

# 7 PLACES TO CLEAN THE CLUTTER IN I.T.

HEWLETT-PACKARD AIMS TO CUT TECH SPENDING BY 30% AND CONSOLIDATE SYSTEMS AND STAFF. WILL IT WORK?

BY PAUL A. STRASSMANN

**CAN AN INFORMATION-TECHNOLOGY** department cut its annual spending by 30% and still remain effective? Hewlett-Packard is on track to do that under a five-year business transformation plan that calls for cutting information-technology costs from \$3.04 billion in 2003 to \$2.11 billion in 2008.

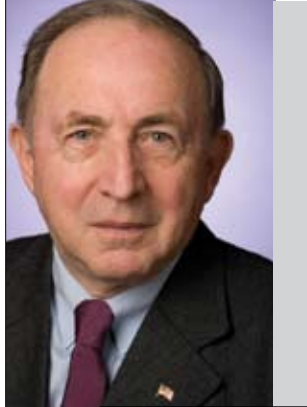
The company's initiatives offer a case study for technology managers on how to simplify and consolidate operations. I have learned of seven places where the \$98.5 billion company, which makes PCs, servers and printers and offers consulting services, plans to transform its business:

**Simplify applications.** HP plans to reduce the number of applications from more than 5,000 to fewer than 1,500. For example, it hopes to go from 84 procurement systems to only five. HP drives the application simplification process by "portfolio prioritization," in which low-value legacy systems are starved for maintenance funds and then forced into liquidation. It also looks at overlap in source code and then combines applications based on commonality. For instance, it found that 79% of the source code in order management applications in procurement overlapped—and the applications were among those consolidated. Eventually, surviving applications will be stored in a data warehouse, where they can be retrieved via a Web portal.

**Reduce development sites.** HP is cutting down the number of technology centers devoted to developing and maintaining internal software code, from more than 100 to 29. Previously, having such a large number of work sites required more administrators and subcontractors, resulted in less uniformity in software code development, and diminished the ability to collaborate.

**Shrink the workforce.** Cutting back the number of applications and reducing the number of development sites make it possible to cut the I.T. workforce. HP is on track to achieve its goal of trimming the number of I.T. employees from 19,000 to 8,000. The company is also cutting the number of subcontractors by 7,000. HP expects to cut the effort devoted to program maintenance from 80% to 20% of total software spending over five years.

**Consolidate data centers.** Over five years, HP plans to cut the number of data centers from 85 global locations to six super-centers, in three U.S. sites. Plans call for a tightly coupled grid-like structure to connect the six data centers for redundancy and fail-over backup. Consolidation has made it possible to eliminate underutilized computer capacity and to create a shared arrangement, including virtualization, for computing and file sharing. In achieving this goal, HP is reducing the number of servers from 19,000 to 10,000 while increasing processing capacity.



**The crown jewel of HP's plan is a 400-terabyte enterprise warehouse that will accumulate data from all applications.**

*Implement an enterprise data warehouse.* Under this plan, the crowning achievement is the creation of a 400-terabyte enterprise warehouse that will accumulate data from all applications. Enterprise warehouses that aggregate data across diverse functions—such as finance and logistics—are extremely rare and difficult to implement. That's because warehouses are usually functional, not cross-functional. HP is taking steps to ensure that data maps into a universally accessible format and is entered only once. The benefits? HP will eliminate 17 diverse database technologies, collapse 14,000 databases and reduce the number of software upgrades needed for separate databases.

*Embrace service-oriented architecture.* The HP architecture can be characterized by the separation of the supporting delivery infrastructure—processing, data storage and communications—from the applications and the user-

managed portal. This design is an example of service-oriented architecture (SOA), where components of the infrastructure can be swapped for new technologies independent of applications. Through the portal, HP staff will be able to submit queries and request reports, without requiring changes to the underlying databases.

*Reap the reward.* The HP effort is driven by savings from the "upstream" supply chain—the streamlining of the management of inbound materials such as parts and subassemblies. Hard savings in reduced inventory, elimination of obsolete components, and other areas total \$1.5 billion for 2004, and \$1.4 billion for 2005. The company has also realized improvements such as the percentage of projects delivered on time—which has gone from 81% in 2004 to 95% at present—and value-added per I.T. employee, a ratio of cost reductions per employee versus the cost per employee, from \$150,000 in 2004 to \$350,000 at present.

Although the HP program has another two years before it is fully implemented, the project offers an example of what can be achieved, beyond just cost savings, by pursuing a broadly conceived approach to I.T. reorganization that simultaneously engages hardware, software and network communications. ◀

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