



Discover the power to do more

By Jeff S. Johnson

As the line between business and IT strategy vanishes, five transformational imperatives are changing the economics of success in the Virtual Era—empowering a highly agile workforce to collaborate on innovations that were unimaginable a few short years ago.

The role of IT has undergone a massive transformation in the last decade, and that transformation is accelerating to keep pace with changing workplace requirements in the Virtual Era. As technology evolves and organizations adapt, executives expect the supporting IT infrastructure to anticipate growth, increase agility, and—through innovation—deliver exceptional efficiencies. To achieve this goal, organizations must increase efficiency throughout the entire IT infrastructure, from the desktop to the data center. For many enterprises, the dilemma is how to get there from here, when IT is often held back by scant resources to manage complex, outdated hardware, software, skills, and processes.

Although it has traditionally been framed as a technology discussion, today's conversation about IT efficiency also must encompass staffing, budget allocation, maintenance, and management processes. The greatest efficiency gains can be achieved by taking a comprehensive approach that encompasses the people and processes working through the technology to meet specific organizational needs. (See Figure 1.)

Whether the goal is to heighten business innovation, improve the quality of health care, or help students succeed, IT is at the core of this organizational transformation. More than ever before, today's IT decision makers are playing a pivotal role in helping their organization achieve its mission. By aligning IT services seamlessly with organizational priorities, CIOs can help improve business outcomes and accelerate growth. To that end, decision makers are redirecting IT investments to focus on strategic goals, from the data center all the way to secure access for remote computing devices located anywhere in the world. To learn how Dell increased IT efficiencies to advance innovation driving its own strategic agenda, see the sidebar, "Reinventing IT from the inside out."

In virtually every industry, there is an unprecedented opportunity for IT organizations to streamline their operations and sharpen their competitive edge by embracing the potential of mobile devices, virtualized and cloud infrastructures, and powerful data management tools. These transformational technologies are the cornerstone of the Dell™ Efficient IT strategy because they create the nexus where true efficiencies can be achieved. For more information, see the sidebar, "Transforming IT infrastructure for innovation."

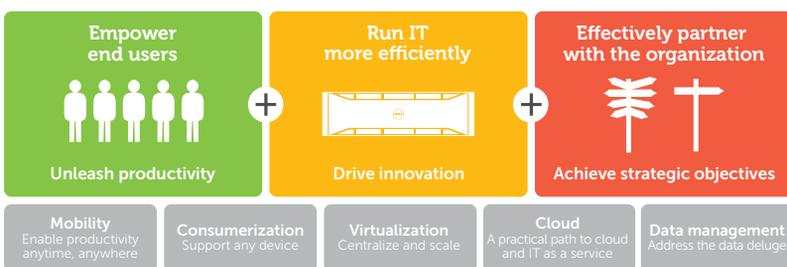


Figure 1. An Efficient IT strategy enables organizations to unleash workforce productivity, drive innovation, and quickly reach strategic objectives

Reinventing IT from the inside out

Dell has a lot of firsthand experience in transforming IT to create opportunities through improved efficiency. Many organizations dedicate only 20 to 30 percent—or less—of their IT budgets to innovation. By increasing efficiency in its own global IT infrastructure, Dell successfully managed to change the economics of IT, so it can now allocate 52 percent of its IT budget to innovation—roughly just 1.4 percent of revenue.

This efficiency was gained in many ways. For example, Dell virtualized more than 11,000 servers and eliminated 6,000 physical servers. And these virtual servers are running at a ratio of 30 virtual machines to one physical server. Applications were rationalized and reduced by 72 percent to only 2,200 applications worldwide, helping reduce licensing and maintenance costs. These efforts now save Dell more than US\$300 million each year.

Dell has extended these learnings, and an unflinching commitment to IT efficiency, to its development and acquisition strategy. The company has committed US\$1 billion toward building multiple cloud-computing-based data centers and developing next-generation services.

At the same time, Dell is broadening the scope of its open, capable, and affordable approaches for data center virtualization, data management, and desktop virtualization through recent acquisitions including SecureWorks, EqualLogic, Boomi, and Force10 Networks, as well as products such as the Dell Virtual Integrated System (VIS) portfolio. For more information about the Dell transformation, visit dell.com/casestudies.



Transforming IT infrastructure for innovation

The Virtual Era is changing not only how much organizations spend on technology, but also where they direct their investments. With 80 percent of fixed IT costs typically devoted to routine maintenance, organizations are left with few resources to implement technological advances and support initiatives that drive business and operational objectives. Even a small improvement in IT efficiency can have a transformative impact on organizational outcomes and budget allocations. In addition, simplifying and automating IT maintenance tasks can dramatically enhance the agility of IT resources in a budget-constrained environment.

Further, simplified operations enable IT organizations to manage fewer touch points, fewer steps, and fewer information silos—helping control costs while freeing administrators to support innovation (see Figure 2). Through more effective management of people, processes, and technology, organizations can become highly agile and cost-efficient, and much more responsive to strategic needs.

Open and scalable Dell approaches are designed to enhance productivity and control while eliminating waste. These approaches avoid the need for proprietary architecture that leads to vendor lock-in and allow IT leaders to capitalize on existing infrastructure through efficiency-boosting innovations in virtualization and storage consolidation.

Exploring Efficient IT

The Efficient IT strategy is based on the notion that standards-based technology helps organizations of any size reduce the cost and complexity of the data center while also creating a seamless path to the cloud. This approach enables IT to put the right amount of computing power at the fingertips of every worker, no matter where they are or when they need it.

An Efficient IT strategy encompasses five core elements that reach from the data center to the desktop: virtualization, to help reduce complexity and enhance workload agility; intelligent data management, to cost-effectively control the data deluge; mobility, to provide workers with anytime, anywhere access from any device; consumerization, to enhance individual productivity while protecting organizational assets; and cloud computing, to help increase agility and lower costs.

Each core element in its own way contributes to self-funding by helping to reduce costs and management overhead. All work together to enhance IT agility and operational efficiency, freeing workers to focus on unbridled innovation and growth.



Unlocking opportunity through innovation

Michael Dell shares his unique perspective on the changing face of IT and its future impact on global economic growth, competition, and the very nature of how we live, work, and play.

dell.to/vvb4qg



Figure 2. The cornerstone of Efficient IT in any size organization is a strategy to standardize, simplify, and automate the infrastructure



Virtualization
Carnival Cruise Lines

60% + 38%

Carnival Cruise Lines reduced its server footprint by 60 percent and increased performance by 38 percent with Dell open virtualization solutions.



Intelligent data management
AccuWeather

80%

AccuWeather reduced storage administration time by 80 percent using a Dell EqualLogic™ PS Series Internet SCSI (iSCSI) storage area network (SAN). Plus, the company is saving five figures a year by eliminating calls to external storage experts.

1. Leverage the benefits of virtualization from the data center to desktop

To boost efficiency, administrators strive to reduce the number of silos and touch points in the IT infrastructure. Virtualization contributes significantly to this effort by helping to simplify management, consolidate hardware and software, and increase utilization and performance. Adopting a “virtualization-first” strategy from the data center to the desktop enables organizations to significantly reduce complexity and enhance agility. But unlocking the value of virtualization can be complicated. It is difficult to bridge existing processes across the organization. Applications have become complicated and sometimes tricky to connect. And many organizations are locked into an inflexible, heterogeneous infrastructure.

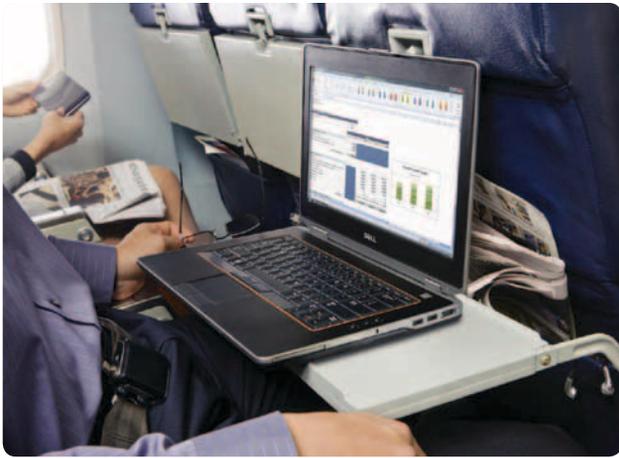
Dell takes a big-picture approach designed to extend the benefits of virtualization by addressing not just technology, but also the people and processes engaged in it. This approach streamlines the management of both physical and virtual resources and unifies them as a shared resource without adding cost or complexity. By unifying these resources in a shared pool, organizations can accelerate deployment and improve operating performance.

2. Intelligently manage the data deluge

Data storage is often a complex aspect of IT transformation because it is growing so fast, is so mission critical, and usually exists in a loosely organized and haphazard structure. For these reasons, efficiency must be built into every point throughout the entire storage network—what data is stored, how it is stored, where it is stored, when it is moved, and on what kind of storage device. Simply adding another storage device is no longer viable. The Virtual Era requires that storage be virtualized too.

The Dell Fluid Data™ strategy enables IT organizations to efficiently orchestrate the flow of information in a way that enhances its value as a competitive asset. To help achieve that objective, Dell storage platforms provide intelligent, automated storage management designed to optimize resource utilization and deliver the right data, in the right place, at the right time, for the right cost.

Dell also helps organizations protect critical information assets from the client to the cloud. Outstanding data protection solutions are available through advanced backup and restore, disaster recovery, and archiving capabilities that are tightly integrated with leading-edge application and virtual environments.



Mobility
Dell

US\$6 million

Dell deployed Dell PowerEdge™ servers to run unified communications applications and avoid the replacement of aging voice mail systems. The company also saved more than US\$6 million in hardware acquisition and maintenance costs.



Consumerization
Niagara College

24/7

In a desktop virtualization deployment, Niagara College students can use their own technology and access the software learning resources they need anytime, from anywhere.

3. Enable an increasingly mobile workforce with access anytime, anywhere on any device

As the workforce becomes increasingly mobile, the workplace requires anytime, anywhere access to key data and applications. End users need one digital identity that follows them everywhere. In addition, the proliferation of personal and corporate device types—smartphones, tablets, Bluetooth® technology, radio frequency identification (RFID) tags, and others—can strain IT resources as workers come to expect their employers to support these devices.

To address these issues, Dell provides simple and affordable ways to help organizations deliver data, applications, and services reliably and consistently through a wide array of mobile devices—from smartphones to tablets to mobile PCs and high-performance workstations—all designed to enable secure connections for remote workers. A centralized approach to endpoint management and mobility from Dell Services enables multiplatform security and monitoring visibility through a single console, which can unify heterogeneous systems and devices. Further, Dell provides virtual desktop approaches to help reduce security risks, simplify management, and improve productivity from the end-user device to the data center.

4. Embrace the consumerization of IT while protecting the organization

With a technology-savvy workforce demanding support for personal computing devices, the time is now for organizations to facilitate the move toward the consumerization of IT. With expanded demands for access using personal devices come stepped-up requirements to protect, monitor, back up, and provide remote application access. This obligation calls for IT organizations to protect the security of the network while enabling seamless access for remote workers. It also means controlling IT management and support costs across diverse device types. The goal, of course, is to insulate the organization from new threats while unleashing end-user productivity with a comprehensive array of device types and operating systems, applications, and software.

Dell provides approaches designed to balance end-user expectations with an organization's ability to meet them technically, securely, and financially. These approaches allow the IT team to centrally and efficiently support diverse types of devices together with operating systems, applications, and software around the globe—and to integrate them securely and virtually on any device.



Cloud
Salesforce.com

2x

By migrating its databases to Dell cloud hardware, salesforce.com achieved cost-effective scalability with twice the performance and 10 times less cost than the previous systems.

5. Consider a practical transition to the cloud to increase workforce agility while lowering costs

Cloud computing enables organizations to leverage highly scalable, dynamic, virtualized resources to provide IT services on demand. Because the cloud model is designed to use computing resources more efficiently than traditional computing infrastructures, it can play a significant role in helping IT departments streamline management, reduce costs, and speed organizational response—actually changing the economics of IT to a highly dynamic and cost-effective model.

However, the path to the cloud depends on organizational needs and infrastructure. Dell helps address these considerations with approaches designed to leverage the IT resources already at work in the data center. Accelerating the deployment and operating performance of virtual resources paves the way to increasingly advanced cloud computing environments. Dell standards-based, interoperable cloud technologies enable seamless portability of workloads between public and private clouds. Plus, Dell offers a comprehensive portfolio of cloud computing approaches that help administrators tailor the IT infrastructure to meet specific requirements.

Optimizing business and organizational outcomes

The Dell approach to Efficient IT helps eliminate wasteful expenditures and duplicate processes to increase IT agility. This approach extends the life of existing technology by enhancing flexibility and minimizing management overhead. It is also designed to provide an open and future-ready platform, enabling organizations to maximize transformative technologies such as virtualization and cloud computing with minimal disruption to operations. An on-demand, pay-as-you-go model scales easily to heighten flexibility and advance agility in response to emerging opportunities as they arise.

An Efficient IT strategy also enables organizations to change the fundamental cost structure of the IT model to focus more technology resources on strategic pursuits than ever before. With dynamic information flow and intelligent, automated, policy-based management, operations can become surprisingly agile—particularly compared to what people have come to expect from traditional data center environments.

By adopting a practical approach that leverages IT resources already in place, organizations can cost-effectively evolve their existing infrastructure to achieve successful outcomes in the Virtual Era with open, capable, and affordable technology. As they transform IT to address workplace realities of the Virtual Era, organizations can create an information fabric that is flexible and responsive. This result, in turn, enhances productivity across an increasingly social, mobile workforce collaborating to advance innovation and growth. 

Author

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Learn more

Dell Efficient IT:
Dell.com/EfficientIT