



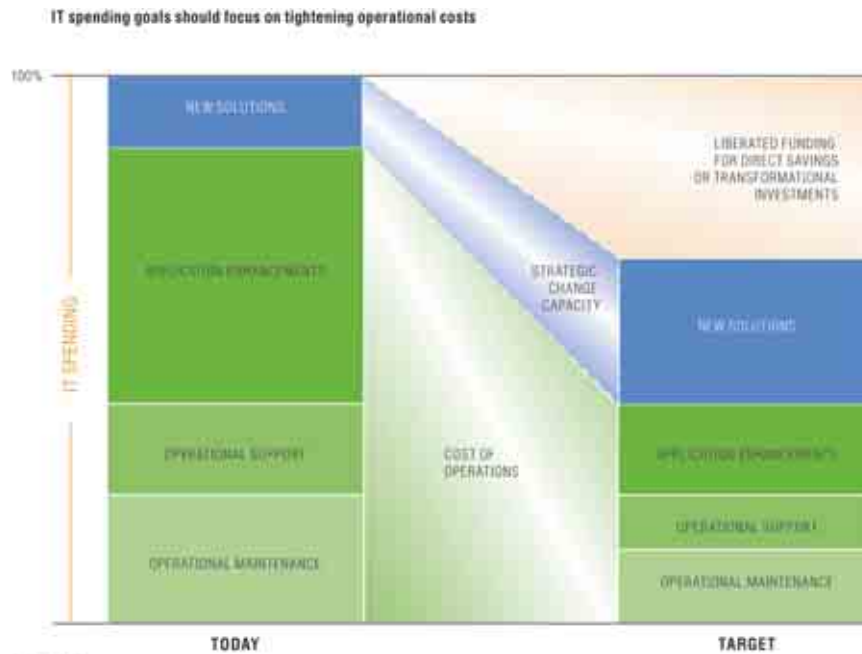
# **Weathering the storm: IT challenges and opportunities amidst economic uncertainty**



**The pressure to do more with less**

In the face of economic uncertainty, many companies are tightening their belts. Cost cutting has once again become a top priority, and capital expenditures are decreasing. IT is often included in these cuts. New projects proposed by IT must demonstrate concrete, near-term ROI, or they may be delayed or canceled. That means upgrade cycles are being extended while IT organizations focus on enhancing existing systems to improve operational efficiency. IT organizations also are reassessing and renegotiating vendor contracts, implementing hiring freezes and even reducing headcount.

Though the pressure is increasing, IT organizations are well positioned to help their companies weather the storm. Companies that survived the economic turmoil in 2001 already run much leaner IT operations, having spent the past seven years focusing on lowering costs and reducing waste. As IDC points out, “There’s no sense of panic amongst CIOs, more a resigned acceptance of the need to swallow some cost savings while the economic outlook remains gloomy or uncertain.”<sup>1</sup> With a continued focus on making smart, careful IT investments, companies can obtain concrete, near-term results that support long-term success.



Source: IBM

Figure 1

To reduce costs while increasing the budget for new solutions, companies must focus on making operations more efficient.

### ***Uncover opportunities to cut costs***

From the CFO perspective, there is always room for cost takeout in the IT environment—and never more so than during uncertain economic times. Though cost-efficiency has remained among IT's top priorities for several years, the CIO now faces increased pressure to squeeze even more savings from the existing infrastructure. Reassessing IT operations can uncover hidden costs and highlight opportunities for infrastructure optimization.

---

#### ***Did you know?***

**Power and cooling costs typically represent approximately 40 percent of data center expenses.**

---

#### **Infrastructure consolidation and virtualization**

The data center infrastructure is a good place to start with any assessment, because some degree of inefficiency and waste exists in practically every IT environment. After years of growth, server rooms and data centers are bulging with servers, storage devices, power supply systems, cables and more. Accumulation of equipment leaves companies

strapped with high energy costs, escalating management requirements and dwindling floor space. For companies facing data center sprawl, consolidation is often a critical step toward regaining control.

Server virtualization is one of the most feasible and successful ways to achieve high server consolidation rates.

Companies can consolidate the workloads of up to 20 servers onto just one machine and reduce server management costs by up to 70 percent. Virtualization can also improve storage management, helping companies cope with rapidly expanding data volumes. By unlocking and combining existing capacity, storage virtualization can significantly increase utilization, simplify management tasks and allow companies to defer the purchase of additional devices, even as data grows. For many fast-growing companies, the savings in power, space and support make server and storage virtualization a necessity.

---

#### ***Case in point***

**After reducing its server count by 80 percent, one global electronics company saved US\$322,000 in annual server support costs and cut total costs by 43 percent over three years.**

---



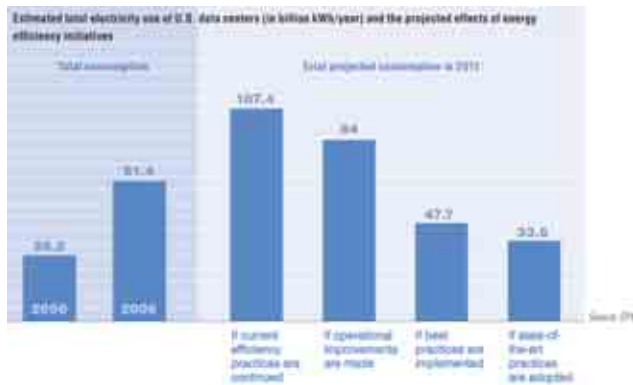


Figure 2  
The EPA predicts that, although consumption has been rising over the last decade, a focus on energy efficiency can dramatically reduce energy usage.

## Network convergence

Servers and storage aren't the only infrastructure components that can benefit from consolidation. Most companies pay more than they need to for voice communications. Not only do they maintain separate networks for voice and data communications, they also pay for calls by the minute. Advances in network technology offer an alternative: network convergence. By combining voice, data and even video traffic onto an IP network, companies can eliminate charges for intra-office calls and reduce total telephony costs by up to 20 percent annually. A unified platform also

simplifies management and supports a number of solutions that are quickly becoming essential for the modern workplace—including IP telephony, unified messaging, IP-based call center operations and real-time collaboration. Thus, in addition to immediate cost savings, the converged network can fuel ongoing ROI in the form of efficiency and productivity gains.

## Desktop virtualization

Looking beyond the data center infrastructure for cost take-out opportunities also can be fruitful. Consider the end-user environment—an inherently decentralized and heterogeneous group of endpoint devices that demands significant support from the IT department. From hardware upgrades to software updates and security patches, desktop computers can be costly to maintain. And, although they seemed to be necessary fixtures in the workplace a few years ago, many companies are beginning to phase them out. That is because desktop virtualization is a promising source of cost savings. By hosting virtual desktops in the data center, companies can reduce endpoint device management requirements and enable users to access their applications and data from practically anywhere. Centralization can reduce application and energy costs enough to provide ROI of up to 40 percent in 12 months.

---

***Did you know?***

A virtual desktop environment can set the stage for cost savings in multiple areas:

- Software upgrades
  - End-user support
  - Asset management
  - Security
  - Energy efficiency
- 

***Get more from existing investments***

The longer companies can derive value from their investments, the better. Finding new ways to use old equipment is well worth the effort—especially when the budget for new technology has shrunk. Fortunately, there are several ways that companies can leverage, extend and protect elements of the existing infrastructure.

Before moving forward on any IT initiative, of course, it is important to get all stakeholders on the same page. This is particularly critical when business priorities shift in the midst of changing economic pressures. By keeping the IT strategy aligned with overarching business objectives, the most pressing initiatives—along with opportunities for improvement—rise to the top.

---

***Case in point***

After optimizing its network, one international travel and transportation company gained a tenfold increase in link capacity, US\$1.3 million in first-year savings and a one-month ROI.

---

***Network optimization***

One area that should frequently top the agenda is the network. It can nearly always benefit from periodic reassessment and tuning. A network configuration that worked well for a company five years ago may not be optimized for its business today. Companies can increase network efficiency, reduce costs and enhance performance when they reconfigure their network infrastructures to support business goals. Periodic tuning and optimization can make management much easier as they deploy new applications, support more end-user devices and increase traffic.

***Business protection***

Business continuity and security are abiding IT concerns—regardless of the current economic conditions. Downtime and security breaches can lead to lost revenue, regulatory fines and other financial damages. Even during a downturn,



companies should take an active stance on blocking threats, mitigating the risk of downtime and avoiding related costs. For business continuity, every company should assess its operations and create a roadmap for recovery in the event of a crisis. In addition, companies need to take precautions to protect their networks and data from Internet-based threats. To reduce the financial risks associated with downtime and data loss, they should assess their defenses to make sure that the entire network is protected—from the perimeter to the core.

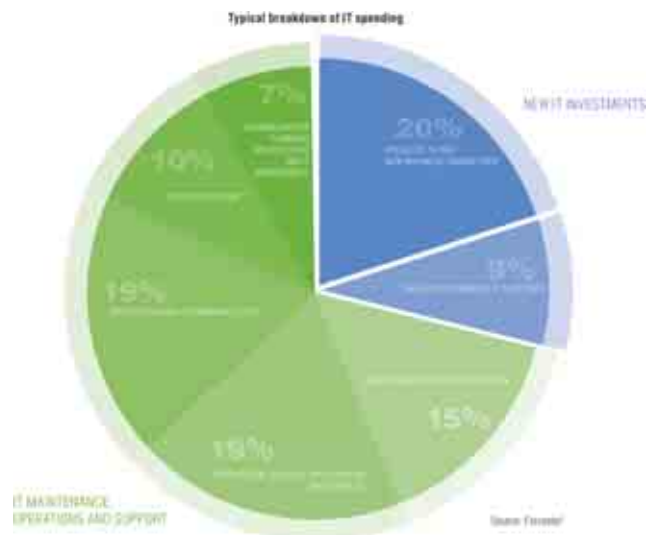
### ***Drive productivity in operations***

Managing the IT environment is a complex endeavor. IT departments have their hands full keeping the infrastructure running smoothly, supporting end users, complying with regulations and meeting service level agreements. In the face of economic pressures, two approaches to IT productivity have become necessities for many companies: automation and outsourcing (or out-tasking). Both help relieve the burden on overtaxed IT departments while improving service levels and reducing costs.

Service delivery is one of the first areas that IT organizations should seek to improve. When companies examine their IT operations, they may find that routine service delivery tasks are requiring an increasing number of human resources.

With the right software, best practices and procedures, companies can automate time-consuming manual activities and allow IT staff to focus on more important initiatives.

Companies should also consider how effectively and efficiently they can manage their administrative operations in-house. While many processes are best left to internal management, some noncore business processes operate more smoothly and efficiently when handled by a third party with superior capabilities and economies of scale.



*Figure 3*  
An assessment of IT expenditures can reveal opportunities for savings.

Companies may benefit from outsourcing in several areas:

- *Telecom expense management*—Outsourcing the management of telecommunications expenses can reduce costs by 15 percent in year one and help companies support multichannel contact centers, mobile workforces and distributed operations.
- *Infrastructure management*—Companies can cut costs by more than 20 percent and reduce the administrative burden by allowing a third party to manage one or more of the following: server environment, storage, information protection and business continuity.
- *Technical support*—Outsourcing can save 5 to 40 percent in technical support costs and resolve problems more quickly. A strong maintenance and technical support contract with a company that has the resources to maintain high availability can keep equipment running longer and more efficiently. Working with a provider that supports equipment from multiple vendors can also deliver savings and reduce downtime.
- *Virtual desktop hosting*—For companies that want to take advantage of desktop virtualization but lack the resources to support the environment, virtual desktop hosting provides a practical option.
- *Asset management*—Off-loading the management of IT assets can cut costs and improve regulatory compliance.
- *Managed security*—Companies can take advantage of advanced network and data security, often getting better protection for much less than the cost of hosting it in-house.

---

### **Case in point**

A financial services company saves an estimated US\$5 million per year in telecommunications spending by outsourcing the management of its telecom expense process.

---

### **Coming out on top—with help from IBM**

Many CIOs are already doing much of the work to run tighter shops—and adopting new technologies that help them do more with less. It's a smart move. As technology advances, it typically becomes better, faster and cheaper, helping IT simultaneously cut costs, improve performance and achieve stronger returns in the short term.

But the most effective path forward is not always obvious. It may not be clear which technologies are best suited to the task at hand. It can be difficult to prioritize IT initiatives, especially with competing interests from across the business. And it is often a challenge to justify the value of an IT initiative to the CFO or COO. Sometimes, IT even reaches a point at which cost-cutting opportunities appear to be completely exhausted. That's when an objective third-party perspective can help.





IBM Global Services helps companies invest wisely, leverage the latest technologies and take advantage of opportunities to hone their IT environments. With services designed to reduce cost, boost performance and increase efficiency, companies can strike a balance between near-term results and long-term gains. Plus, IBM Project Financing™ services and IBM Global Asset Recovery Services can make it easier to pursue IT initiatives by helping companies lower the cost of technology, simplify technology acquisition, facilitate asset management and recovery, and manage liquidity and risk. Wherever assistance is needed, IBM Global Technology Services is ready to help companies take advantage of opportunities, so they don't just survive the economic conditions—they also emerge stronger and healthier.

### **For more information**

To find out more about how IBM Global Technology Services can help your organization prosper during uncertain economic times, contact your IBM sales representative or visit:

[ibm.com](http://ibm.com)

© Copyright IBM Corporation 2008

IBM Global Services  
Route 100  
Somers, NY 10589  
U.S.A.

Produced in the United States of America  
August 2008  
All Rights Reserved

IBM, the IBM logo, and [ibm.com](http://ibm.com) are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or TM), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

Other product, company, or service names may be trademarks or service marks of others.

IBM assumes no responsibility regarding the accuracy of the information provided herein and use of such information is at the recipient's own risk. Information herein may be changed or updated without notice. IBM may also make improvements and/or changes in the products and/or the programs described herein at any time without notice.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

---

<sup>1</sup> IDC, *IDC Executive Market Watch*, May 20, 2008.

<sup>2</sup> EPA Report to Congress on Server and Data Center Energy Efficiency (Public Law 109-431), U.S. Environmental Protection Agency ENERGY STAR Program, August 2, 2007.

<sup>3</sup> Phil Murphy and Alex Cullen, *Budget Adjustments For CIOs In Lean Economic Times*, Forrester, March 28, 2008.



Recyclable, please recycle.