



IT service management in an uncertain economy: Resetting priorities for healthcare providers

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Executive summary

Recent economic turmoil and uncertainty are driving important changes in how the healthcare industry and other industries invest in IT, according to a global survey of CIOs and other IT investment owners conducted by IBM during December 2008 and January 2009. The results indicate that organizations are reprioritizing IT projects in response to economic change, and that they are specifically using service management best practices to optimize IT-enabled business activities.

The survey consisted of blind interviews with IT investment decision-makers in 421 organizations, including 30 healthcare organizations. In other industries, those surveyed identified regulatory requirements and economic uncertainty as the top two business issues currently affecting IT investment priorities. It should come as no surprise that regulatory requirements trumped other issues among these respondents, given that healthcare was the target of one of the most sweeping industry-specific regulations to emerge in recent years, the Health Insurance Portability and Accountability Act (HIPAA). Even with these targeted industry-specific regulatory requirements, 63 percent of the study participants identified economic uncertainty as the second most significant business issue affecting IT investment priorities. The next most-mentioned issue, introduction of new technologies, was farther behind at 54 percent.

The current economic and market conditions that these organizations face have had a significant impact on enterprise budgets. But IBM's survey showed the opposite to be the case for IT budgets. 85 percent of IT decision makers in healthcare services reported budgets remaining relatively flat or changing only slightly. IBM believes that these IT investments are continuing because these organizations recognize that in uncertain economic times, IT services enable the organization as a whole to operate more effectively and efficiently

Highlights

Healthcare organizations are facing increasingly volatile conditions and changing business requirements—with relatively flat IT budgets for the IT services they depend on.

and also provide competitive advantage. The IBM study indicated that most organizations, globally and across industries, view the primary role of IT as providing quality and reliable IT services that support business requirements.

Leading CIOs are taking a business-driven approach to setting IT investment priorities today. This is a significant challenge because organizations as a whole are facing increasingly volatile conditions and changing business requirements—with relatively flat IT budgets for the IT services they depend on. In order to optimize the value produced from relatively flat IT investments, CIOs have to first ensure that the programs related to security and compliance are funded. After these required initiatives are funded, healthcare services organizations have a disproportionately high level of investment building out the technology infrastructure of their organizations. These organizations are continuing to invest in server deployment/consolidation, network convergence and other network changes, virtualization, storage deployment/consolidation, desktop, mobility, intelligent or connected devices, business performance management, and data center facilities.

Because of the regulatory requirements for IT services in healthcare organizations and the increasing cost and risk associated with this sprawling complexity, systems and service management improvements are also being funded to enable the IT organization to manage the digital infrastructure of the healthcare business that is being built out. As the proportion of digital healthcare records increases, so does the audit and business risk associated with the IT services that they depend on.

Highlights

Healthcare CIOs are driving a strategic and planned approach to building out the digital platform of IT services that the healthcare business depends on, as well as making corresponding investments to improve their ability to manage it.

Healthcare organizations are investing in better ways of managing the increasingly complex portfolio of IT systems on which the organization depends. Healthcare CIOs are starting to prioritize IT investments that will improve the quality and reliability of the specific IT services that support the most critical or regulated activities. Essentially, these CIOs are driving a strategic and planned approach to building out the digital platform of IT services that the healthcare business depends on, as well as making corresponding investments to improve their ability to manage it.

The impact of an uncertain economy on the healthcare industry

There is no question that recent economic developments have had a serious impact on the healthcare industry. Improving efficiencies and reducing costs have become more critical concerns than ever, as the demand for improvements in care delivery, compliance, and security and other key areas has increased, while sources of funding may have become scarcer. With this demand for organizational improvement has come an intense need to make costly investments in technology-driven areas such as electronic health record management, healthcare access management, healthcare asset management, and clinical application performance management. Nowhere today is the connection between business priorities and IT priorities, and between organizational achievement and IT investment, more apparent than it is in healthcare.

To succeed in these challenging times, healthcare organizations must build out and improve the digital platform that supports, enables and automates just about every process and service that is critical to delivering healthcare. The new healthcare infrastructure is not just the physical infrastructure, but also the digital infrastructure that in aggregate provides the integrated platform of IT-enabled business services that make up the organization. Organizations must therefore also invest in improving their ability to manage this critical healthcare infrastructure of IT services. This requires a focus on managing IT-enabled business services, rather than a technology-centric view of IT

Highlights

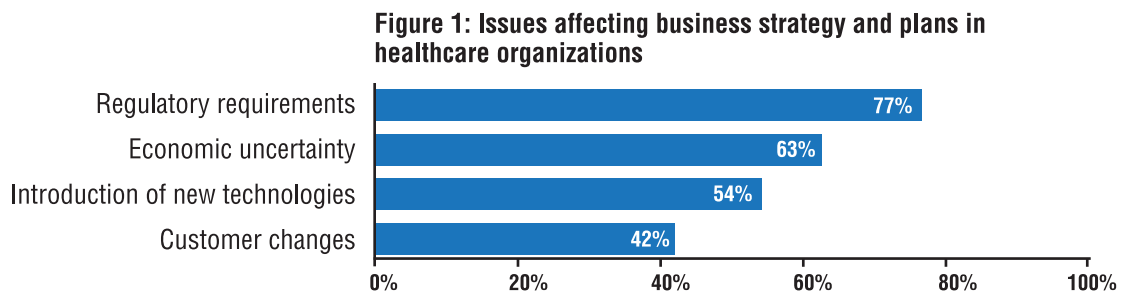
According to an IBM survey, IT decision makers in the healthcare industry are using IT budgets not just to make technology available and keep it up and running, but to make IT an enabler of organizational improvement.

priorities. As many organizations are now realizing, the integrated digital platform of the business increasingly enables competitive differentiation as well as better control of costs and risks. This foundation is critical to controlling costs and risks, growing market share, and improving revenue.

To find out how healthcare CIOs and other IT decision makers are navigating the economic turmoil and addressing the challenges of change, IBM surveyed IT and business leaders in charge of their organizations' IT investments. The results show that the uncertain economy is driving changes to business priorities and, in turn, IT priorities. Increasingly, IT decision makers are using IT budgets not just to make technology available and keep it up and running, but to make IT an enabler of organizational improvement. To accomplish this, they are reprioritizing IT investments to optimize key processes and specifically using service management best practices to improve the quality and reliability of the IT services on which the organization depends.

The effect of intense business requirements for IT

As Figure 1 shows, IT decision makers in the healthcare industry see regulatory requirements and economic uncertainty as the business issues having the greatest effect on strategy and planning in their organizations.



Source: IBM Market Insights, *Service Management in an Uncertain Economy*, January 2009.

Caption: Today, economic uncertainty is a leading external influence on organizational strategies and plans

Highlights

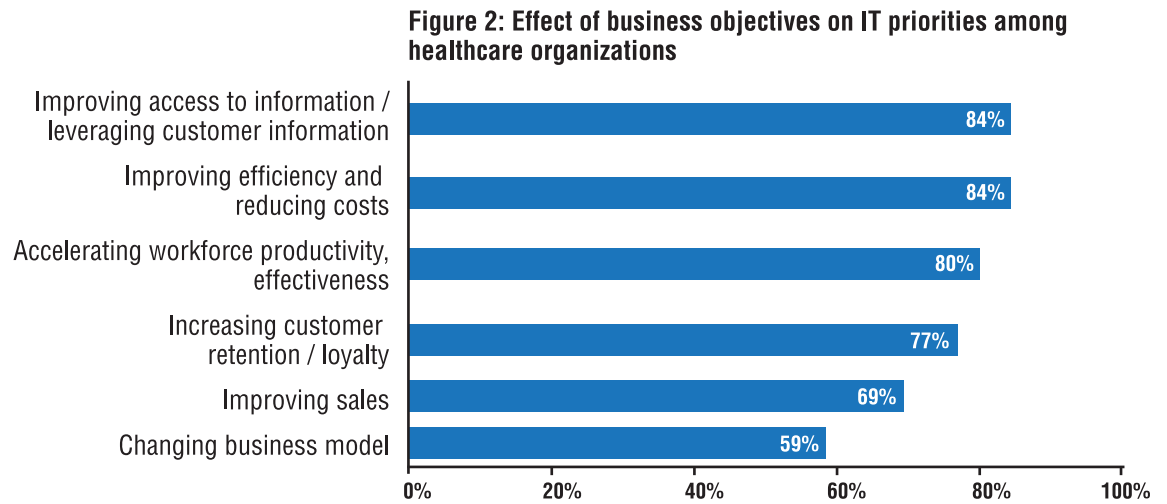
These organizations are recognizing that in uncertain economic times, IT services can become a catalyst for productivity and efficiency across the organization. Because of the costs and risks related to IT services, business investment decisions have put a disproportionately high priority on improving service management as a strategic asset. These businesses have realized that just cutting costs within IT has limited benefit and introduces unacceptable levels of risk to the entire organization that depends on the quality and reliability of IT services for efficiency, compliance, security and even competitive differentiation. If IT expenses are 2 to 4 percent of the revenue of a healthcare organization, cutting IT by 50 percent will yield only a 1 or 2 percent reduction, but will most likely expose the other 96 percent of the organization to significant new problems, unacceptable risk and competitive disadvantage.

Service management investments focus on improving service quality and reliability to enable cost reductions in the business activities they support.

Leading CIO's are responding to economic pressures by investing in smarter management practices to enable the organization to get more value from the capabilities and resources it already has. Service management investments focus on improving service quality and reliability to enable cost reductions in the business activities they support. Projects with significant capital expense are very often cancelled or deferred unless they enable smarter approaches to technology, such as standardization, rationalization, consolidation and virtualization of IT resources (network convergence, server consolidation, storage virtualization), and deployment of smart connected devices enabling enhanced workforce mobility.

Setting IT priorities to support business requirements

The process of establishing IT priorities to support business requirements begins with identifying the current business objectives and then determining the impact of those priorities on IT plans. In healthcare, IT decision makers identified the top objectives that impact IT priorities as improving access to information and leveraging customer information, improving efficiency and reducing costs, accelerating workforce productivity and effectiveness, and increasing customer retention/loyalty. Figure 2 indicates the percentage of IT projects continued, expanded or initiated as a result of the influence of these objectives.

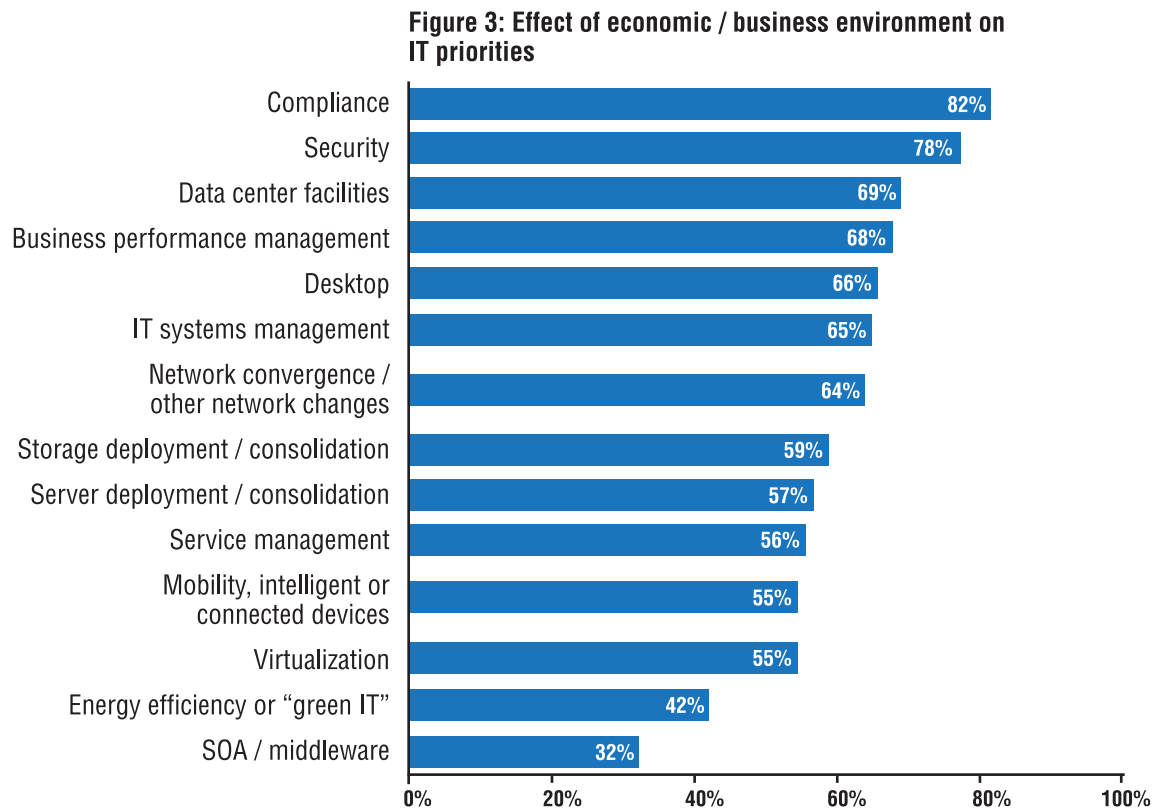


Source: IBM Market Insights, *Service Management in an Uncertain Economy*, January 2009.

Caption: Business objectives influencing which IT projects that are continued, expanded or initiated.

The next step in establishing IT priorities to support business requirements is to determine which critical healthcare activities depend on the quality and reliability of IT services, then to map those critical activities to the IT services that support or enable them. IT decision makers can then begin to reprioritize which IT projects are most necessary to produce the desired business results.

Figure 3 examines the effect of the economic and business environment on IT programs and projects, as expressed by the percentage of programs and projects continued, expanded or initiated in specific areas. It reflects the reality that there will always be mandatory areas that must take precedence; in the healthcare industry, these are compliance and security. They are followed by data center facilities and business performance management.



Source: IBM Market Insights, *Service Management in an Uncertain Economy*, January 2009.

Caption: The economic and business environment influences the deployment of IT programs and projects.

Network convergence ranks as a higher priority among healthcare organizations than among organizations in other industries, which is understandable given that the business infrastructure required to enable market survival is increasingly an integrated network for electronic communications and digital patient records. Today's healthcare business infrastructure is more about applications, information and supporting infrastructure configured as IT services than it is about buildings and offices. Building out this new infrastructure, and managing the cost and quality of this digital platform, is a top priority for leading CIOs today.

Smarter management of IT services is the top business-driven priority for IT. Service management builds on foundational capabilities—security, compliance and managing IT systems—that provide the basis for reliable IT services required by the organization. As shown in Figure 3, the percentage of service management projects continued, expanded or initiated as a consequence of the economic and business environment was slightly higher than the percentage in virtualization and mobility intelligent / connected devices, and much higher than that in areas such as green IT and service oriented architecture (SOA) / middleware.

Highlights

By integrating service management with consolidation, virtualization and other aspects of a dynamic infrastructure, healthcare organizations can improve service quality, reduce business costs, and manage risks.

As reflected in these figures, service management is the key to managing a dynamic infrastructure that can respond to rapidly and dramatically changing economic and business conditions. By integrating service management with consolidation, virtualization and other aspects of a dynamic infrastructure, healthcare organizations can improve service quality, reduce business costs, and manage risks. The following table lists the kinds of service management projects in healthcare organizations that were maintained, expanded or newly initiated as a result of new business priorities.

Objective	Approach	Priority projects
<ul style="list-style-type: none"> • Improve the quality or reliability of IT services 	<ul style="list-style-type: none"> • External provider for process design improvement • External provider for software implementation 	<ul style="list-style-type: none"> • Service level management • Event management and monitoring • Incident, problem and service desk • Service strategy, portfolio, catalog and service request management • Governance of service management • Performance and capacity
<ul style="list-style-type: none"> • Increase workforce productivity 	<ul style="list-style-type: none"> • Internal project to design process improvements • Service management software acquisition • Project with external providers to implement software and design process improvements 	<ul style="list-style-type: none"> • Education, training or briefing services • Incident, problem and service desk • Availability management
<ul style="list-style-type: none"> • Reduce or control costs 	<ul style="list-style-type: none"> • Internal process design project 	<ul style="list-style-type: none"> • Asset and configuration/change management • Service strategy, catalog and request • Governance of service management • Asset and configuration management • Chargeback and accounting

With the increasing dependence on IT services in a heavily regulated environment, leading healthcare CIOs invest in smarter management practices to control risk and stay ahead of the increasing number of audit warnings and failures. Compliance requirements may describe what records must be maintained, the content of the records, whether signatures are required, and records retention policies. In addition to establishing good processes, they need to establish good governance practices and management controls for clear decision rights and accountability chains.

Compliance often means that all IT systems must be configured and documented on an ongoing basis as changes are made, in accordance with regulatory guidelines. Typically changes have to be scheduled, managed and documented with a clear audit trail that often includes digital signatures attached to the multiple approvals in the change workflow. Centralized identity and access management throughout an IT systems lifecycle is increasingly critical. Controlling and documenting identity and access from initial registration through approval, provisioning, ongoing maintenance as well as termination may well be required. Compliance and audits may view the absence of evidence as evidence of absence—therefore there is a need for defined processes and procedures and for digitally storing the evidence that is produced by them.

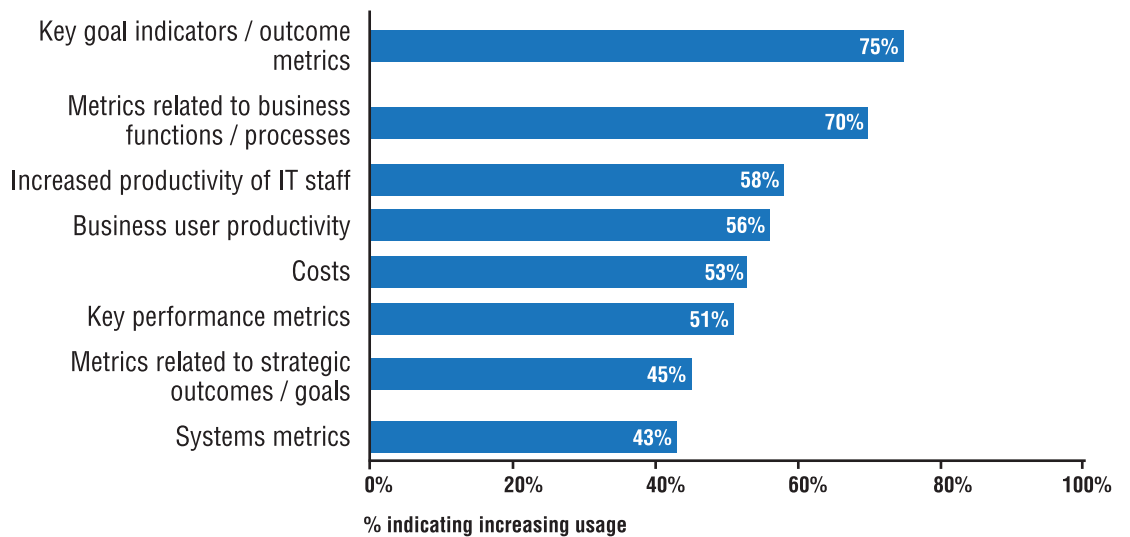
Highlights

IBM's study shows that healthcare organizations place a higher-than-average focus on measuring key goal indicators, when compared to other industries.

Measuring the value of IT projects

When it comes to measuring the value of service management projects, IBM's study shows that healthcare organizations place the highest priority on measuring the key goal indicators/outcome metrics—more than any of the other industries surveyed. As illustrated in Figure 4, healthcare IT leaders also expect to increase their use of metrics related to specific business functions/processes, and metrics related to increased productivity of IT staff.

Figure 4: Changes to IT service management metrics among healthcare organizations



Source: IBM Market Insights, *Service Management in an Uncertain Economy*, January 2009.

Caption: Healthcare IT leaders are increasingly focused on process and business-oriented metrics.

Highlights

IBM's survey also asked IT decision makers in healthcare to describe what they saw as the most common inhibitors and critical success factors for achieving value through service management initiatives. Like their peers in other industries, they described insufficient funding as the main inhibitor to achieving ROI—to a notably greater degree than the others (74 percent in healthcare, compared to 49 to 59 percent in other industries). This is not surprising because, with a disproportionately high level of spending on technology, there is a natural deficit in the ability to invest in smarter management practices that produce value from those IT assets. Leading CIOs balance the technology build-out with corresponding improvements to their ability to manage it. Like their peers, they also tended to name communication with stakeholders as the main contributor to generating value.

Process improvement initiatives are more successful when they focus on achieving business outcomes like improving the quality and reliability of specific IT services that are critical to the healthcare organization.

Successful CIOs focus their service management improvement plans on improving the quality and reliability of IT services that matter the most in their current business environment. Rather than focusing on optimizing technology subsystems or individual processes, successful CIOs start their service management plans by focusing on optimizing critical IT-enabled business services. This approach enables them to gain sponsorship for the projects as well as to ensure that value is delivered. Process improvement initiatives are then more successful when they focus on achieving business outcomes like improving the quality and reliability of specific IT services that are critical to their healthcare organization.

Conclusion and recommendations

According to the results of the IBM study, IT leaders in the healthcare industry are reprioritizing IT investments to focus on optimizing IT-enabled business services. Accordingly, once they have met urgent requirements in areas such as security, compliance, and systems management, they are investing in smarter management. This business-driven approach to service management emphasizes the role IT services can play in improving the efficiency and effectiveness of the organization as a whole rather than on the type of cost-cutting within IT that can produce negative and unacceptable business risks throughout the entire organization as well as to patients and customers. IT services have great potential to enable organizational success, but they also present new risks for severe harm if they are not managed well with industry accepted best practices.

The study results point to the following key recommendations:

- *Improve the quality and reliability of IT services that enable workforce productivity, provide access to and leverage customer information, and contribute to customer loyalty.*
- *Prioritize smarter ways of doing things through service management and technology consolidation.*
- *Revise measurements and reporting to stress productivity, business outcomes, healthcare business functions, and, of course, costs.*
- *Change the focus from technology and optimized subsystems to optimization of IT-enabled business services. This includes building out the digital platform of IT services the healthcare organization depends on and improving the ability to manage it as the increasingly critical new business infrastructure that it is.*
- *Apply some investments to tactical quick wins—but also work toward eliminating service-quality inhibitors through longer-term initiatives.*

In today's uncertain economy, organizations are no longer focusing on optimizing technology or process subsystems. They are working to improve IT-enabled business services through smarter management and improved measurement practices that focus on service quality and business outcomes.

For more information

For more resources and information on service management, contact your IBM sales representative or IBM Business Partner, or visit ibm.com/tivoli/features/industry-solutions

About IBM Service Management

IBM Service Management Solutions™ can help healthcare organizations address key service management requirements, including:

- *eHealth service management: Ensuring that the infrastructure that electronic medical records rely on is effectively managed to optimize the quality and speed of care given to patients.*
- *Access management for clinical staff: Providing clinicians with secure, streamlined access to the information they need.*
- *Healthcare application performance management: Ensuring that diverse healthcare applications and the supporting IT infrastructure are available and meeting all service levels.*
- *Healthcare asset management: Managing a sophisticated mix of computerized devices, tools, equipment, systems and technologies as well as facilities and operational assets.*

IBM also provides the business planning, model innovation and service-oriented architectural approach to the design of the digital platform on which the business relies. IBM provides the infrastructure planning, design and implementation needed by the application innovation. Service management strategy, assessment, planning, design and implementation services can help organizations take a business-driven approach, improving their ability to manage the digital platform. Additional options are available for organizations that prefer to outsource some or all of their IT services to a reliable and scalable partner.



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Produced in the United States of America
June 2009
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