- Prove flexibility measures increase business agility and productivity as well as employee lifestyle balance.

Many of these areas of focus address those issues that the analysis will show are common components associated to both success and failures of workplace strategies in the study groups: Associating dedicated space with one's worth or perceptions of the workplace as a part of one's reward system; managements' perception of needing to manage by 'seeing;' the bringing together of HR, IT and CRE as a well integrated team in developing and implementing the workplace design strategy; and being able to link flexibility metrics with business agility, productivity and employee balance of lifestyles.

A 2005 internal presentation by Ed Lawrence, Vice President of Corporate Real Estate on integrating CRE strategy into the Financial Organisation business strategy, focused on the company's information-based strategy as a driver for integrating the CRE strategy into the organizations strategy. The document demonstrates the unique (among those organizations interviewed for this theses) positioning of the CRE strategy as part of a larger corporate vision. Broken down within the document are the interrelationships between corporate vision, corporate workplace vision, CRE vision, corporate strategies, CRE strategies, and CRE key results.

Lawrence goes on to outline how the 2005 CRE strategies support Financial Organisation's business priorities through a matrix that outlines priorities, strategies and results. Here again, the desire is to demonstrate and connect how CRE workplace strategies are designed to support critical organizational strategies. Four key elements are highlighted: optimizing investments, revolutionizing the workplace, reinventing workplace services and leading the transformation. Important here is the linking of CRE strategies to cost savings ('optimizing investments'); the integration of workplace services (i.e. IT distribution) as a critical component of the act of 'revolutionizing the workplace; the role of

revolutionizing the workplace through distributed workplace strategies; and the role of CRE in 'leading' this transformation. In most of the other organizations studied, the role of CRE was rarely leading.

The document is also unique in that it is the only reference in all of the study organizations that draws a connection to 'atmosphere' as being a critical component of Financial Organisation's branding, and further that 'atmosphere' (which Lawrence defines as 'an intangible feeling, often unnoticed, unless there is something that adversely affects the tone or mood') is 'owned' by CRE and that CRE's role within Financial Group is more than 'workplace optimization.' The document also points to and reinforces the perceived importance of integrating CRE with HR and IT, which is a common theme expressed during the interviews.

A 10 April 2007 power point presentation titled 'No More Cubicles! The Future of Work at Financial Organisation" prepared for an International Facility Management Association conference repeats many of the same themes and images in earlier presentations but focuses on some of the historical data relating to the case for distributed work. These include data on percentages of the population using the Internet, having high-speed connections, percentages of office space left empty, percentage of knowledge workers who will telework in the future and average time spent in traffic jams per week.

The presentation goes on to make the connection between the workplace and primary influences on knowledge workers by quoting Tom Davenport of Babson College, who states that, the 'workplace is the least understood, researched and studied' influence on knowledge worker productivity.

Rethinking the way work is done is a key theme when discussing the FOW program, and the presentation in reviewing the benefits and components of the program makes the analogy of 'the university' as 'one

way to envision the shift in thinking and behaviours to distributed work.’ It compares the components of university life with having some scheduled classes, optional attendance, freedom of spending time outside of class any way one chooses, freedom to complete coursework wherever and whenever one chooses, and assessment of work based on participation, quality and timeliness of work with high school life where one is expected to be in assigned classrooms every hour of the school day where one reports to a home room, study hall is allowed at set times, and the teacher is accountable for the students’ whereabouts throughout the school day.

An important feature of the presentation, aside from the discussion of FOW, was its implementation program, which involved a change management effort. Activities supporting the change management program were scope development, building awareness, education and preparation, move, and reinforcement and measurement. The change management program, it should be noted, did not involve any interventions in organizational structures, but rather focused on an ADKAR model (Awareness, Desire, Knowledge, Ability and Reinforcement). Measurement models involved “measuring our delight with the program;” “using choice to control when and where we work;” “increasing our collaboration and decision speed;” “improving our time to concentrate;” “realizing our sense of innovation;” and “improvement opportunities.”

Measurement sources included FOW surveys examining activity patterns, occupancy patterns, speed, uptime, downtime, atmosphere and satisfaction, FOW observations examining types of interaction, and location of individual work; calendar data to deterring time spent in meetings, HR surveys examining user satisfaction and commitment, and interview and focus groups determining metric validation and measuring interpretations. Survey measuring involved using pre and post surveys to

test data from criteria gathered before entering into the FOW program to data gathered after a period of time working in the FOW program.

The metrics gathered from the surveys indicated an increase in satisfaction at every point. The largest increases were in the areas of collaboration and ability to work flexibly within and outside of one's office location. There was a substantial 33% increase in satisfaction pertaining to being satisfied with access to quiet space. There were also increases noted in the areas of the workplace helping groups work more effectively (53% increase) as well as in reducing the time to make decisions which was measured through querying about the hours it takes to get input to make decisions from managers and peers. Based on the heavy reliance of these metrics, it was interesting to note that in a query concerning satisfaction with collaborative time, while there was an increase in the post from the pre surveys, it was a far smaller percentage difference (15%).

A 16 February document prepared for a FOW sponsorship group meeting and titled FOW Measurement Pulse Check, uses the power point format to present findings on the FOW pilot study. It breaks the information down into pulse check response, pre-move observation results, pre-move survey response, anecdotal data gathering and conclusions. The document starts off by offering the observation that Financial Group has conducted pre-move and 'pulse check' measurement studies and that these studies fit the CRE sponsors expectations.

Through a series of bar charts and graphs, taken from data gathered as a result of on – line electronic surveys, the presentation proclaims: "IT and CRE pulse check response shows good news. People like their new FOW environment better than their prior work environment." This is reinforced by the bar graph that shows 55% of the respondents said they liked the FOW work environment better than their prior workplace. The survey was conducted from IT and CRE staff who were the occupants of the pilot

study space. The highest responses were in those areas dealing with collaboration, with IT and CRE citing assistance in interacting with others, available technology and support services as resulting in improvements in the pilot study work life. The lowest scores were associated in there being no change between previous and current workspaces in the ability to concentrate.

When queried about the respondents 'favourite' components of FOW, the majority answered 'workplace,' while the areas that they would change involved 'tight space.' Supporting data to the survey included desk utilization observation data that examined the rate of vacancies on the floor along with the types of work being conducted by those that were working on site in the previous workspace in order to capture information to measure against the new FOW workspace. This data was not available for this presentation.

Anecdotal feedback was also used to provide data on measuring the 'pulse' of the program. These were all cited as high on the positive side. At the presentations' conclusions where next steps and action items discussed, the response to the lack of improvement of concentration ability, a 'pre-emptive communication plan' was suggested as a tool to 'mitigate negative results around ability to concentrate and team interaction dimensions.'

When examining this presentation, and both the data presented as well as the mitigative next steps against the actual on line survey results, one can see how the data can be used to favourably position a strategy by emphasizing those areas that were supportive while providing less attention on those negative aspects. What comes across in both the presentation information and the survey results is the absence of equal weighting of importance to the positive and negative areas of responses. This is supported in examining a number of responses.

A question dealing with the way in which certain characteristics have changed work processes, flexibility and control, a high value feature of FOW, 37% responded 'better' while 50% responded 'no change.' Areas dealing with interaction fared far better and more positively. On both the questions of concentration, and finding suitable places to conduct tasks, the latter had higher negative ratings while the former had only 3% difference between no change and better.

An article authored by the Manager of Workplace Research at Financial Organisation, further makes the case for the success of the organizations Future of Work initiative. She begins by creating the stage for Financial Group's actions by 'ignoring conventions' as being 'unprecedented.' It immediately establishes Financial Organisation as being mavericks in a world of organizations pursuing the conventional.

The piece explains the program in some detail. One of the points she makes without any empirical support, involves associate satisfaction. Here she makes the point that these associates have choice and control over how they do their work, which results in the generation of higher levels of satisfaction. Citing pilot programs, the author claims that they illustrate that the Future of Work program 'is a big win with our associates' and it 'appears to be a win for Financial Organisation.' The section concludes with the statement that '...associates are delighted with their new environment.' She concludes with survey quotes from associates under the title 'What are Associates Saying?' it is intended to debunk certain workplace myths and is intended to dispel what she terms 'sceptics' who do not 'clearly understand the value and potential benefits that Future of Work has to offer.' She then goes on to state how Financial Group has taken this data derived from the pilot studies, and use it to dispel what she terms 'the most predominate myths associated with ...workplace change.'

Workplace 20/20

In a power point presentation for the AIA's National Convention in 2005, GSA' Kevin Kelly discussed the Workplace2020 program. Its mission cited is to provide 'superior workplaces at superior value to the U.S. taxpayer.' Supporting this function, the 'real' economics of space was presented noting the breakdown of costs associated with physical workspaces. The presentation associated the program with what it terms 'the promise of a world class workplace' Supporting this theme, Kelly notes that to achieve this, a world class workforce is not 'just about the setting' (while showing a slide of an award winning building), yet a world class workplace is 'all about the setting.' 'On a humorous side, office hell is defined as when the place works against (and embarrasses) you.' Success for the initiative is supported by performance measurements and associated tools developed by a rostrum of consultants. Among the metric tools noted are gap analysis, rapid engagement processes and occupant satisfaction surveys.

OGC

The OGC along with DEGW, has authored a book, Working Without Walls. The book is subtitled "An insight into transforming the government workplace." While it is published as a resource to an external audience interested in workplace change, Ms. Hardy has referenced this work in our interview as being a critical strategic tool to assist in 'selling' the role of OGC and innovative ways of working. In the introduction, Ms. Hardy positions the government as a leader of new ways of utilizing workplace design and as a model for the future for 'overseas' government agencies. The books' stated audience are senior managers and 'estates and facilities managers with the aim of using this book as a starting point for those about to embark on creating organizational change.

As with similar works, it begins with the historical context of the government workplace beginning with Somerset House, the 'welfare state,' the period of the Thatcher government and the role of office design within the public sector. The authors make the case for a more progressive approach to workplace strategies by discussing the shift in function within the civil service from 'policy advice to delivery.' By making the association with today's civil service becoming an 'instrument of empowerment' and its desire to partner with others to deliver a return on investment, they infer the relationship with this shift in public service approach with the adaptation of progressive workplace strategies. Discussing these changes within the government as well as its desire to attract employees that will enable these shifts, they point out that 'The redesign of the government workplace is an important part of this change.' This is the very essence of what the books intent is, with the focus of the book to assist in this transformation by enabling new and more open, flexible ways of work.

An important chapter of the books is the discussion of the utilization of the workplace as a driver of business change. The critical component of this is through identifying components of workplace performance that incorporates efficiency as well as effectiveness. Equally of importance, they squelch any association between workplace strategies and productivity, which has traditionally been the inhibitor of the adoption and or focuses on workplace strategies as a business tool.

The book makes use of the technique of using so-called experts with high profiles to support this thesis. Dr. Michael Hynd of Scottish Enterprise discusses multiple perspectives of the workplace. In his paper he discusses the need to change mindsets of employees in order to successfully obtain buy-in of these workplace strategies. Additionally, he points to the need to separate workplace strategy initiatives from the need

to reduce real estate assets. Dave Woods, from the Ministry of Defence discusses managing cultural change and Lawrence Woodman of HM Treasury focuses on 'What I might have done differently.'

Another chapter focuses on the government as trendsetters and how the use of the workplace is part of this. The rest of the book examines case studies within the public realm that supports this viewpoint, as well as protocols and examples of 'working without walls.' It concludes with the steps necessary to achieve the goal of 'working without walls' by creating workplaces that represent new ways of working. And as with the UK energy organization document, there is a section focusing on the need for and the role of change management initiatives as a critical component of initiating workplace strategies.

Global Professional Services Organization

Two pieces offered were a power point presentation focusing on the results of focus groups using 'future leaders' on specific workplace perceptions; and a Pocket Guide to Hoteling that is available at all locations to explain how to make use of the hoteling workplace concept.

The Guide is purely a descriptive tool to assist employees in working in these new environments and covers a range of topics from 'checking in,' 'reserving a workplace,' 'checking out,' and concludes with a section on 'frequently asked questions.' Its purpose is both as an instructional document (an owner's manual of sorts) and a means to establish protocols to be used by employees in engaging in work at these facilities.

The power point presentation was provided to me as a document demonstrating the organizations employee support for the success of their workplace strategy. It shows results of company wide focus groups conducted with interns who the power point identified as 'future leaders.' The survey covers three geographic locations: New York, Chicago and

Los Angeles. The mean age of the focus groups was 21.5 years of age and examined five areas of the workplace, ranking them in levels of importance to the participants: collaboration (formal and informal), space that supports work processes, upbeat office, safety and accessibility to senior management. It summarizes the findings both by city and by practice area.

By city, the area of most importance to each was collaboration, though accessibility to senior management was ranked equally high by the LA office (while the other offices ranked that far lower in importance). Many of the regions showed similarities in responses, with some significant differences to importance of privacy, hierarchy, and sustainability between the three. In these areas, Chicago was universally ranking these areas lower in importance.

The practice areas included Assurance, Tax, Advisory and IFS. There was relative consistency between responses across these practice areas, with all agreeing on collaboration as being the most important feature.

When examining their reaction to the actual work environments vs. expectations, 37% of the participants rated them as 'somewhat exceeded.' Greatly exceeded was ranked only at 20%, below the 27% for 'met exactly' and somewhat above the 15% for 'somewhat met.'

What is striking about the surveys is the closeness of many of the rankings. With exceptions between practice areas there was not a great deal of difference between rankings of collaboration, work processes, stimulating offices and privacy. But more revealing was the ranking of the respondent's reaction to their actual work environments vs. expectations. At 37% for somewhat exceeded against 20% for greatly exceeded there could be some questions as to whether these facilities represent the resounding success that was being exclaimed during the interviews.

UK Financial Organization 2

Supporting their information from the interviews, the organization provided a power point presentation “The ‘Good to Great’ Challenge.” This document was used as a presentation given by Barry Varcoe, Head of Group Workplace Operations. The presentation offers their vision: ‘to be the most admired provider of operational workplaces in the world;’ their mission: ‘provide effective and efficient places, resources and information that encourages customers to do more business and colleagues to do work smarter;’ and objectives: ‘consume a reducing share of business operations expense; delivery of integrated workplace solutions tailored to suit varying customer, operation and staff needs; ‘a workforce that exceeds the organizations and customer expectations in our dynamic business environment;’ and ‘a bedrock culture of routine excellence and reliability.’ Briefly stated, the objectives span the range from intangibles to the tangible.

It goes on to compare the previous Group Operations business model with the current situation. The former model was a conventional structure with a tiered reporting structure. In contrast, the new model is hub based with the facilities service centre centrally located serving Management Solutions, Workplace Services, Workplace Projects and Workplace Operations.

The role of innovation was discussed relating stages of innovation (implement, support, drive) to goals (correct the worst problems, adopt best practices, link strategy with operations, and give an advantage). The resulting product is labelled as ‘uses of innovation: steps holding the organization back, be as good as competitors, be clearly the best in the industry and redefine the industry’s expectations.

Included in the presentation is another comparative analysis between a conventional workplace strategy with the current model based on distributed work models. It positions the conventional approach as a

strategy based on a universal open plan (one size fits all); stated the need for improvements based on the model not supporting the current business and where at any time of the day 50% of the workplace settings are empty. Based on this assessment, real estate is only 50% efficient in a normal workweek. This is in contrast to the finding that the universal open plan approach is quite efficient with an allocation of 8-10m per person.

The new way of working is reported to have a key issue translated as the need for a 'conveyor belt' design and delivery process. The presentation concludes with a stated objective of the workplace strategy as providing the framework where improved workplace design capabilities are established that test new ways of using the workplace more effectively to better support cultural preferences and the way the organizations employees work.

An interview with Barry Varcoe published in CoreNet's **Leader**, January 2006, the theme of innovation throughout Group Property was noted of prime importance: "innovation simply is embedded in everything Group Property does"(pg 49). To support that statement, Varcoe points to a key hire, John Hinks, and the development of an Innovation Council: "Very early on I recruited an innovation manager...John Hinks joined us from academia..."(ibid). The Innovation Council is composed of leaders from within Property's various teams and meets four times a year. Property also established a Workplace Innovation Centre within University College London at its Bartlett School of Architecture. Varcoe sees this as "...our formalized link, if you like, into the academic world...They obviously do pieces of research for us, but also are the fulcrum for us in making the most of all the research that's out there..."(pg.49-50).

In discussing the new headquarters in Gogarburn, Varcoe references as a sign of it's success, the blurring between the 'working day and the normal day' (pg 47). He associates the relationship between the

workplace and how people work and live: "...I think this works, because it more closely matches how people want to work and how people want to live"(ibid).

US Global Media Company HQ

A power point presentation prepared six months after occupancy by CRE to discuss the move to the new headquarters facility covers the spectrum of issues that touched the project. Focusing on the project's greatest challenges, co-locating business units, creating and re-defining workplace standards, mitigating the risk of partnering [co-ownership of the property], and maintaining control within a complex condominium structure was all cited. To support this, the presentation details the scope of these challenges such as 25,000 tons of steel and 62 miles of coaxial cable used in the buildings' construction. Within the Global Media Organization complex the CNN floor alone equals the size of a football field. All of these facts lead to the presentations claims of success as being attributed to the manner of the way the actual move was made, freezing all project changes 45 days prior to each move, and frequent and 'meaningful' communication with employees.

Communications is the focus of a number of the slides. Objectives cited are: generating employee excitement, and creating employee familiarity with the building and the neighbourhood. To implement this program, the team initiated focus groups, employee surveys, departmental presentations, executive and department head interviews and employee tours. Communication was transmitted through newsletters, a 'Move Essentials Kit,' promotional videos, special emails, on-line information, lunch meetings and working tours. There was a focus on the first day of work at the new facility. These included a welcome book and 'Picnic in the Park' tote bag [the facility is adjacent to New York's Central Park]. Additionally there were online messages from CEO Dick Parsons along

with a welcome desk set up in the building's lobby, as well as free lunch for all 1000 employees. To further the theme of success, the presentation notes the project being completed under budget and on time, an 'extremely high degree of employee satisfaction,' popularity of employee amenities all mixed in with facts and figures such as 181,680 meals served in the café, 6,522,252 elevator trips and 661,727 pieces of mail received and delivered.

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