Samitivej Sukhumvit Hospital Enhances Healthcare Delivery with VMware’s Business Mobility and Virtualization Solutions

The deployment of VMware Horizon® and VMware vSphere® optimized Samitivej Sukhumvit Hospital’s IT infrastructure, empowering its clinical staff to provide always-on healthcare services. Samitivej Sukhumvit Hospital’s IT and clinical staff can now keep up with rapid business growth with increased business mobility and organizational efficiency and agility. VMware solutions also helped the hospital save 90 percent of its electricity costs, achieving its vision of becoming a ‘Green Organization’.

Samitivej Sukhumvit Hospital, a part of Samitivej (Public) Company Limited, aims to be the leading healthcare provider in Thailand that offers 24/7 complete medical services with cutting-edge technology, an efficient management system and qualified staff and medical experts. Recognized as an established full service medical center, Samitivej Sukhumvit Hospital has over 3,000 hospital staff serving 2,500 outpatients in the heart of Bangkok each day.

The Challenge

From the digitalization of patient records to streamlining of hospital administrative processes, the IT model undertaken by over 50 IT employees was highly complicated. With the rapid development and expansion of the hospital in the recent years, the organization required more computers to facilitate workflow to serve its customers more efficiently. The increased use of computers and devices in the hospital brought about challenges of spatial constraints and under-utilization of physical servers. In addition, servers connected via numerous LAN lines and fiber channels resulted in high electricity usage and manpower required for maintenance. The setting up of new offices or departments, the provisioning and installation of new systems was not only taking a long time, but the sheer volume and complexities were making it even harder for IT to manage.

When lives are at stake, access and exchange of accurate, up-to-date patient information is critical. The hospital needed better access and facilitation of mobility for their staff. The protection of confidential patient records and medical information is key to the hospital, and Samitivej Sukhumvit Hospital needed technology that is secure and compliant with hospital regulations.

The Solution

Virtualization enabled Samitivej Sukhumvit Hospital to fully utilize IT investments, enhance organizational efficiency and employee mobility, in a secure manner. The hospital virtualized its servers with VMware vSphere® and desktops with VMware Horizon®, empowering medical and
administrative staff to better collaborate and work more efficiently. VMware’s solutions were easy and quick to deploy, and over 1,400 computers were equipped with the solution in just two days. With over 95 percent of the hospital’s IT resources virtualized, Samitivej Sukhumvit Hospital’s IT efficiency was greatly enhanced.

Business Results & Benefits

Business mobility has been greatly enhanced. The clinical staff can easily access information. From list of hospital medical staff and employees through Active Directory application, patient’s health information via its TrakCare application, from any location at any time. Whether logging in from the office or home, medical professionals can now access patient’s medical records quickly and securely to track, examine, or advise patients post-operation. This increased business mobility has enabled them to provide 24/7 patient care, regardless of location, a benefit which is vital in a highly-congested city like Bangkok. The digitization of patient records has also reduced the need for paperwork and minimized potential loss of medical records. Real-time patient visibility, transfers and clinician assignments have also greatly improved.

A virtual desktop environment also allowed the hospital to work on old computers as well, reducing the need for the upgrading of existing computers. In addition, the automation of its IT infrastructure removed the need for constant system monitoring, resulting in reductions in human errors and working hours. This has enabled massive reductions in electricity usage per computer with reductions from 300 to just 6 watts. Instead of having to change their desktops every three to five years, the hospital is now able to better optimize and extend the lifespan of existing IT investments.

“Aligned with the hospital’s vision of becoming a “Green Organization”, significant emphasis was placed on purchasing technologies that do not require reinstallation to avoid unnecessary energy consumption. Virtualization has enabled the hospital to fully utilize IT investments to enhance organizational efficiency and employee mobility,” said Dr. Panuratn Thanyasiri, chief information officer of Samitivej Hospital group and BNH.

IT staff can respond faster and manage the new IT infrastructure more easily. Through the deployment of VMware solutions, centralized management has not only enabled easier and faster troubleshooting of issues, but also allowed this to be done off-site. Provisioning IT support for a new department took less time, and the hospital was able to fully utilize IT resources and reduced 90 percent of its electricity cost with fewer servers required. System managers and employees operated better and provided faster response to the team’s demands too.

“We chose VMware because its solutions fit with our current IT infrastructure, is easy to install, and simple to operate as compared to solutions from other brands. Downtime was reduced significantly, allowing our organization to work continuously, which is critical for healthcare providers like us,” Dr. Panuratn concluded.

Looking Ahead

Samitivej Sukhumvit Hospital plans to deploy a private cloud by using VMware’s cloud management solutions. It also plans to virtualize its network with VMware NSX™ to leverage the operational agility and granular control that virtualization brings, and improve on its disaster recovery capabilities for business continuity planning.