

# Don't Get Stuck on Your Virtualization Journey: Where to Focus Next

With each step forward, the rewards increase exponentially

## THREE PHASES OF VIRTUALIZATION MATURITY

A typical virtualization journey consists of three distinct phases. (See Figure 1.)

**Phase I: IT Production.** Virtualization is used primarily for server consolidation of IT-owned applications.

**Phase II: Business Production.** Businesses begin using virtualization for business-critical applications such as Microsoft Exchange Server, Oracle, or SAP, and more advanced virtualization automation and management features are deployed.

**Phase III: IT as a Service (ITaaS).** All applications are eligible to run in virtual machines (VMs), advanced techniques are used to manage and monitor virtual servers, and IT organization and processes are updated to run efficiently within virtual infrastructure.

**IT as we know it is evolving:** Businesses are on an IT transformation journey that typically starts with virtualization and ends with the shift to an IT-as-a-service (ITaaS) model based on a cloud infrastructure. Of course, the journey isn't always linear—some organizations continue to invest in virtualization and private cloud technologies, while others leap straight to the public cloud, depending on their business models and goals. Still, a global survey of businesses by VMware found that most go through three phases of maturity before they reach the final destination of cloud-based ITaaS.

Often, businesses get stuck on their virtualization journey. This can happen for various reasons, including lack of budget, lack of a long-term cloud strategy or simply a lack of technical expertise to move to the next level. The VMware study shows, however, that the rewards accelerate with each phase, and that stopping short of reaching ITaaS means that businesses fail to reap the full value of virtualization and cloud computing.

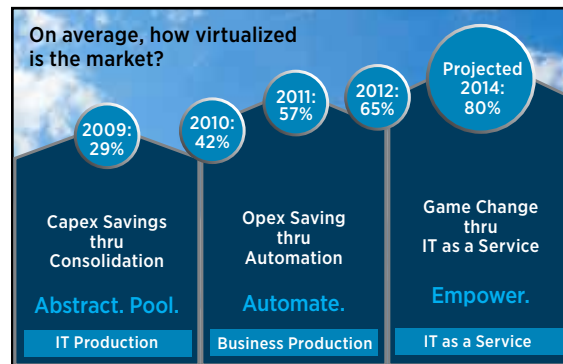


Fig 1. The Virtualization Journey

Businesses globally have high expectations about the rewards for completing the full virtualization journey. According to the VMware global survey of customers before they virtualized, almost half (47 percent) expect to be able to do more with less IT staff. Thirty-eight percent expect that they will be able to deploy new applications more quickly. Twenty-nine percent expect that their end users will be able to access their applications from anywhere.

It is important to understand that the journey is an accelerating one. In particular, the companies that achieve IT as a Service (ITaaS) see significant ROI gains of 222 percent, compared to 164 percent for those that stop at Phase I (see Figure 2).

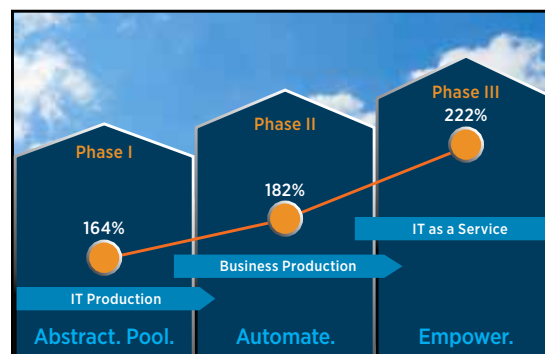


Fig 2. ROI Accelerates as the Journey Progresses

Based on the VMware survey of customers, the majority of businesses surveyed are in Phase I (29%) or Phase II (45%) stages. Only 15 percent have moved to ITaaS.

— VMware Virtualization Journey to ITAAS Survey, October 2012.

## As the journey progresses, virtualization value shifts and increases

The benefits of each phase of the journey are distinct from one another. This means that businesses do not just achieve “more of the same” as they pass from Phase 1 to Phase 2, and from Phase 2 to Phase 3.

For example, in **Phase I**, during the initial consolidation and pooling of hardware resources, the gains are primarily CAPEX because fewer servers are required to run the same number of workloads. During this phase, businesses can frequently also pay less for software licenses. Typically, businesses in Phase I have virtualized up to 30 percent of their hardware.

In **Phase II**, when the main focus is on automating management of VMs, up to 70 percent of hardware is virtualized and the value shifts to OPEX savings. At this stage, typically IT organizations are virtualizing their business-critical applications and putting service-level agreements (SLAs) for performance and availability in place for their users. Businesses also find that the reliability of their IT infrastructure improves significantly during this phase due to disaster recovery and business continuity the reliability of their IT infrastructure improves significantly during this phase due to enhanced disaster recovery and business continuity functionality.

Finally, in **Phase III**, upwards of 70 percent of hardware is typically virtualized. Here, the focus is on virtualizing storage and networking as well as compute hardware, with the goal of being able to deliver on-demand services as the business needs them, such as infrastructure as a service (IaaS). The benefits in this stage include significantly enhanced agility and competitive advantage for the business.

The No. 1 barrier to moving beyond Phase II (business production) to Phase III (ITaaS) is a basic one: budget. This is closely followed by the limitations of the IT staff—both size and skill sets—as major barriers for progress (see Figure 3)

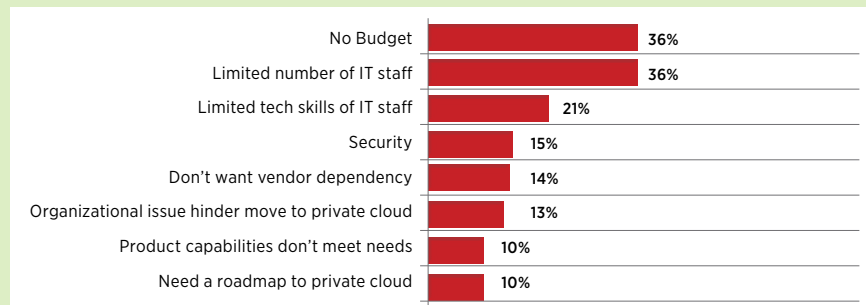


Fig 3. Barriers to Reaching ITAAS

### ONLY ONE-THIRD OF ITAAS BUSINESSES HAVE MADE NECESSARY IT ORGANIZATION / PROCESS CHANGES

According to the VMware global survey of customers, 66 percent of businesses that have reached ITaaS have yet to make the kind of organizational and process changes that will allow them to reap the full benefits of virtualization. These include realigning the functional silos of IT workers from being dedicated to devices such as computer, network, security, and storage, to managing IT services, and reengineering IT processes to suit.

### What to do next: How to reap all the advantages of the ITaaS phase

Based on a collection of research from businesses who have reached the ITaaS phase of the virtualization journey, the following best practices emerge:

- Get executive approval and funding for the IT-as-a-Service or cloud computing journey and transformation
- Develop a roadmap or strategy that covers: hardware, network, storage infrastructure, virtualization technology and management of those moving pieces, and finally an outline of the services offerings for end users
- Shift IT's focus from managing technology tasks to delivering services that align with business needs. Service-centric IT organizations take the time to start first with the business requirements and the perspective from the end user point of view
- Reinvent your IT organization and processes to align with the technological changes of virtualization and cloud computing
- Replace manual IT processes with automated ones. Starting with a 'managed virtualization' platform early can take the pain of integrating automation technologies down the road
- Create a self-service catalogue of IT services for users and lines of businesses
- Give IT management control over third-party cloud service providers along with internal IT services

According to the Customer Journey to ITaaS report, organizations that follow these best practices typically achieve higher operational, financial, and business benefits.

**Operational benefits.** The time to build and provision new applications decreased 76 percent and the time to provision new capabilities for workload peaks dropped by 70 percent for businesses in the Best Practices ITaaS segment. Additionally, the time and resources needed to complete new IT projects declined by 69 percent, and the downtime of Tier 1 applications decreased by 68 percent.

**Financial benefits.** The costs of numerous IT functions decreased as a direct result of employing best practices while achieving ITaaS. The cost of performing infrastructure testing and the cost of hardware maintenance both decreased by an impressive 72 percent, whereas the cost of deploying new applications dropped by 68 percent.

**Business benefits.** Most significantly, developing a plan based on industry best practices meant that IT had an impact on top-line business results. There was a 25 percent increase in new business accomplished, and a 17 percent increase in new line-of-business revenues because of the newly agile and responsive IT organization.

### Conclusion: Don't Get Stalled on Your Journey

It's easy for an IT manager to be a hero by virtualizing a few servers. The initial CAPEX savings and operational efficiencies—not to mention improvements in business continuity and disaster recovery—make it easy to achieve early wins.

Long term value comes to those who continue on the journey.

The most successful organizations use cloud technologies as a catalyst to put in place new systems and processes that free IT organizations to maximize not just operational metrics, but business results.

For more information about where to focus next depending on the unique needs of your business, go to [www.vmware.com/go/assessmentadvisor](http://www.vmware.com/go/assessmentadvisor).

