Many organizations have understandably turned to consolidation and virtualization to reduce server complexity, footprint and cost-to-scale. The next step is to optimize performance using analytics, policy-based automation and new technologies like cloud computing. Companies that focus on server optimization are seeing greater flexibility and sustained cost and operational efficiencies, with administrators able to manage 2.5 times more servers and almost twice as many virtual machines per server.

**Drive virtualization and standardization**

As expectations increase for IT cost transparency and demonstrated business value, standardizing and virtualizing the server environment is key. Companies need to be able to develop an effective strategy for streamlining the infrastructure and lowering complexity.

A leading financial services firm used IBM’s fit-for-purpose analytics to standardize its server environment by identifying the best, most cost-effective platform for each workload, based on processing requirements like I/O and CPU. After assessing the firm’s server platforms against 30 workload variables, the firm was able to reduce its platforms by 66 percent, servers by 90 percent and operating costs by 45 percent.

**Maintain a high level of service by adopting new technologies and having a backup plan.**

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Using analytics to model current and future demand on a client’s server resources, IBM was able to automate workload placements, infrastructure management and the resource allocations needed to maximize the efficiency of the client’s physical, cloud and virtual infrastructures. The process quadrupled server utilization (see figure) and reduced the number of servers by five times, with $4 million in savings estimated the very first year.

**For more information**
To learn how IBM is helping clients optimize the server environment, please contact your IBM marketing representative or IBM Business Partner, or visit: ibm.com/services/smarterdatacenter

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**CPU workload modeling with advanced analytics increased the average utilization rate from 10 to 40 percent.**

**Adopt new technologies and have a backup plan**
Companies that are optimizing server performance and moving workloads easily can leverage new technologies more easily. These companies are also much more likely to have a backup plan in the event of a disaster.

IBM has a history of helping clients develop the operational efficiency to facilitate technology adoption and disaster readiness. IBM Flex System™ is a new client-tuned infrastructure designed to automate system management and facilitate growth. It combines simplicity and the elasticity of cloud in a flexible system, easing cloud migration, virtualized server recovery and other IT functions, especially for customized environments. Our expertise and repeatable methodologies are designed to speed deployment and drive high levels of server efficiency and performance to maximize return.