

Groundbreaking applications and technologies help a business respond to a changing marketplace. But too many businesses can't take advantage of these innovations because they spend most of their annual IT budget on maintenance and operations.

Such overhead expenses leave few financial resources for adding capabilities that might be used to secure customer relationships, fend off rivals, increase revenues or build market share. Or, if funds do become available for new applications or hardware, implementation into the existing infrastructure actually contributes to hardware sprawl and operational complexity. In both cases, the end result is a technological ecosystem that is poorly suited to promoting business success.

### **The business problems we're solving**

The good news is that IT optimization provides many strategies for making an outdated infrastructure more efficient, affordable and effective. Strategies like server consolidation, virtualization and energy management allow you to reduce operational costs and system complexity while also providing a framework for bringing new technologies online and aligning critical resources with your organization's immediate and long-term strategic goals.

### **Solutions benefits**

Through IT optimization you are able to create an infrastructure that is easier to manage and less expensive to operate. Innovations, like those available through the IBM Power Architecture, provide practical options for:

- Consolidating servers and resources while improving performance and capacities
- Using server virtualization to increase utilization rates and system flexibility
- Designing an infrastructure that is easier to manage and more energy efficient.

### **An overview of our solutions**

We use a holistic approach to develop strategies for reducing energy requirements, improving server utilization, increasing infrastructure flexibility and simplifying system and network management requirements.

These strategies include power-management technologies for using less power and generating less heat, modular servers that deliver more performance per core (plus, the flexibility to scale up as your business requirements change) and innovative virtualization technologies, such as IBM PowerVM™, that allow you to consolidate multiple workloads onto a single server.

Just as important, our approach includes comprehensive installation services and a single point of support when needed.

### **How this solution helps**

*Consolidate servers and resources and improve performance*



You are able to build a simpler and more responsive infrastructure. Consolidation allows you to address the complexity of your server environment by grouping servers with like primary functions into islands, such as terminal servers, web servers and so on. You then are able to size each island's capacity requirements (CPU, memory, storage and network utilization) to the anticipated workload within its environment. The result is an infrastructure that is optimized to carefully match your actual requirements.

*Use virtualization to increase utilization rates*

You are able to go beyond the boundaries of your physical resources and control how your IT infrastructure adjusts to changing business demands. Virtualization delivers dynamic control that allows you to deploy multiple virtual servers on a single physical server. In turn, that means you can locate sets of applications and multiple operating system (AIX®, IBM I and Linux®) on just one server. Virtualization of processors, memory and I/O resources also allows you to maximize every resource and reduce infrastructure costs.

*Design an infrastructure that saves on management and energy costs*

You are able to create an infrastructure that provides more performance-per-processor core and scalability. Our IT optimization strategies help you address new workloads while controlling power consumption and cooling costs. Both strategies allow your infrastructure to remain dynamic even as your business needs change. State-of-the-art workload and management tools enable consolidated environments to run comfortably on the same system.

Overall system administration is easier because you have the comprehensive tools to track and deploy assets, optimize performance and perform maintenance. Easy-to-use, point-and-click platform management solutions offer complete control over multi-system environments.

**Businesses that need this most**

Finance/Banking, Retail, Healthcare/Insurance, Telco/Utilities/Media, Distribution/Process, Manufacturing and Education.

Optimizing infrastructure requires a comprehensive approach that addresses a range of issues, including energy management, virtualization and server consolidation. We meet these challenges by providing a portfolio of hardware, software and service solutions that are ideally suited for creating a dynamic infrastructure that quickly adjusts to changing workload demands.

