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Final Copy of Case Study

LOCATION:
New York, NY, US

ORGANIZATION:
Netuitive

YEAR:
2011

PROJECT NAME:
Predictive Analytics for virtualization and cloud management at one of the world's 10 largest banks

STATUS:
Laureate

CATEGORY:
*Business
Responsiveness*

PROJECT OVERVIEW

Netuitive provides predictive IT analytics and cloud management software solutions to eight of the world's 10 largest banks. These banks represent some of the largest production deployments of virtualization in the world serving mission critical applications such as online banking, trading applications, and payment systems. Any service degradation or downtime translates to significant business loss. For one of these banks, Netuitive's predictive analytics software is playing a key role in a major IT initiative involving the migration and integration of distributed IT infrastructure into the banks' virtual data center following a major acquisition. Business drivers called for a private cloud service delivery model involving virtual desktop infrastructure (VDI) encompassing approximately 100,000 instances of VMware powering multiple storage and network platforms. The challenge for the bank was to understand the performance of its virtualized infrastructure (comprised of virtualization hosts, networks and storage systems) in the context of the guest operating system, middleware, and applications that were being supported. Exceptional IT performance of the new converged environment was the number one priority. Central to the solution is Netuitive's predictive analytics software – an analytics layer that excels in virtualized and cloud environments and provides a holistic view of the entire virtual data center architecture. Using its patented Behavior Learning Engine™, Netuitive replaces manual, rules-based methods for performance monitoring with automated statistical analysis that correlates and self-learns the operational behavior of IT systems and applications. It allows the bank to resolve IT performance problems as quickly as possible by isolating root cause and, in some cases, forecast problems and prevent them from happening altogether. Netuitive's technology-agnostic approach allows it to easily integrate with the banks home grown monitoring tools as well as the other leading industry monitoring and management tools it uses. This provides the coveted holistic view across all of the bank's platforms, vendors and users enabling it to manage IT performance and capacity proactively and in real time. In addition, as part of the bank's vision is to deliver autonomic computing to optimize the allocation of resources in real-time based on application needs, Netuitive provides the intelligence needed to fully automate IT infrastructure and provisioning end-to-end. This includes orchestration tools being integrated with Netuitive enabling true autonomic



functionality such as dynamic resource provisioning and right-sizing of cloud infrastructure. In the end, it came down to risk. As part of such a large IT migration and integration, could the bank risk not using predictive analytics to improve visibility, performance and capacity management in the newly converged IT environment? The answer was no. Only through the mathematical certainty provided by predictive analytics could the bank achieve the required visibility to evolve its virtualization management strategies to an elastic private cloud model.

SOCIETAL BENEFITS

The consolidation of large carbon footprints into virtualized and cloud IT infrastructure is an inherently green approach. While no specific data is available yet, the belief is that predictive analytics enables green computing initiatives to move from conceptual to realized faster because of proven, more efficient use of resources.

PROJECT BENEFIT EXAMPLE

This IT initiative is leading the company's overarching goal of realizing the true promise of virtualization and cloud computing. It affects nearly all bank employees and will also allow the banks senior executives to confidently bring users over to the new IT platform. It will also allow the enterprise computing group to start utilizing advanced features inside VMware's product set.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

Netuitive's role in the banks' large scale IT migration and integration embodies and facilitates innovation in IT. The core premise of cloud computing is the ability to interchange components and resources at will based on demand. Innovation in IT goes only as far as the flexibility of the management layer allows. Netuitive's technology-agnostic approach across virtual, cloud and physical environments enables a holistic view across silos, platforms, vendors and users. Under this approach, innovation is limitless and is a good example of why predictive analytics is being deployed by many of the biggest early adopters of virtualization and cloud computing including 8 of the world's 10 largest banks and several global telecommunications companies. While the large bank mentioned here is in the early stages of deployment, results from other very large organizations are being documented. Gartner reported how a global telco is using Netuitive's predictive analytics to analyze more than a million metrics simultaneously allowing it to eliminate 3,480 hours annually in service degradation representing a business savings of \$18 million.