

Application Management Paradigm for a Changing Technology Landscape – Addressing the Cloud

The technology landscapes of today's enterprise bear hardly any semblance to that just a few years back. Massive strides of advancement in storage and high performance computing along with the nascent cloud computing platform have been game-changers for today's CIO. The need of the hour is to develop applications that will last the long run, and the real challenge is to adapt one's traditional modes of working to address the support and maintenance needs of the altered IT landscape.

Traditionally, application management has been a CIO's way of tapping into the steady state operations of the organization, and a means of obtaining a systemic and systematic methodology and tools that offer visibility into real-time metrics that help manage the key aspects of applications. These components are monitored for availability, performance of key business processes, and SLA compliance. While the core nature of application management remains unchanged, the ground realities of both the application management service provider and the technology decision maker must now change to factor in the cloud realm.

Today's CIO needs to wake up and smell the cloud. It is no longer an either-or. It is an on-premise plus cloud model that will survive. And, he has to recognize that cloud infrastructure can exist both within and outside an organization, with the internal environments being called Private or Internal Clouds and the ones external to an organization being Public Clouds.

Background - The Altered IT Landscape of an Enterprise

As Figure 1 illustrates, the CIO's world now moves from a fully on-premise one to that resting in three logical units of a unified cloud environment – on-premise, private cloud and the public cloud.

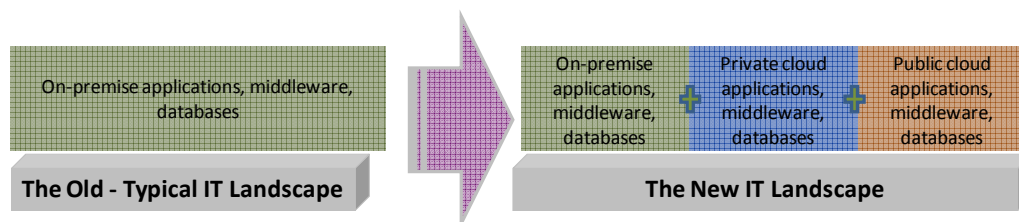


Figure 1. The new world

Before moving into the realm of addressing application management across these three ecosystems, the CIO would have to traverse the journey of going from **virtualization** – where the actual transformation of the physical infrastructure is undertaken to reduce footprint, gain operational efficiency, and to break the dependence between systems and the underlying physical hardware, building a **dynamic infrastructure** – where the key activity is to transform and optimize virtualized systems and applications to be explicitly designed for, aware of, and leverage advanced features in virtual infrastructure and then stabilizing a **unified cloud environment** where virtualized systems and applications are moved between private and public sections of the hybrid cloud based on policy and compute requirements and the rest is retained on-premise.

The Problem is Recognizing and Addressing the “New IT”

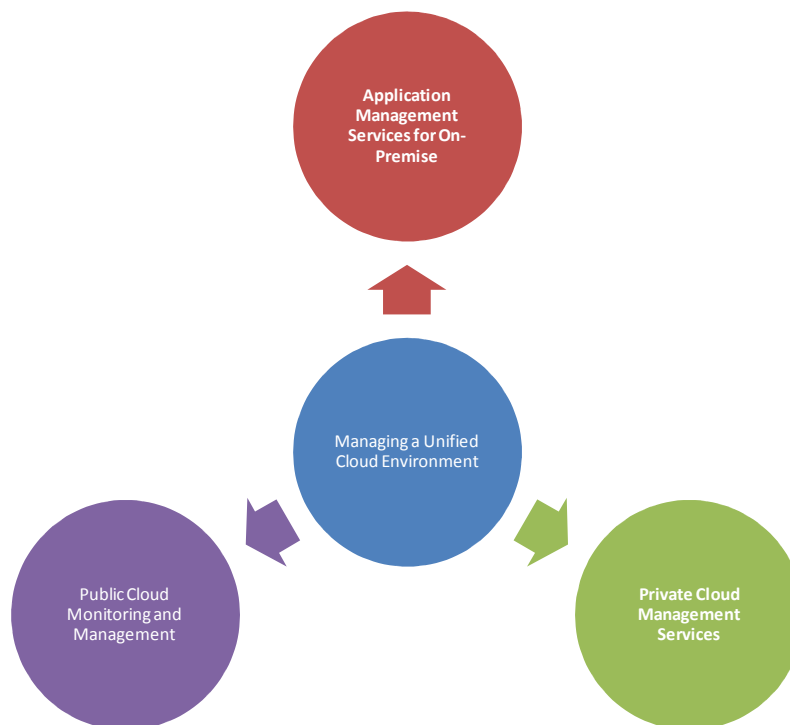
The business pain points faced by any customer wanting to be part of the ‘new world’

- Complex data integration between the clouds and on-premise systems and applications
- Analytics challenges due to disparate data sources
- Complex IT infrastructure management needs due to new cloud monitoring requirements (which we will cover in the rest of this article)

The IT service provider will now need to expand his offerings to include the need for industry focused solutions to address business pain areas either or both on-premise and cloud platforms, conversion/migration to private and public clouds, data management solutions for the complex integration to meet the new landscape along with Business Intelligence and analytics solutions and a more sophisticated IT infrastructure management including monitoring, support and maintenance.

The technology pain points to be address now comprise of the traditional, viz. monitoring service level agreements (SLAs) in real-time and to detect non-compliance, understanding the nature, severity and business impact of incidents, rapid triage of performance issues and assigning the fix and diagnosis of the RCA of incidents and speedy remediation, and the unconventional, viz. next generation Remote Infrastructure Management, a single view of systems via ITIL-based operations frameworks, consistent and high-quality service definitions created via detailed service development process, continuous Improvement through adherence to an operations maturity model and a flexible delivery model that optimizes resources and delivery locations.

The Solution is a Hamper.



The new application management solution should be able deliver at multiple levels. It must be able to address the traditional requirements of proactive performance management before end users are affected, the ability to monitor transactions in real time and detect problems quickly and the capability of understanding the business impact of problems and fix them quickly.

The new paradigm of application management should also include private cloud management services wherein the service provider helps customers manage existing cloud environments along with private cloud management in addition to the more conventional service offerings of desktop in a cloud (VDI) management, enterprise shared platform management (database and middleware, for example), infrastructure management in a public cloud as well as public cloud monitoring and management (white-label services).

The public cloud management service offerings will include the typical vendor management and operational level agreements aspects, administration and configuration management support of virtual resources, server OS monitoring, application services management, middleware services management, web infrastructure management, message queue management as well as the new remote database management.

In conclusion, only the CIO who scales his vision and models up to the hybrid environment will help his business tide this economic realities of today and it is the service provider who will deliver this cheaper, faster and more efficiently than ever before who will add true value to his customer.

About the Author

Darshan Nandi is the Operations Head at [InKnowTech India Pvt Ltd](#), a global IT and network infrastructure and services provider with clientele across almost all major industries and geographies. He has varied experience in projects and operations with middle and senior management capabilities. He is organizationally and technically proficient in all aspects of IT infrastructure operations, maintenance and management like asset management, server management, system administration, design, implementation and management of complex data secured LAN, WAN etc in telecom and BPO domains.