

## VALUE PROPOSITION FOR IBM SYSTEM i: COST/BENEFIT CASE FOR JD EDWARDS ENTERPRISEONE DEPLOYMENT IN MIDSIZE BUSINESSES

What does the future hold for Oracle's JD Edwards EnterpriseOne users? In a demand-driven world, the dynamics of success for midsize businesses are changing.

No longer is it sufficient for a company to operate efficiently. It must also respond rapidly and flexibly to changing market conditions. Strategies and processes must be adapted to handle faster cycle times. Closer, more responsive relationships must be developed with customers and partners. Lean manufacturing and distribution models and real-time business practices are increasingly mandated.

These shifts are driving a fundamental transformation of enterprise resource planning (ERP) systems. Core transaction processing applications are joined by tools that allow organizations to use information as a new resource for competitive advantage, and enable high value-added interaction with customers, suppliers, partners and co-workers through the Internet and intranets.

Latest-generation JD Edwards EnterpriseOne solutions offer the potential for significant business gains. Their effectiveness, however, will be determined not only by application-level functionality, but also by underlying IT infrastructures.

These must handle software environments that are more complex and technologically sophisticated than most midsize organizations have dealt with in the past. They must also manage increasingly diverse, interdependent workloads and maintain the around-the-clock continuity of service that is mandated for businesses operating in real time in globalized, Internet-connected markets.

How will these challenges be met? This document deals with one potential solution: the IBM System i platform. Specifically, it looks at the business case for deploying EnterpriseOne applications on this platform in midsize companies.

This case is based on the following:

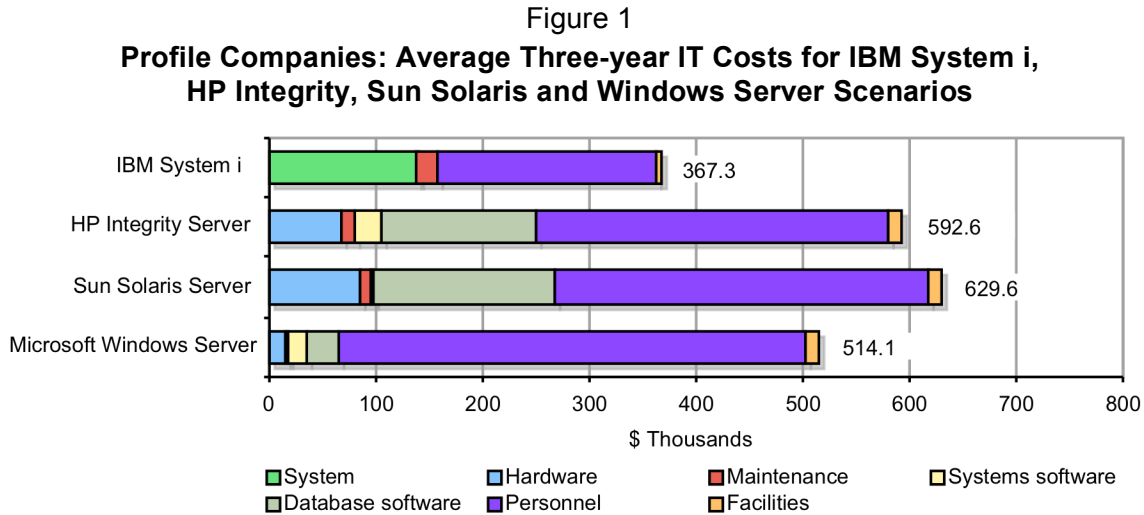
- ***Distinctive capabilities.*** Companies that have deployed EnterpriseOne solutions on the System i report that its ability to maintain extremely high levels of availability – often on a near-24x365 basis – is a critical strength. Among 52 users surveyed for this report, 50 (96 percent) cited this as a principal benefit of employing this platform.

Other System i capabilities valued by users included ease of management, reflected in low IT staffing; high levels of stability and system integration; partitioning and virtualization capabilities optimized for mixed workload environments; and distinctive System i strengths in disaster recovery, security, virus protection and other areas that reduced organizational risk exposure.

- ***Lower IT costs.*** If overall IT expenditures for implementing, supporting and administering servers over time are compared, costs for EnterpriseOne deployment on System i may be significantly lower than for other platforms.

This is illustrated by three composite profile-based comparisons of manufacturing companies presented in this report. In these comparisons, three-year IT costs for System i-based scenarios averaged 28.5 percent less than those for Microsoft Windows server equivalents; 38.0 percent less than those for Hewlett-Packard (HP) Integrity server equivalents; and 41.6 percent less than those for Sun Solaris server equivalents.

Figure 1 summarizes these results.



Higher IT costs for HP Integrity, Sun Solaris and Windows server scenarios are due in large part to higher full time equivalent (FTE) staffing levels and personnel costs for system administration, database administration and related functions; and (for HP Integrity and Sun Solaris scenarios) costs of Oracle database software.

In System i scenarios, 525 and 550 platforms handle application and Web serving, as well as database serving functions. Advanced partitioning, virtualization and management capabilities enable these platforms to handle three-tier workloads more efficiently than conventional server architectures, and provide additional performance and availability benefits.

Lower IT costs for System i scenarios also reflect comparatively aggressive IBM pricing for the new System i 525, as well as reductions in i5/OS costs for 550 platforms due to use of the IBM application server licensing option. Introduced in April 2007, this offers lower-cost license fees for processor-based partitions that do not require use of the i5/OS database.

Profiles are based on automotive parts, food and beverage, and electronics manufacturers with between \$100 million and \$650 million in sales, and 800 to 4,000 employees. Detailed profiles and calculations are presented in the Detailed Data section of this report.

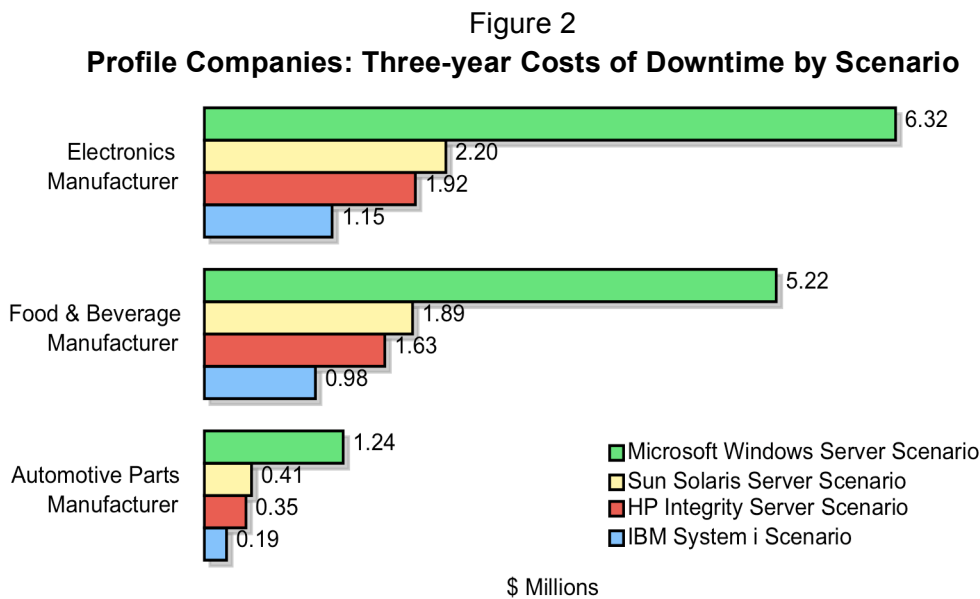
- **Lower costs of downtime.** More than a decade of experience with ERP systems has shown that outages impact bottom lines. Operations may be disrupted, personnel and capacity idled, orders and shipments delayed, and a wide range of other business activities affected. Customers may also be alienated, and their business lost or reduced.

Recent trends have increased vulnerability. A tightly integrated supply chain operating in real time, with minimal inventories, is a great deal more vulnerable to outages than a looser, less efficient structure. In such environments, disruptions tend to generate “cascading effects” that spread rapidly across the entire organization, and extend to customers and suppliers.

These effects, moreover, may continue to be felt long after service has been restored. Even brief outages may continue to affect businesses for days or even weeks. If orders or customers are lost as a result, bottom-line impacts may be significantly greater and of longer duration.

As organizations move toward 24x7 business operations, they are increasingly exposed to the effects not only of unplanned (i.e., accidental) outages, but also of planned downtime for such tasks as hardware changes, software upgrades and routine maintenance. In the past, such tasks might be scheduled to occur outside normal business hours. In a growing number of businesses, however, “normal business hours” are now 24 hours per day, 365 days per year.

There is thus a direct correlation between system availability and the effects of bottom-line business disruption. For the three profile companies described above, differences in availability levels for System i, HP Integrity, Sun Solaris and Windows server scenarios translate into major variations in costs of downtime over a three-year period. Figure 2 summarizes these costs.



Overall three-year costs of downtime for System i scenarios average 81.8 percent less than those for Windows server scenarios, and 40.4 percent and 48.4 percent less than those for HP Integrity and Sun Solaris scenarios respectively.

Costs of downtime in this presentation include costs of idle and underutilized capacity and personnel for production and logistics operations; costs of scheduling and production setup changes; costs of order, shipment and payment delays; additional inventory carrying costs; customer-related costs including late delivery and imperfect order fees; and other components. The basis of these calculations is presented in the Detailed Data section of this report.

User experiences with EnterpriseOne deployment on the System i also highlight a broader benefit. The distinctive capabilities of this platform materially reduce the technical complexities with which organizations must deal.

In the past, the effects of IT complexity have debilitated the ERP strategies of more than a few large corporations. In midsize companies with small IT staffs and limited technical and financial resources, the damage may be greater and longer lasting.

It is from this perspective that the business case for the System i platform should be viewed. It enables midsize users to realize the business benefits of EnterpriseOne solutions, while minimizing the downsides that use of latest-generation technologies might otherwise represent for them.

## **Additional Information**

This ITG Executive Summary is based upon results and methodology contained in a Management Brief released by the International Technology Group.

For copies of this Management Brief, please email requests to [info-itg@pacbell.net](mailto:info-itg@pacbell.net).



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