

30 June 2003

Real Estate Continuity

Integrating Real Estate Strategy into Business Continuity Planning Critical in Contemporary Organizations

Highlights

- Although polls suggest large organizations have a greater awareness for the need for business continuity planning, the urgency seems decrease at the real estate policy level
- These results suggest a disconnect between business continuity planning and real estate strategy
- A jointly written US Federal Report released in 2002 suggests a framework companies can use to evaluate the appropriateness of a decentralization program
- Business continuity planning initiatives grew in days leading to Y2K; human element suggests real estate should be integrated into future planning
- The degree or magnitude of a decentralization plan depends on a number of factors that need to be placed within the context of a detailed cost-benefit analysis
- Factors to consider include employee analysis, role, degrees of importance of various job functions, as well as importance of firm within context of broader external network
- Planners need to logically assess risk of events of mass disruption whether they are natural, human-induced, or health-related
- Results of analysis determine whether to proceed with decentralization and how involved it may be (i.e. along what geographical lines, or "hot" or "warm" sites)

Tony Gill +1 905 940 5399 www.gillinc.com

© Gill Advisors Inc., 2004

Introduction

n the two years that have elapsed since the terrorist attacks, planners have had ample time to rethink the logistics of maintaining ongoing operations, especially in an era that

places particular emphasis on preparedness. Beyond a need to safeguard lives, and be more aware of how human elements impact organizations, decision makers now realize more than ever the importance business continuity. By recognizing the human element, organizations expand the boundaries of business continuity planning into other areas that were previously not included. Therefore, the field will move beyond a set of IT-based protocols, and short-term disaster planning initiatives, into areas such as real estate strategy. Accordingly, facility plans will be formulated to align with broader organizational mandates.

The primary purpose of this paper is to demonstrate the heightened importance of real estate policy making in a postterrorism, or post-health epidemic environment; given this importance, real estate planning needs to be more integrated into the body of business continuity planning.

Identifying the Gap

urveys are a good way to measure the extent to which change has occurred. Over the past year, a number of formal and informal polls have been conducted illustrating the importance of comprehensive business continuity planning within organizations; however, the degree of urgency diminishes when policy reaches the real estate level. To illustrate, one poll released in August of 2002 by Newstream reported that the attacks had significantly increased concerns about business continuity and recovery from disasters; another AT&T poll conducted on 1000 respondents revealed only 1 in 4 medium to large businesses in the United States had not yet formulated business continuity plans. The same survey found that almost 40% of companies with plans have created dedicated teams whose sole purpose is to focus on business continuity. Recent events such as the SARS scare in Toronto suggest that more companies will devise their own business continuity plans.

Somehow, this message doesn't seem to register in the minds of real estate planners. Consider the results of another poll that indicate senior executives in real estate based organizations are slower to adopt such planning initiatives. The poll, conducted by KPMG and cited in October 2002 issue of National Real Estate Investor (given to 21 senior level executives from real estate firms whose annual revenues equalled or exceeded \$500 million), revealed that many of these firms are in fact unprepared. The poll revealed the following:

- 53% of respondents had no preparedness plan in place
- Only 25% believe they have adequately prepared for a crisis
- 33% did not even rate crisis preparedness as a priority

An initial analysis of these figures suggests a few things. The fact that 33% do not rate crisis preparedness as a priority indicates real estate policy makers may not be fully attuned to the nuances and implications of business continuity planning. More significantly, this suggests business continuity planners, despite having devised an elaborate set of tools to ensure business operations remain smooth, have not adequately integrated real estate strategy into their planning initiatives. Therefore, we might conclude that there is presently a disconnect between business continuity and real estate planning, and this disconnect needs to be addressed in order to make both areas more strategic.

Given the widely held assumption that Canadians are more detached from the urgency of massive disruptions, the figures presented above could be even more pronounced if the same survey were administered here. The recent SARS epidemic in Toronto, for instance, caught a number of prominent companies off guard, despite having nearly two years to prepare thorough business continuity plans after witnessing the devastation and economic upheaval associated with the terrorist attacks.

The findings presented above should be troubling, considering the same study determined that 40% of businesses that experience disaster will go out of business within two years. The importance of incorporating real estate planning into broader business continuity initiatives should not be minimized. As organizations become more complex, real estate becomes an increasingly important component in the formulation of those plans. Some of the larger organizations previously located in lower Manhattan, have since launched comprehensive decentralization plans, and these examples become models for smaller firms who increasingly will include real estate solutions into their larger plans.

Overview of US Draft Resolution

he apparent lack of urgency suggested above might be attributed to soft economic conditions that place additional expenses under greater scrutiny. It could also be attributed to the absence of a methodology used to assemble a comprehensive plan. The first document that has been published that provides this needed framework is a US-based study released in August of 2002 that was jointly prepared by the US Federal Reserve, the New York State Banking Department, the Office of the Comptroller of the Currency, and the Securities and Exchange Commission. The purpose of the document was to provide larger organizations with a framework to ensure the following standards:

- 1) The rapid resumption of operations following either the loss of, or inaccessibility of staff
- 2) The rapid resumption of critical operations following a widescale disruption
- 3) That organizations properly anticipate such disruptions and operate with a high degree of confidence
- 4) In the event of a large scale event, systemic disruptions are minimized

Interestingly, many planning initiatives for such an event had commenced prior to September 11. In the late 90's, we started hearing predictions of a computer systems-associated disaster that would occur at the turn of the century. Accordingly, many firms started formulating comprehensive business continuity plans to deal with what would become known as the "Y2K" problem.

We interviewed a senior executive of one of the large financial institutions located in the affected area of lower Manhattan and discovered that within minutes of the first attack, his firm had put their shelved Y2K plans into immediate action. Months later, those plans were cited as being the most significant factor contributing to business continuity and recovery. The plans worked well, but now that organization, like many others, is aware that they need to be revised to address some of the vulnerabilities that the attacks exposed. This includes incorporating areas such as real estate into business continuity planning.

The joint document cited above revealed several vulnerabilities that were not anticipated. The most significant of these include:

1) **Previous instances of business continuity planning had never considered the possibility of wide-area disasters** and the major loss or inaccessibility of crucial staff. Generally, earlier plans focused on a single building or system. No plans were made for an entire district, which effectively renders continuity planning on a one-off basis useless.

- 2) Market-based and geographic concentrations amplified the magnitude of disruption. Increased implementation of corporate "clustering" was a key driver of this factor. Also, increased concentrations often resulted in inadequate telecom redundancy strategies.
- 3) It compellingly demonstrated that many organizations, particularly financial institutions operate within a network of many system participants. This implies that business continuity planning cannot take place in isolation of other participants.

Impact of Dispersal Factors

eal estate plays an important role in the preparation of a business continuity plan. Because it is a long-term investment, real estate becomes a key foundation upon how such a strategy is launched. Therefore, an organization must consider a range of possible location scenarios. For instance, what degree of decentralization should be adopted to maximize a firm's longer-term strategic vision? Should secondary facilities be established in suburban or semi-rural locations, or does global expansion to far-away locations where the firm implements a 24/7 "follow the sun" strategy (i.e. one that has fully integrated business data duplications and functions in different countries) make more sense? According to the recommendations made in the joint Federal report cited above, the answer to these questions requires an analysis of the nature of operations, as well as a determination of the position this firm may occupy in a broader array of network participants.

If plans are made to establish alternate sites, a firm must decide the extent to which these facilities will be staffed. As the need for business continuity planning becomes more critical, several organizations now weigh the pros and cons associated with "hot" (fully staffed) and "warm" (lightly or occasionally staffed) sites that will provide backup facilities to maintain business operations. September 11 has actually spawned some interesting examples of back-up space. Consider GE Capital, for instance, who now can provide a distressed organization with a fleet of 18-wheel tractor-trailers outfitted with desks and workstations that can be activated simply by connecting the trailer to a post. For the purposes of this discussion, our emphasis is more concerned with longer-term plans that are more permanent in their scope.

A good starting point in policy formation is determining the usefulness of moving a primary site out of an established central location, or separating a single location into multiple locations. This can be accomplished with a sound cost-benefit analysis that might incorporate some of the following factors:

- Number of employees by role and department
- Defining specific function of each department
- Developing a hierarchy of importance of departments/jobs within subject organization
- Defining degree of employee interaction that occurs; % of projects are completed on individual basis vs. team basis
- How do the activities of subject firm affect activities in other industries
- Defining the maximum amount of permissible downtime, on company-wide and departmental basis
- Where do employees live? How long is commute?
- How easy or difficult to replace employees (make assessment on a departmental basis)
- What are existing real estate costs
- What are real estate costs in potential secondary locations
- Who are the firm's customers? Where are they located (local or global)
- Does most client interaction take place within facilities or at client locations

These factors also need to be evaluated alongside a risk analysis of any of the following events of mass disruption that may affect a particular area:

- Natural disasters (floods, earthquakes, ice-storms, etc.)
- Human Induced disasters (weapons, chemical, biological)
- Health Epidemics (SARS, West Nile Virus)

Any moving-related advantages must be weighed against not only the financial costs of separation, but the positive factors associated with being centrally located. There are obviously very sound business reasons for being centrally located, including proximity to clients and customers, however, as the organization assumes an expanded suite of roles and responsibilities, the opportunities to decentralize expand. For instance, larger organizations that have major research and development operations (generally comprised of major knowledge worker concentrations) are often located away from central business districts (CBDs) and large population clusters. Often, these are located on remote outer locations, known as "Greenfield" sites, where design build projects are completed to the precise standards of a target organization. Whether a firm is large or small, a careful evaluation of the operations and

Degrees of Geographic Dispersal

Realized to their fiduciary responsibilities a financial institution. These organizations, after all, handle the public's access to their money is maintained without disruption and that their balances are correct. They also need to maintain the integrity of their other fiduciary and regulatory responsibilities.

According to the US federal report cited earlier, some institutions are establishing broad national footprints for some of their key business lines. The relative importance of that line of business determines the degree of decentralization. The decision to set up a secondary location is determined by weighing the costs of that site against the relative importance of that line (i.e. the risk of that area becoming disabled). The report defines the following business continuity models characterized by the these types of decentralized locations:

1) An Active/Backup Model

This is an example of a traditional decentralized model used by larger organizations. It is comprised of an active operating facility with a corresponding backup facility (also known as a "warm" site) for data and operations. This model relies on the relocation of staff from the active to the backup site. On September 11, one of the significant firms (a prominent securities trading firm) affected by the attacks put this plan into immediate action and had its entire workforce move to the data/operational site in nearby New Jersey.

This strategy limits the degree of geographic separation that is permissible due to employee mobility constraints, and in the case of a wide-area disruption, the facilities may be inadequate to meet demand during a disaster. The company mentioned above provides an example of how such problems manifested themselves in a real-life situation. When the firm was devising plans for new facilities in the months following the attacks, all employees remained at this one operational centre. The conditions were described as being so cramped that "they made the most notorious textile sweatshops seem like executive penthouses."

2) An Active/Active Model

This is where two or more widely separated active sites are put into operation; the backup location in this case is referred to as a "hot" site, because it is fully staffed on a 24/7 basis. The advantages of this model are numerous and include the following:

- These facilities provide backup for one another; within the banking industry, these locations are often hundreds of miles apart, and will often extend beyond national boundaries. In this situation international workloads are shared among sites from different countries.
- This strategy virtually ensures close-to-immediate resumption capacity
- It addresses some of those vulnerabilities identified in the business continuity section (i.e. eliminates dependency on a single location and provides diversity to other locations, reduces the likelihood of telecom single point failure, and it supports maximum geographic separation)

The costs related to such an undertaking are significant. These include costs associated with maintaining excess capacity, maintaining highly trained people at multiple sites, as well as increased expenditures on technology. Given the complexity of the dynamic presented above, some institutions are formulating a hybrid version of the above models. For example, some are periodically making backup sites primary sites.

Organizational Interrelatedness

n a pre-attack or pre-SARS world, the idea that firms would have knowledge of each others business continuity plans would seem absurd. The lack of mutual coordination, as it turned out was a significant vulnerability factor exposed in the aftermath of September 11. The primary lesson learned was that depending on the complexity of a firm, future organizational planning could not occur in isolation if that firm operated within a system of many participants.

For example, the financial system operates as part of a network of interrelated markets and participants. Such interrelatedness suggests that the actions of any participant within this network can broadly impact the entire system. The Federal report was written because some activities are so critical to the operation of the financial system that plans need to be formulated to ensure these remain in continuous operation, even in the event of a large-scale disruption. The report suggests that the resilience of the entire financial system rests on the timely recovery and resumption of critical financial markets. If operations need to be kept in operation, it provides a compelling reason to decentralize facilities.

Defining a Three-Tiered Hierarchy

he Federal report pointed out that different business lines may require different recovery times, as some activities may not be as important as others. With this in mind, the report defined a three-tiered hierarchy that identified the nodes most susceptible to systemic risk ("Systemic risk" is defined as the risk that the failure of one participant within the grid would cause the other participants to be unable to meet their obligations), these were:

- 1) *"Critical Markets" ("Critical")*: these firms provide means for banks, securities firms and other financial institutions to adjust their cash and securities positions to manage risks associated with their businesses. In the US, these include the markets for federal funds and foreign exchange, as well as government or corporate securities.
- 2) *"Core Clearing and Settlement Organizations" ("Core"):* these consist of those financial system "utilities" that mostly provide clearing and settlement services for financial institutions; the dimensions of these firms systemic risk would likely be national and even international
- 3) *"Firms that Play Significant Roles in Financial Markets"* (*"Significant"*): these are the firms whose volume of business makes them significant; these would include many if not all of the 15-20 major banks in the US as well as the 5-10 largest securities firms

This model shows that the sudden disruption of a few firms can have systemic effects that can create market-wide implications. The "core" firms within this model are places where a single point of failure can create massive disruptions, thus there is a greater urgency for these types of organizations to make large-scale business continuity plans. "Significant" firms should develop business continuity plans should their primary sites become inaccessible.

Creating Backup Sites

Some of the "core" firms within the financial industry who were directly impacted by September 11 have now established remote back-up facilities in some cases hundreds or even thousands of miles away from their primary site. In order to successfully implement this strategy, they have taken a more national, or multiregional approach to their business operations. Once these changes take place at the strategic planning level, it makes it much easier to deploy a decentralized strategy. One of the major challenges in achieving an optimal model is assuring that out-of-region staffing meets the rigorous requirements of staffing in a central area.