How do you build a people-ready infrastructure?

IT: The Foundation for a People-Ready Business

We frequently look to investments in technology to help us differentiate our businesses—in many cases, technology is a strong imperative for improved business performance in the modern enterprise. However, technology alone does not hold the key to business success. IT systems will not offer creative insight into new product development, will not seize opportunities for process improvement, and will not develop strong relationships with our business partners. Technology plays an important role as an enabler to support every enterprise’s most valuable asset—its people.

Companies today are realizing that there has never been a greater need for IT to become—and be seen as—a true corporate asset that delivers ongoing business value. This changing agenda is evident by looking at what chief information officers (CIOs) and IT leaders defined as their top priorities. A 2006 survey by Gartner shows that CIOs are focused on business intelligence, security, collaboration, mobility, and customer relationships—IT priorities that align closely with the business challenges and trends in the modern enterprise.

If people are the key to driving business results, the question becomes: What kind of IT infrastructure do you need to support a people-ready business? The answer is simple. You need an IT infrastructure that can help advance rather than impede your business. CIOs are working to drive costs out of infrastructure and free IT staff to grow their business. They want to refine cumbersome business processes that slow their people down. In practical terms, this calls for a new, dynamic approach to supporting the evolving needs of the business—today and tomorrow!

Close alignment between business and IT objectives can help your organization deploy solutions that empower your people to reach customers more effectively, harness critical business insight, and collaborate across boundaries. Information is a key commodity in the everyday process of doing business, and your infrastructure must be designed with your business needs in mind.

A people-ready business uses IT infrastructure solutions as a foundation to amplify the impact of their people, manage complexity, protect information, control access, and advance the business.

Building a People-Ready Infrastructure

Microsoft® and its partners are helping businesses break the reactive IT cycle and move toward a vision of self-managing, self-healing Dynamic Systems and Applications. As businesses advance their IT capabilities and achieve a sustained improvement in their IT infrastructure, they must take a long-term, strategic view of optimization and link these capability and optimization improvements to their business needs and strategy.

The goal for infrastructure optimization is to help companies build the people-ready business by helping them realize the full value of their IT infrastructure to drive business results.

Infrastructure optimization—centered on using your organization’s IT assets to support and help advance the business—can help you drive cost reduction and organizational agility as well as security and efficiency gains.

To help businesses measure their level of infrastructure optimization and drive for a truly people-ready infrastructure, Microsoft has developed three models—focusing on core infrastructure, business productivity infrastructure and application platform infrastructure—that outline a progression through four stages of infrastructure optimization. Each of the models illustrate the strategic value and business benefits of moving from a “basic” stage of optimization, where the IT infrastructure is generally considered a “cost center,” toward a “dynamic” infrastructure, where the business value of the IT infrastructure is clearly understood and is viewed as a business growth enabler and strategic business asset.

Using these models, you can gauge the current stage of your optimization, establish a technology vision for the future, and build a clear roadmap to achieving that vision.

For more information on Infrastructure Optimization, please visit: http://www.microsoft.com/io.
Core Infrastructure Optimization Model

Today, many enterprise businesses still run older, legacy technology, expend manual infrastructure management techniques, and typically have not maintained their environments based on the software and technology upgrades available to them. Building a more secure, well-managed, and dynamic core infrastructure can help reduce overall IT costs, make better use of IT resources, and make IT a strategic growth asset for the business. A key challenge in this area is to support IT professionals in the management of servers, desktops, and applications to help eliminate unnecessary cost and complexity. This issue is critical within IT departments today.

The Microsoft core infrastructure optimization model defines four stages of optimization—basic, standardized, rationalized, and dynamic—and maps the advancing stages to an enterprise’s ability to better understand and control cost and complexity, reduce security risk, and drive operational agility. As organizations move from a basic infrastructure to a more dynamic infrastructure:

- **Security and Networking** - The security and networking capability helps ensure proactive and reactive protection of the IT and user environment.
  - At the basic level, organizations lack antivirus software on desktops, do not have a centralized firewall, and do not have an internal server for basic network services. As organizations progress through the optimization model, they begin adding features to make their systems more secure and more efficient.

- **Data Protection and Recovery** - The data protection and recovery capability provides a structure for disciplined backup, storage, and restore management. Organizations at a basic level of optimization do not have backup and restore functionality for their critical servers. When an organization begins advancing its data protection and recovery capabilities, it will progress through three stages: first, adding backup and restore functionality to critical servers; next, adding backup and restore functionality to all servers and implementing service level agreements (SLAs); and finally, extending the backup and restore functionality to protect desktop data as well.

- **IT and Security Process** - Since technology alone cannot create a secure and well-managed infrastructure, it is important to help drive security and IT processes in conjunction with the technology. This requires a process framework for managing the operations and support of IT systems, making adjustments to meet changing business needs, and optimizing processes for greater efficiency. In addition, IT services management and security processes are critical to ensuring that the people and process side of security is as advanced as the technology.

**Business Productivity Infrastructure Optimization Model**

Today’s information-based economy and increasing rate of change is creating worldwide trends that are placing new demands on how people work and the tools, applications, and infrastructure needed to support them. Businesses must leverage and act on the right information, work across boundaries, manage sensitive business information, and streamline business processes to increase competitiveness. By implementing a single infrastructure for unified communications and collaboration, enterprise content management (ECM), and business intelligence, organizations can streamline the management and control of content, data, and processes across all areas of their business.

**Technical Capabilities**

Within the core infrastructure optimization model, Microsoft has identified five key technical capabilities that have the greatest impact:

- **Identity and Access Management** - Identity and access management has become more complex as digital identities take on an increasingly central role within organizations. Regardless of the size of the network, businesses rarely store their identity information in one place. Multiple departments, locations and software results in a proliferation of database, directory service, and application-specific identity stores.

- **Desktop, Server, and Device Management** - Enterprises with only basic desktop, server, and device management capabilities lack the technology for widespread use of automated patch management and server monitoring, do not have a consistent plan for managing multiple operating systems, and do not have an imaging strategy or mobile device provisioning. By optimizing these areas, you can reduce the burden on IT departments and make management of the core infrastructure more efficient and cost effective.
Like the core infrastructure optimization model, the business productivity infrastructure optimization model defines four stages of optimization: basic, standardized, rationalized, and dynamic. It provides guidance that can amplify the impact of the people in your organization by helping them simplify working together, secure and manage content, and find information that improves business insight.

Technical Capabilities
Within the business productivity infrastructure optimization model, Microsoft has identified three key technical capabilities that have the greatest impact: communication and collaboration, ECM, and business intelligence.

- **Communication and Collaboration** - The communication and collaboration capability represents the capacity to streamline people-driven processes, simplifying how people work together and help build customer connections so that each person can maximize their efficiency. For optimum competitiveness and efficiency, organizations need pervasive, contextual communication and collaboration capabilities. By optimizing your communication and collaboration systems—including messaging, instant messaging (IM)/voice, Web conferencing, and collaborative workspaces and portals—your organization can achieve end-to-end integration, extended teaming across all line-of-business (LOB) applications, and enterprise search and offline file access capabilities.

- **Enterprise Content Management** - Enterprises face an exponential growth in information and increasing regulations around how that information is stored and managed. As ECM within an organization becomes more optimized, they can better streamline business processes and increase the control and security of enterprise content. Key benefits include extending content management to every information worker, enabling compliance-based content retention, and extending access to business processes across boundaries. Advancing your organization’s ECM capabilities—through document and records management, Web content management, electronic forms, and search capabilities—can help you achieve broader user adoption, better content protection, and lower implementation and management costs.

- **Business Intelligence** – Business intelligence has historically relied on specialized tools, frequently requiring specialist training, and often implemented in department-specific solutions. However, business intelligence is now transforming into a strategic initiative that appeals to business users, executives, developers, and IT professionals alike. It is ranked as the top technology priority for CIOs in a Gartner 2006 survey. The Microsoft vision for business intelligence is to help improve organizational performance by providing business insights to all employees, helping lead to better, faster, more relevant decisions. By implementing a business intelligence framework that ties information together across your organization, you can integrate disparate business systems to make it easier to analyze complex business information and empower your people to make decisions at all levels. Note: The Business Intelligence capability is a shared capability between the Business Productivity and the Application Platform IO models. In the Business Productivity model, the Business Intelligence capability is focused on how information is being accessed by the users. In the Application Platform model, the Business Intelligence capability is focused on how information is managed and processed and how business logic is centrally managed.

Application Platform Infrastructure Optimization Model

With the increasing demands of business in a connected world, there has been a fundamental shift in terms of supporting architectures for business applications. Static-state applications with centralized management and limited client-side functionality have evolved into wide-ranging, off-the-shelf, end-user applications driven by graphical user interfaces (GUIs) and featuring integration and pervasive connectivity. Today’s applications are based on service-oriented architecture (SOA): interconnected through a Web services architecture such as .NET, and catering to multiple form factors supported through the use of flexible, standards-based systems. This type of applications environment is complicated by the recent explosion in form factors to support remote availability and the need for constant connectivity. When an organization’s application platform infrastructure cannot meet the business needs, challenges arise in the form of poor system availability, low user satisfaction and productivity, limited information visibility, and application development backlogs.

The application platform infrastructure optimization model encompasses four stages of optimization—basic, standardized, advanced, and dynamic. As organizations move from one level to the next, they drive more efficiency, collaboration, and agility across the IT life cycle:

- Developers become part of more efficient and collaborative development teams.
- IT professionals use familiar tools to manage and deliver applications more effectively.
- Business users can manipulate reports, optimize business processes, and share information.

Technical Capabilities
Within the application platform infrastructure optimization model, Microsoft has identified five key technical capabilities that have the greatest impact: user experience, business intelligence, SOA and business process, data management, and development.

- **User Experience** - User experience is frequently a late consideration in application design, and yet it is one that is critical to the ultimate usability and value of the application. User productivity and adoption of business tools are essential to the success of an IT department’s efforts and budget spend. A well-designed user interface can enhance the overall system return on investment (ROI) by allowing users to more intuitively use the tools, helping reduce help-desk calls. By investing in user experience and the design of an easy-to-use, rich interface, an organization can increase user effectiveness, drive end-user satisfaction, and ultimately give people the tools to make better business decisions.
• **Business Intelligence** - Business intelligence has historically relied on specialized tools, frequently requiring specialist training, and often implemented in department-specific solutions. However, business intelligence is now transforming into a strategic initiative that appeals to business users, executives, developers, and IT professionals alike. It is ranked as the top technology priority for CIOs in a Gartner 2006 survey. The Microsoft vision for business intelligence is to help improve organizational performance by providing business insights to all employees, helping lead to better, faster, more relevant decisions. By implementing a business intelligence framework that ties information together across your organization, you can integrate disparate business systems to make it easier to analyze complex business information and empower your people to make decisions at all levels. **Note:** The Business Intelligence capability is a shared capability between the Business Productivity and the Application Platform IO models. In the Business Productivity model, the Business Intelligence capability is focused on how information is being accessed by the users. In the Application Platform model, the Business Intelligence capability is focused on how information is managed and processed and how business logic is centrally managed.

• **SOA and Business Process** - To keep up with increasing customer demands, new business opportunities, and expanding government regulations, many enterprises have incrementally added information systems. For enterprises to remain competitive and to grow, they need to integrate and connect these disparate applications and systems. By advancing SOA and business process capabilities, organizations can achieve process automation, optimization through process management, and real-time visibility. This enables them to manage their processes, integrate applications and legacy systems, and connect to trading partners and customers. Critical to this capability is building a connected and adaptable IT environment that is based on a flexible architecture. Optimizing your business process management can help your organization realize improved connectivity, better compliance, richer collaboration among teams, and greater agility so that you can respond more quickly to business opportunities.

• **Data Management** - In a data-driven, always-connected world, organizations must ensure that their employees, customers, and partners can access the information that they need, when they need it. Finding the right information quickly can help maximize employee productivity, ensure optimal customer service, and enable the organization to be more responsive to business opportunities. Data management has become a requirement for competitive differentiation and yet is increasingly challenging for IT departments to achieve as the volumes and sources of information increase. Outdated or inefficient data management systems can lead to unplanned application downtime, poor system scalability and performance, and lack of data security. A scalable and integrated database platform can help your organization more securely store and manage increasing amounts of data from disparate sources and help ensure that business-critical systems and applications remain up and running.

• **Development** - IT development teams are challenged by poor visibility into IT projects, communication and collaboration hurdles, outsourcing complications, and continual changes to requirements. To overcome these problems, organizations need to align software application delivery to business needs, ensure that requirements are understood and adhered to, and make the maintenance and support of applications easier. As organizations optimize their development capability, they gain effective tools and methodologies that help IT development teams improve developer productivity and management of IT projects. When your organization optimizes its development tools and processes, development teams will be able to better manage applications throughout the IT life cycle, benefit from increased team collaboration and productivity, and improve software quality.

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**What’s Next?**

1. Learn more about the business value of building a people-ready business and take the Infrastructure Optimization assessments by visiting: [www.microsoft.com/io](http://www.microsoft.com/io).

2. Read about organizations that have experienced the business value and benefits of infrastructure optimization ([https://members.microsoft.com/customerevidence](https://members.microsoft.com/customerevidence)).

3. Read what experts are saying about infrastructure optimization and management ([http://www.microsoft.com/business/peopleready/overview/insight/default.mspx](http://www.microsoft.com/business/peopleready/overview/insight/default.mspx)).

4. Read this IDC white paper ([http://www.microsoftio.com/content/overview/IDC_IO_Whitepaper.pdf](http://www.microsoftio.com/content/overview/IDC_IO_Whitepaper.pdf)) to find out how much your PCs are costing to maintain and manage—then contact your Microsoft representative or Partner to transform them into strategic assets.


6. Determine the infrastructure optimization level of your organization and the value of moving to the next stage of optimization—contact your Microsoft representative or partner.

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**Sources Cited:**


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