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WHITE PAPER

The Great Realignment: A Radically Changed Economy Demands New Approaches to IT

Sponsored by: HP Financial Services

Joseph C. Pucciarelli
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IDC OPINION

Most of us intuitively sense that the current period of economic volatility demands new approaches, new thinking. We understand that any economic downturn accelerates the introduction of new technologies, best practices, and business models as organizations struggle to balance the risks and opportunities inherent with constrained resources and reduced business demand.

But this is not just "any" downturn.

IDC believes it is a veritable 100-year economic storm — and that business and IT organizations must act now, even as the storm continues, to address its implications. The importance of prudent stewardship of capital cannot be overstated because capital constraints increasingly shape IT strategies. In IDC's view, the resulting business realignment will directly impact more than 60% of the world's economic output. These stresses, when contrasted with emerging IT technologies including virtualization, software as a service, cloud computing, and second-generation enterprise resource planning (ERP) systems, have fomented a situation akin to IT's most recent burst of innovation and creative destruction — the dot-com era.

Fueled by mushrooming Internet acceptance and powered by a fresh, Y2K-revitalized IT infrastructure, dot-com companies such as Amazon, eBay, PayPal, and Google redefined business segments. Second-generation Internet companies such as MySpace, Facebook, and Craigslist continue to shape — and redefine — industries.

The current economic storm will have no less significant an impact on the business landscape.

IDC recommends that business leaders and IT professionals closely monitor — and perhaps even map — the impact that changing business requirements impose on IT services and assess how rapidly evolving IT technologies and new IT business models (e.g., virtualization, next-generation datacenters, cloud computing, and second-generation ERP systems) will be deployed. IDC further recommends they reevaluate IT investment strategies with an eye to taking advantage of flexible financing options that can preserve precious capital and reduce technology obsolescence.

The realignment offers real opportunities to elevate an organization's IT services delivery functionality and cost equilibrium. Emerging IT financial management processes will support IT organizations as they provide the type of business value and performance metrics demanded of other business functions. The time to act is now, as the economic changes begin to manifest themselves.

Global Headquarters: 5 Speen Street Framingham, MA 01701 USA P.508.872.8200 F.508.935.4015 www.idc.com

IN THIS WHITE PAPER

Organizations worldwide confront unparalleled pressures to rapidly change and adapt, which IDC defines as the "Great Realignment."

This white paper puts into perspective the period of transition that organizations are experiencing today and how IDC believes their reactions to changing pressures will define their ultimate success or failure in a rapidly evolving market. The document explores the role of technology in fomenting change and innovation and IT's critical role in helping organizations survive and thrive. In this document, IDC specifically examines how the current economic conditions are like a 100-year storm, with more than 60% of worldwide economic activity facing pressures that are at an all-time high.

Further, this document demonstrates that traditional IT investment models cannot effectively serve organizations in an environment of constrained capital and rapid technological change. IDC asserts that business and IT leaders need an improved framework for running their business. Proving business value through performance metrics, demand and resource loading analysis, and financial transparency will be essential — and an improved IT infrastructure is the only way to satisfy these growing demands.

IDC recommends that business and IT leaders redouble their efforts to connect their business processes with their IT structures as a means to bridge this economic storm. The link between the two is critical.

In summary, IDC recommends that business and IT leaders come to terms with the inevitable — that they are in a period of potential industry realignments. It is a time to be on high alert to industry, customer, and business partner realignments and recognize how these changes will shape business and IT outcomes.

SITUATION OVERVIEW

The global economic volatility that began in 2008 has triggered a cascading series of market realignments and new regulatory frameworks that will continue to play out in the months and years ahead. Numerous industries are being realigned as a direct result of this 100-year storm, including financial services, automobile, and construction. Other industries potentially facing new regulatory frameworks include energy (shift to renewable sources), healthcare (potential new requirements at the state level and the federal level, including a shift to universal electronic records), and utilities (regional requirements for new smart grid requirements).

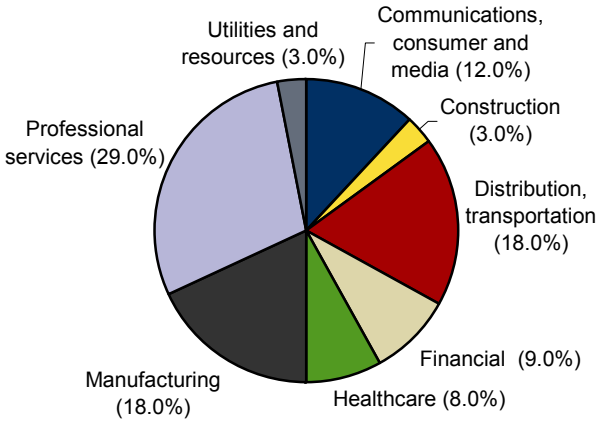
As companies confront the changes wrought by constrained capital markets, constricted consumer demand, new legislative requirements, or changed economic circumstances (such as a bankruptcy or an acquisition/divesture), each will respond in its own way. This creates a cascading series of changes, or "realignments," throughout the entire business ecosystem.

Understanding the World's Economy

To better frame the scope and scale of how business can be affected, and the resulting impact on IT services, Figure 1 characterizes economic activity and gross domestic product for each of the major industry sectors within the United States during 2008.

FIGURE 1

U.S. GDP Percentage of Total by Industry Segment



Source: IDC, 2009

Examining industry sectors within Figure 1, and contemplating the impact of each of the following three categories, leads to a dizzying assessment of the new business landscape:

- Changing demand, requirements, and fulfillment for both customers and suppliers
- Economic transitions such as bankruptcy, mergers, acquisitions, and divestures
- Expanded regulatory frameworks such as privacy, green, and transparency

CHANGE IS NOT AN OPTION; IT'S A LIFELINE TO SURVIVE

Usually — whether in biological, technological, or business ecosystems — change is constrained, incremental. Rarely are there convergences that cause multiple industries to be confronted with change in a relatively short time span. Therefore, most often it is best to approach change narrowly, incrementally. In some situations, it is even possible to wait until the imperative to change becomes so blatantly obvious that the correct course is equally obvious.

In times of rapid — even radical — change, however, a failure to respond quickly and adequately can be fatal. Consider the following examples of business change in other industries.

In the automobile industry, divestitures such as Jaguar's sale to Tata or Chrysler's bankruptcy and subsequent alliance with Fiat are far more than examples of shifting ownership. Similarly, General Motors' radical restructuring cuts far deeper than the disappearance of the century-old Pontiac division. IDC believes these realignments have the potential to change these companies to their very core.

In the energy segment, power utilities are rapidly shifting from a largely passive electric transmission grid to one that actively monitors and responds to changes in load, generation resources, or transmission capacity. This "smart" infrastructure capability portends new business models for both the utilities and a host of companies engaged in developing elements of the "smart grid" or devices that might interact with the grid in ways not yet imagined. In the healthcare sector, the shift to electronic records means far more than just automating a manual task — again, it portends fundamental changes in operational business models for providers, insurance companies, and consumers themselves.

INFORMATION TECHNOLOGY'S EXPANDED ROLE

The first major application of IT to functions such as payroll started only 50 years ago — bringing with it fundamental changes in business processes. The first real-time, company-spanning computer systems came online fewer than 15 years ago. Most organizations still rely on their first-generation ERP system, albeit with upgrades and changes, to keep pace with business demands.

Within the business and IT communities, the idea that IT "enables the business" has been repeated so many times that it has almost become trite. In reality, IT "is" the business because, in the modern context, IT systems have evolved for most organizations to fulfill three specific roles:

- **Internal communications infrastructure.** IT systems have largely supplanted printed documents, and even personal interactions, to convey real-time status information. Of significance, these systems can assemble and present data to different people in different ways to enable them to complete their task — while maintaining the underlying data integrity.
- **Requirements manager, resource manager, and performance monitor.** Beyond facilitating the accumulation, transmission, and presentation of data, IT systems have become principal tools to enable the following:
  - The process of eliciting, documenting, analyzing, prioritizing, and agreeing on requirements and then controlling change and communicating to relevant stakeholders the deployment of organization resources — be they financial, inventory, human skills, production resources, or IT
  - The organization, automation, and analysis of business methodologies, metrics, processes, and systems that drive business performance
- **Change management.** The essence of survival is the ability to seek, sense, and then respond to an external stimulus. For most organizations, their IT infrastructure plays a critical role in efforts to transition individuals, teams, and business from the current state to a desired future state.

As sweeping as the scope of IT systems has become, it is clear that social networking tools will play an increasingly important role in facilitating communications with employees, customers, and business partners. These tools are reshaping requirements, resource, and performance management and creating new and perhaps more effective change management processes.

IDC believes the critical issue through this next planning period will be IT's ability to reconfigure itself to enable the changed business processes — driven by market requirements to adapt rapidly.

FUTURE OUTLOOK: HOW BUSINESS AND IT WILL TRANSFORM

A wide range of new technologies are on the horizon:

- Forthcoming second-generation ERP systems that will fix the single most frequently cited complaint about first-generation systems — their lack of flexibility and changeability
- Tools to manage, analyze, and apply unstructured data such as video (IDC estimates that by 2012, the end of the planning period, 76% of enterprise data will be unstructured data — challenging traditional, file-based analysis tools.)
- Expanded application of benchmark data and process models to improve enterprise process measurement and execution of "soft skills" or internal processes

While these new technologies promise to fulfill the basic charters of IT — that is, to facilitate and enable communication and business management — perhaps the most revolutionary aspect is more of a change in IT business models than a technology.

As the dot-com era ushered in an array of new technologies and business models, it also presaged a new IT business structure — the outsourcing business model. Many organizations embraced outsourcing — both to accelerate innovation and to reduce IT budgets. Others struggled with various aspects of the IT change this transition heralded, not the least of which was total spending. Prior to ERP systems delivered over distributed computing networks, many companies' IT spending averaged 1% of revenue. Following implementation of the new systems, IT spending often rose to 2.5% — a massive shift of business resources and priorities.

The modern IT environment has been characterized by low device utilization levels. From x86 server utilization levels below 10% to datacenter-class storage devices with less than 20% utilization, inefficient devices made IT an inefficient user of business capital. And, during the past 10 years, this has proved to be a growing problem, as spending for IT equipment and software often exceeds 40% of spending for all equipment.

IDC believes that capital constraints increasingly will shape IT strategies and business models — with cloud computing being a focal point. The rationale is simple, compelling, and straightforward: While IT remains a major "consumer" of investment capital, its low average device utilization makes it an inefficient user of that capital. With business capital at a premium — and likely to remain so through 2012 — IDC believes that IT will be increasingly challenged to make platform and investment choices that use capital more efficiently.

IDC believes that IT outsourcing and cloud computing should be thought of as business models. At this particular time, the value of business capital is at a premium. Business leaders, in spite of the technological limitations, will enthusiastically embrace a business model that provides alternatives.

The immediate challenge for business and IT leaders, as they struggle with the onslaught of new IT service requirements, will be coping with the pressures to change and evolve the IT business model. For these reasons, IDC believes that the most important change facing IT organizations is to articulate their IT "financial architecture" with their technology plan.

IT FINANCIAL ARCHITECTURE

Coping with the Great Realignment will challenge business and IT leaders in profound ways. IT leaders need a better business, technology, and financial framework on which to run their internal IT businesses. Although most CIOs have a good handle on their technology and business requirements, IDC believes existing IT financial management processes are still inadequate for most IT organizations as they strive to provide the type of business value and performance metrics, demand and resource loading analysis, and financial transparency demanded of other business functions.

As IT capabilities become evermore integral to business operations, the need for expanded financial analysis tools similarly has grown. Enterprise financial systems, built around cost centers, lines of business, and "corporation codes," do not map to IT's requirements. A sound IT financial architecture should be able to answer the following questions:

- What are the capital funding requirements for major applications — not just IT devices but also datacenter facilities?
- What is the cost per user for major applications, and how will it change through the planning period?
- Is the IT capital planning and management process sophisticated enough to tune platform decisions? Should the related servers, software, and services be funded with cash or financed?
- How does IT's funding, leasing, financing, and outsourcing decision model integrate into the IT service management strategy?

In summary, IDC recommends that organizations immediately take steps to evaluate the business and IT changes necessary to support their evolving business requirements — and then take action.

CHALLENGES/OPPORTUNITIES

Embracing change amid an epic storm requires vision, leadership, and passion. Many — likely most — organizations already have been directly impacted. In fact, many IT organizations already have begun experiencing a building wave of IT service request changes. But the realization that the macroeconomic changes are rapidly translating into changed business processes, new IT service demands, and real challenges for IT organizations is just beginning to be internalized.

In this particular storm, access to investment capital poses an acute challenge. For many IT organizations, the most recent period of business expansion was accompanied by unusually low-cost and relatively easy-to-access investment capital. If a sound business case could be made, proposals were funded. But today's situation is markedly different. IDC believes that business capital will remain more costly through at least 2012.

Given this capital markets outlook, IDC recommends that IT organizations conduct a fresh, "no-holds-barred" review of requirements, constraints, and opportunities. Further, IDC believes it is essential that the needs assessment be accompanied by an equally aggressive, ground-up evaluation of IT funding and financing options. IDC research found that more than 40% of IT organizations typically lease some of their datacenter equipment. Their reasons for doing so include preserving capital and reducing technology obsolescence. IDC believes that a balanced assessment of current IT financing practices should be completed and then contrasted with funding resources and requirements.

IDC believes that through 2012, the percentage of IT organizations leasing or financing equipment, software, and services will increase as the world economy adjusts to the inevitability of more expensive capital.

CONCLUSION

Given the magnitude of the changes this storm is provoking, the implications are significant — and the time frame for action is very short.

Logically, for business and IT professionals, this economic uncertainty sparks an avalanche of new requirements that accelerate the introduction of new products, service delivery technologies, and business models. Most sectors of the economy already have been affected, and change requirements for IT services are already on the rise. IDC believes that we are at the front edge of a significant increase in IT change requirements. Further, the rising tide of requirements is not a one-time anomaly but a fundamental shift.

As organizations and as business leaders, we struggle to balance the risks and opportunities inherent with changes in the face of constrained resources and reduced business demand. Nonetheless, the cruel truth is that steps organizations take today — during the downturn — will have greater long-term impact on the business than actions taken during good times.

IDC recommends that business and IT leaders:

- Continuously analyze the degree of change impacting their industry, their customers, and their key suppliers; aggressively search out opportunities to use IT to gain strategic advantage by lowering costs, driving efficiencies, standardizing processes, and reducing waste.
- Map changing business process requirements against rising new technologies that promise to meet the organization's requirements for the next economic cycle — and be proactive; act now to prioritize IT investments based on business value, focusing on areas offering clear competitive advantage.

- Resist temptations to allow capital constraints to dictate the pace of your organization's IT transformation; flexible sourcing solutions — including financing, outsourcing, and the cloud — offer vast promise and an array of cost-saving alternatives to survive and prosper in the Great Realignment.

APPENDIX: HP FINANCIAL SERVICES

HP Financial Services is a unit of Hewlett-Packard Company and as such has access to the global capital resources consistent with an industry-leading firm with a market capitalization of approximately $100 billion. Delivering a complete array of leasing and financial life-cycle asset management services, the business unit operates in more than 40 countries around the world. HP Financial Services and its 1,100 employees manage nearly $10 billion in assets, provide financing of $5 billion a year in new customer acquisitions, and handle more than 1.2 million pieces of used equipment annually.

The company has four principal lines of business:

1. **Leasing and Financing.** HP Financial Services offers an exhaustive range of leasing and financing options tailored to specific HP products, as well as a broad range of structured IT leasing and financing options.

2. **Asset Recovery Services.** Because many IT implementations involve the removal of existing multivendor equipment, HP Financial Services offers closed-cycle equipment management services, including data wiping, disposal/recycling of obsolete equipment, and the related transportation and logistics options, on a global basis.

3. **Pre-owned Equipment.** HP Financial Services sells or leases a wide range of HP equipment that is certified, reconditioned, and under warranty.

4. **Transition Financing.** To enable business and IT change, HP Financial Services offers a range of change-enabling capital options, including financing for consulting and advisory services, IT consolidation financing, and sale/lease-back services.

Finally, HP Financial Services offers a range of IT asset management and Internet-based tools to assist customers in managing their leased assets.