Pimpri Chinchwad College Of Engineering Builds A Flexible And Agile IT Environment With VMware

Considered as one of India’s leading engineering and management colleges, it was imperative for Pimpri Chinchwad College of Engineering to have the resources needed to prepare students for Industry 4.0 and Future of Work. The college saw a need to modernize its IT environment and leverage the benefits of virtualization. VMware helped them achieve this through its enterprise-class products and expertise in implementing customized solutions.

**Introduction**

Pimpri Chinchwad College of Engineering (PCCoE) is a leading engineering education institute located in Maharashtra, India. It was established in 1999 and managed by the Pimpri Chinchwad Education Trust (PCET). The college provides a conducive environment for its engineering and management students to nurture their skills with best-in-class academics, and industry-oriented training. The aim of PCCoE’s management is to develop socially committed and technologically competent engineers and management professionals for the future.

In its mission to deliver quality education, PCCoE recognized the importance of offering the latest curriculum; one that is aligned to the latest technological advancements. To empower students with relevant knowledge, the college needed to upgrade its current IT environment. VMware, with its excellent track record in enabling IT through digital transformation, helped PCCoE achieve their goals with its enterprise-class solutions.

**KEY CHALLENGES**

- IT infrastructure to be more agile to keep pace with the latest technology
- Overcome data security threat which is due to information stored on local systems
- Equip the IT environment to cater to the needs of students belonging to different courses
- Overcome dependency on specific computer systems in the laboratory.

**VMWARE FOOTPRINT**

- VMware vSphere®
- VMware vSAN™
- VMware Horizon® 7
- VMware vCenter Server®

**BUSINESS BENEFITS**

- Business agility improved through virtualization, allowing faster provisioning and adoption of technology
- Consolidation of applications and usage of licenses improved in efficiency by 30%
- Lab management and employee efficiency increased by 40%
The Challenge
PCCoE wanted its IT team to be well-prepared to handle technological trends and happenings, which is critical for the college as it offers the latest curriculum. To achieve this, there were several challenges that needed to be addressed.

Security: A single computing system was used by different students from different courses with varying hardware and software requirements. With multiple students using a single desktop, safeguarding student data was a challenge.

Cost efficiency and resource optimization: Updating the system was time-consuming and resource-heavy due to increasing hardware costs. This posed a challenge for the institute to maintain cost efficiency and optimizing resources.

Dependency: The localized systems created dependency on specific systems for specific needs. This meant if a system was unavailable, a student would not be able to get his/her work done and will have to wait for its availability.

The Solution
To tackle the challenges faced by PCCoE, VMware offered several solutions best suited to their needs. The VMware team saw virtualization as an ideal solution to enhance the college’s IT infrastructure. Through virtualization, it would be possible to reduce the college’s dependency on localized systems, increase cost-efficiency, and strengthen security of students’ personal data. This was done through the implementation of vSphere® which allowed the easy set-up of virtual environments.

Following which, the VMware team addressed the challenge of concurrent system users with the deployment of VMware Horizon® 7. It is an enterprise-class platform that manages virtual desktops and applications across the server while simplifying their delivery whenever the need arises.

Deploying VMware vSAN™ improved business agility by allowing access through multiple devices. It is a storage virtualization software that supports vSphere® to manage compute and storage on a single platform. With a virtual network in place, this meant both students and teachers can now benefit from increased accessibility.

VMware Professional Services also played an integral role in helping the IT team at PCCoE to adapt to the new environment. Intensive training and certification helped equip the team with the knowledge for running and maintaining the virtualized IT infrastructure.

The Benefits
VMware’s solutions have helped PCCoE’s IT infrastructure become more flexible and agile.

With a transformed IT infrastructure, it is now better equipped to meet the students’ needs and provide them with the latest industry knowledge.

Through virtualization, both students and employees can access IT anytime securely.

Reducing dependency on localized systems has increased efficiency of the computer laboratory.

Virtual servers and storage have ensured faster provisioning of resources and strengthened the security of student data.

These benefits have resulted in cost and time savings, as well as better optimization of resources for the college.

“VMware has helped us achieve virtualization seamlessly through its enterprise-class products and customized solutions. If you are thinking of virtualization, think VMware.”

PROF. RAMKRISHNA VADALI
HEAD, SYSTEMS & IT SUPPORT