White Paper

CA XOsoft Solution

An Investment Management Approach to Business Continuity

January 2007

TABLE OF CONTENTS

Managing Risk: A Test of Leadership

Business disruptions, especially major ones, impact more than just operations. In fact, there is evidence of strong correlation between how a company responds to a disastrous event and its valuation by the market. A decade-long research effort has found that management's ***handling*** of "a disaster is a much stronger determinant of recovery than the direct financial consequences of a loss." The foundational study concludes that the impact "springs from what catastrophes reveal about management skills not hitherto reflected in value."[1]

Executives themselves concur. According to Accenture's 2006 executive issues survey, managing risk led the list of executive concerns this year.[2] Why this growing concern? While it may seem that the world is becoming a riskier place, the factors that leap first to mind, such as geopolitical stability or environmental degradation, are not the main drivers of business risk.

Risk avoidance and transfer approaches are no longer sufficient mechanisms for coping with unforeseen but probable disruptions to your business continuity. A paradigm shift is required, driven through insightful leadership. Clearly, the ability to lead a company in actively assessing, managing, and responding to risk *will* be on the test.

Where the Risks Lie: Top- and Bottom-Line Impact of IT Disruption

There are obviously myriad sources of risk in today's complex model of business, and it is impossible to identify a single category as consistently more important than others. In broad terms, however, risks may be categorized with the trends which give rise to them. For example, globalization yields a far greater sensitivity to geopolitical events and cultural issues, and value chain disaggregation gives rise to significant issues of security and new kinds of competitive threats. On this basis at least, the category of IT risk may be presumed to be important.

The fact is that all these trends are largely fueled by information technology at every scale. In many cases, the business model itself is built on IT capabilities. As a result, the disruption of IT systems becomes a threat to the very heart of the business. The potential impact is further heightened by increasingly tight integration of IT resources and individual business processes. This integration increases productivity, but also exposes the process to the threat of drastic productivity loss when the process or its data are unavailable. Finally, the impact of IT service disruptions is enhanced as well by a significant rise in expectations of availability. Where once limited hours and uneven availability were the norm, today's consumers increasingly expect continuous access to many of the services they utilize, and a 24X7 business necessarily requires 24X7 access to the critical services on which its own model depends.

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[1] *Protecting Value in the Face of Mass Fatality Events*, Rory F. Knight & Deborah J. Pretty, Oxford Metrica, 2005 (www.oxfordmetrica.com/pdf/OMMassFatalitiesBriefing.pdf); *The Impact of Catastrophes on Shareholder Value*, Rory F. Knight & Deborah J. Pretty, Templeton College, University of Oxford, 1996 (www.nrf.com/Attachments.asp?id=12546).

[2] *Managing Risk Ranks as the Top Priority for Senior Executives, Accenture Study Finds,* Accenture Press Release, September 19, 2006 (newsroom.accenture.com/article_display.cfm?article_id=4415).

How Do Increased Risks Translate to Business Costs?

Broadly speaking, business risk falls into three categories: *operational* risks related to the effectiveness of regular operations and processes; *financial* risks associated with public markets, liquidity of assets, and credit; and *strategic* risks associated with the longer-term performance of the business and business model.

The studies cited in this paper indicate that business disruption due to IT system failure can absolutely give rise to significant financial risk. To the extent that the business model or cost structure are of strategic value and depend critically on IT capabilities, inadequate IT continuity measures can have strategic impact as well. Of course, IT system disruption is most clearly associated with operational risk, and measuring impact there is straightforward. If systems are down, there will be lost revenue due to the inability to service customers, reduced productivity while employees are idle or shift to lower-priority tasks, and increased costs to recover afterward. In the longer term, the business may face decreased sales and increased marketing costs due to damaged reputation or brand, or to a decrease in customer satisfaction. Corporations may also face legal liabilities due to compliance failure.

It is very important to note that these consequences need not only result from an actual “disaster”. The fact is that business systems are likely to experience significant downtime on a regular basis due to low-level and more frequent disruptions resulting from user or software error or even from planned maintenance operations.

Clearly, the risk of IT system disruption, whether catastrophic or mundane, is a critical and high-level concern of businesses today. The question is how to manage that risk.

A New Old paradigm: From Managing Risk to Maximizing Return Under Uncertainty

In a complex and rapidly changing environment risk management is no longer a question of preparing for eventualities, but of learning to operate in a world where uncertainty, and hence risk is a fundamental characteristic of the environment. This requires a new paradigm.

A well-understood paradigm that fits this situation nicely is that of investment management. Simply put, from an investment management perspective, the task is not to *minimize losses* in the (presumably unlikely) event of some disastrous occurrence, but rather to *maximize return* on all investments over all contingencies. It may not seem much of a stretch to apply this view to risks associated with innovative business strategies and new ventures. But this is not a typical way of thinking about disaster recovery protection for IT systems. Nevertheless, when IT is a critical part of the infrastructure that powers and connects key elements of your business model, an investment management approach is of tremendous value.

This is more than simply requiring that IT managers “make the business case” for their DR initiatives. The fact is that there are so many sources of disruption, from major disasters to user mistakes to virus attacks to regular maintenance, that downtime is an inevitability. The question is no longer whether, but how much. Viewed from this perspective, business continuity and high availability solutions are essentially techniques to improve the “yield” of the business or business process in terms of standard business output measures, such as cost, revenue, productivity, capacity, etc., just as an investment strategy seeks to improve the yield of a fund.

The question, of course, is how to go about making the shift into this new paradigm.

Execution: Steps Toward a Risk-Resilient Culture

First, leadership and solid business acumen are key. This is in part because poor corporate “recovery” performance will necessarily be laid at the feet of top management, whether over the company's response to a major disaster or simply the accumulated drag of a thousand tiny missteps. Even more important, the new paradigm is not a natural one for most of us – we resist the need to embrace uncertainty rather than eliminate it. As much as anything else, building a culture that can operate effectively in an environment of uncertainty is about helping people learn to think differently, and to integrate the new way of thinking into the operational DNA of the company. This kind of change requires strong leaders at the highest levels.

Next, make disaster recovery and business continuity about performance above all. This means that requirements for DR and availability planning must be driven by the same performance measures as the business. How do they impact productivity or capacity? How will they enhance or drag down growth? Can they be used to improve customer satisfaction or build brand? Some projects may require thinking about these measures over somewhat longer timescales than is usual, but investment thinking is usually about balancing performance over a range of timescales.

An early task, of course, is to assess where the company is now. What is known about the impact of disruptions to IT services on business process performance? Is business continuity planning currently being done? How well integrated is the BCP effort with operational staff and planning? What is the basis for BC planning? Is the focus primarily on major events or is it typical to consider a broad range of sources of disruption? Is DR planning focused on backing up or recovering? Surviving or thriving? How vital are the plans – is testing performed regularly? Are plans updated frequently? In short, where are you starting from?

Going forward, make sure that technical and management leadership is in place, people who understand how to move beyond risk reduction. Look for opportunities to actively apply and demonstrate the new way of thinking. Look for easy wins – the simpler, the better – for opportunities to introduce productivity-enhancing solutions on a small scale. For example, it may be possible to protect a few critical servers before taking on entire processes. The key point throughout is to introduce changes that have measurable impact on the overall performance of the process.

Finally, make sure that planning for new purchases and new processes and systems regularly incorporates availability planning as a standard component, with the utility measured in terms of the impact on standard business performance measures over a range of contingencies.

Additional Resources

Disaster recovery, business continuity, and high availability technologies are rapidly evolving, but there is a wealth of resources available to track the latest trends. Here are a few that you may find useful.

- CIO magazine.
- SearchStorage.com
- Disaster Recovery Journal (www.drj.com)
- Search engines
- Vendors
- CA XOsoft Step-by-Step Guide to Disaster Recovery Planning

You can also find a number of other useful resources on the CA XOsoft web site. Many provide in-depth information on the CA XOsoft products for continuous availability of mission-critical applications like Oracle, SQL Server, Microsoft Exchange, web servers, file servers, and others. In addition, you will find a number of useful recorded seminars on topics, including:

- Building the Business Case for Disaster Recovery Planning
- Determining the Right Kind of Disaster Protection for Your Organization
- A Step-by-Step Guide to Disaster Recovery Planning
- Myths & Facts: Coping with the Most Common Causes of IT Disasters
- A Katrina Survival Story: DR for the Real World

Other CA XOsoft Products

CA XOsoft offers several other products to protect access to your critical data and applications, as well as to add value through fast and completely flexible content delivery. Please check out our website or contact a CA XOsoft representative for more information.

A 14 day trial evaluation of the software is available for download at:
http://www.caxosoft.com/download/index.shtml

About CA XOsoft

CA has extended its storage management portfolio with the acquisition of XOsoft, Inc. The acquisition enables CA to offer a complete recovery management solution that allows customers to reduce the risk of data loss, reduce the time spent on backups and accelerate recovery of critical business services. CA will integrate XOsoft's products with BrightStor ARCserve Backup to deliver a complete solution for protecting and recovering critical applications. Using XOsoft's patented technology, CA also will develop a next-generation information protection platform to unify and simplify enterprise recovery operations.

XOsoft develops and markets Continuous Application Availability software solutions that minimize application downtime and accelerate time to recovery. Founded in 1999, XOsoft is a leading provider of continuous application and information availability solutions that fully address business continuity, disaster recovery, continuous data protection and content distribution needs. XOsoft products ensure uninterrupted access to all types of file and application servers, including Microsoft Exchange, Microsoft SQL, Microsoft IIS, and Oracle, and allow instantaneous recovery from any type of disaster. Please visit http://www.caxosoft.com.