

Upgrades its IT Infrastructure

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Veena World had their website, ITMS application and more hosted on Azure Virtual Machines, ever since their inception in 2013. Azure helped them avoid huge initial investment and maintenance cost, and provided them with a dependable IT infrastructure. But, as business and peak hour user load increased, the infrastructure became strained. This led Veena World to conclude that they need a major upgrade to their virtual machine. The company reached out to Synergetics, a Microsoft Partner, with this requirement. Synergetics, after thoroughly analyzing the infrastructure and applications of Veena World, offered a more affordable yet equally efficient alternative. Let us see what.

Business Situation

Veena World started in 2013 with a vision to make travel affordable. The founders of Veena World, with their decades of industry experience, knew very well that technologies, like analytics, would have enormous influence on this goal. Hence, since inception, Veena World worked on developing the right technologies for the industry. The company built its business on Azure platform, using Virtual Machines to address their IT needs. The reason to go with cloud was that, even as a startup, Veena World wanted to be able to process vast number of transactions, and hence wanted to ensure scalability. The company's website and their ITMS Application (ERP solution) were hosted on Azure Virtual Machines.

Veena World also adopted Exchange Server 2013 to handle their communication needs. The database of Veena World was also maintained on Azure VM. Azure was the perfect platform for the company as it eased out the enormous upfront expense associated with IT infrastructure and enabled them to migrate to a predictable monthly installment model. Furthermore, as it was a fully maintained infrastructure, Veena World did not have to shed money for maintenance. This also meant that their focus will remain where it matters, their core business.

As the company grew and business increased, some bottlenecks came into the picture. A crucial obstruction was the lag in their website. During peak travel seasons, when customers flocked into Veena World's website, it failed to meet the load and slowed down. Correspondingly, Veena World's internal team developed a more advanced ITMS application and it was also not performing at its optimal speed. Due to this performance bottleneck, the

company was concerned about the downtimes during the peak season, which would be undesirable. Similarly, there was the question of database availability and management. The worry of data loss resulting from a database crash was becoming another pain point for the company. "We analyzed the situation and concluded that an up gradation and optimization of the current IT infrastructure on Azure was due. It was clear that the available RAM for the present virtual machine had maxed out," says Mr. Vinay Soman Manager, Software Development of Veena World. The company decided that the next installment of virtual machine must be of a higher specification, taking into consideration the present and forthcoming load.

With this need, Veena World reached out to Synergetics, a Microsoft partner concentrating in development tools and server technologies. Synergetics was particularly focused on Azure Cloud Platform, SQL Server Business Intelligence Platform, and SharePoint Server Collaboration Platform. Hence, they were in the perfect position to analyze and help Veena World with their needs. Veena World explained to Synergetics team that they need a higher specification virtual machine to handle their needs. A 16 core, 112GB RAM virtual machine, to be precise. Synergetics knew that a virtual machine of that specification would be expensive, and hence wanted to ensure that this was necessary. So, Synergetics started analyzing Veena World's IT needs and the present infrastructure.

Solution

"After we did a thorough analysis of Veena World's existing infrastructure, their product and application architecture, internal communications infrastructure, and database management, it became clear that a virtual machine of such a high specification was not necessary," says Kedar Ghanekar, AVP-Delivery (Cloud Services) & Lead Consultant – Data Services of Synergetics. Instead, Synergetics proposed a few upgrades and changes that would efficiently address all the bottlenecks of Veena World, while ensuring that the associated cost would remain in check.

Synergetics recommended a dedicated database server for ITMS applications. Additionally, a proposal was made to replace Exchange Server 2013 with Office 365.

Additionally, to ensure high availability of databases, Synergetics suggested an Always-On SQL server setup. The reason for this was that, the AlwaysOn Availability Groups feature on Azure VM's provides an enterprise-level alternative to database mirroring.

Introduced in SQL Server 2012, AlwaysOn Availability Groups maximizes the availability of a set of user databases for an enterprise. It supports a failover environment for a discrete set of user

databases, known as availability databases that failover together. It also supports a set of read-write primary databases and one to four sets of corresponding secondary databases. Optionally, secondary databases can be made available for read-only access and/or some backup operations. They also provided a rich set of options that improved database availability and enable improved resource use. It facilitated continuous back up of Veena World's databases and their transaction logs on a regular basis. This would single handedly ensure that Veena World's databases will stay secure no matter what.

Benefits

Better Performance: This was a major requirement for Veena World and now, with the web farm setup of Azure, they have high performance at their disposal. This ensured reduced processing time.

High Availability: With Azure AlwaysOn Availability Groups ensuring high availability round the clock, the worry about availability is put to rest.

Cost: Had Veena World gone ahead with the 16 core, 112GB RAM virtual machine, as they had originally planned, they would have incurred a huge cost, and the VM would not be underused most of the time. Now, they have the adequate performance at an affordable cost.