Delivering IT as a Service
With a Software-Defined Data Center

One of the most disruptive elements of the new order is IT as a Service (ITaaS). ITaaS starts at the top with a crystal-clear understanding of business needs; it also starts at the bottom with a set of virtualized resources and pre-configured and certified building blocks that can be combined and deployed at the click of a button.

With a top-down view and bottom-up technology capability, IT can quickly and reliably respond to the changing needs of the business with optimized yet highly standardized solutions. With ITaaS, technology solutions can be deployed as needed, when needed, and bill only for what is used. This allows IT to be a strategic enabler of the business—but allows users of technology services to take control of the process and work at their own speed.

The idea has been discussed for more than a decade. But now Software-Defined Data Center technology (SDDC) makes it a reality. A SDDC includes the ability to abstract compute, storage, networking and security resources so that virtualized resources can be deployed and managed in a highly automated fashion. This approach allows elasticity and on-demand self service for all of these resources according to established policies while being able to monitor and measure the entire environment in a more holistic and transparent way.

For many organizations, this approach creates a dramatically different outside-in view of IT and business resources. When ITaaS is used effectively, the resulting solution drives transformation through the enterprise and helps IT evolve from a tactical role to strategic one that potentially leads to a competitive advantage.

This paper explores the concept of ITaaS and the opportunities and challenges it delivers. A number of factors drive success, including a need for strong leadership, a well-defined change management strategy, a way to redefine and standardize IT, and a long-term strategic plan that helps IT achieve peer status with the business. CIOs and their management staff play a core role in the transformation of IT and the successful adoption of IT as a Service.

Today’s Corporate Environment: A Nexus of Business and IT Priorities

Clearly, the nature of business and information technology is changing radically. As organizations look to become more agile, many are turning to virtualization and cloud computing through an SDDC to bolster resource efficiency.
“We are trying to restructure technology, which is one of our basic drivers, to become a ‘peer’ player in the business. It’s not about support, it’s not just about providing capabilities, it’s about truly providing services in the context of leadership and achieving equal footing with other departments such as marketing, sales, HR and finance.”

Today, line of business managers increasingly choose solutions outside the domain of IT—through independent service providers—because IT has historically failed to meet their needs. These shadow IT purchases circumvent IT controls and put critical information at risk. Later, these departments approach IT and require support for their rogue purchases. This “cloud boomerang” is detrimental to the business.

ITaaS puts IT back in the driver’s seat by making it the internal services provider for the enterprise regardless of whether applications and services are built in-house or outsourced. Leveraging an SDDC, IT provides a simplified and transparent way—including a direct view of services and associated costs—to provision and enable a more modular and dynamic IT infrastructure that relies heavily on a cloud and

Companies Face Risks but Greater Opportunities

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<th>NET Extremely/very effective worldwide</th>
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<td>Reporting on LOB IT usage costing</td>
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<td>Enhanced ability to manage compliance/regulatory rqmts.</td>
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<td>Improved customer service</td>
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<td>Reduced costs</td>
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<td>Increased revenue growth</td>
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<td>Aligning demand, cost, and performance</td>
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Delivering ITaaS is a top priority across the globe

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<th>Priority Level</th>
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<tr>
<td>Critical/High priority</td>
<td>76%</td>
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<td>Critical priority</td>
<td>36%</td>
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<tr>
<td>High (but not critical) priority</td>
<td>40%</td>
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<tr>
<td>Moderate priority</td>
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Infrastructure as a Service (IaaS) with a software based foundation to support the high level of agility demanded by line of business users and the entire enterprise.

An IDG survey of mid-size and large firms conducted in July 2012 found that ITaaS is on the radar of IT
executives. Overall, 76 percent of the 650 respondents from the United States, EMEA, APAC and Latin America indicated that ITaaS was critical or very important for enterprise success.

Among the biggest perceived benefits reported in this Cloud Innovation Study: IT as a Service:

- Reporting on line of business IT usage costing (68%)
- Enhanced ability to manage compliance and regulatory requirements (63%) and
- Improved customer service (62%).

The IDG study identified several important trends:

**Trend 1: Changing Mindset, Roles and Organizational Structure is Paramount**

Success with ITaaS requires IT to take a strategic outlook and break down IT silos. It’s vital to overcome internal barriers while coping with growing competition from established service providers that offer a proven value proposition for outsourced cloud, IaaS and software as a service (SaaS) models. IT organizations that can attain a more strategic role move up the value chain and emerge as a partner rather than a cost-centric technology supplier.

A vice president of IT for a $2 billion firm summed up thinking about this new era and how the organization is adapting to changing times. “We are trying to restructure technology, which is one of our basic drivers, to become a ‘peer’ player in the business. It’s not about support, it’s not just about providing capabilities, it’s about truly providing services in the context of leadership and achieving equal footing with other departments such as marketing, sales, HR and finance,” he explained. The company has also been forced to redesign roles and positions and repurpose and re-skill individuals.

Transparency is at the center of this new model, he noted. The concept must apply to “resources, benefits, cost, and choices” about information technology. “This dynamic means you can’t have merely good performance. You’ve got to have great performance that is sustained all the time.” This has translated into new Key Performance Indicators (KPIs) as well as a redefined executive vision and exercises surrounding strategic scenario planning.

Other CIOs, CTOs and VPs report similar challenges, including smaller time windows to implement and change systems and a need for a more flexible IT framework that can adapt to a rapidly changing 24/7 business environment. The vice president and CTO of a $500 million firm reported that ITaaS serves as a way to reduce risk and trim costs through a build-versus-buy approach. He noted that the organization, which mandates that any new system function in a virtualized environment, first looks externally for IT and only engages in internal build-outs when necessary.

**Trend 2: It is Vital to Attain Executive support**

Altogether, 64 percent of survey respondents acknowledged a need to attain executive endorsement of ITaaS business objectives. But understanding the importance of the concept and putting it into play are two entirely different things. Part of the challenge is educating senior executives and middle level managers about the benefits of ITaaS. One CIO noted: “You have to take every opportunity to discuss technology decisions as well as the pros and cons of a decision. You need to talk about why an approach such as ITaaS may align better or worse with a longer term strategy for the business.”

The same CIO admitted to facing “pockets of resistance”—mostly individuals, including some “conservative” and highly change-averse IT staff from his department. As a result, he has focused on getting his staff “attuned” to the ITaaS model and realigning resources to support the change.

**Trend 3: Organizations must Refactor ITIL and ITSM Practices**

Overall, 56 percent of survey respondents said “Refactoring Information Technology Infrastructure Library (ITIL) and IT Service Management (ITSM) practices, procedures, and metrics across all domains ... to accelerate the adoption of ITaaS” is a critical or high priority. At the center of this concept is a need for clearly defined standards and a clear vision of technology and ITSM lifecycles. Many organizations begin by assessing core architecture capabilities and then expanding the process.

A senior operations manager at a $3 billion consumer packaged goods firm explained that the organization has worked to define core architecture capabilities but also examined everything from configuration databases to the help desk. “We have created a huge metrics-driven scorecard focused on resource allocation and innovation, solution delivery, the percentage of the roadmap that is completed, service level agreements (SLAs), scheduled up time, support staff satisfaction levels, percent of run budget as a percentage of revenue, and more.”
Trend 4: Organizations must Redefine Their Core Architecture to Accelerate ITaaS

Slightly more than two-thirds of respondents cited the importance of “Defining core architecture capabilities for service delivery with consistent standards.” Indeed, it’s next to impossible to embark on an ITaaS strategy without a Software Defined Datacenter that enables IT departments to establish consistent governance and standardized systems. It’s necessary to survey and assess all dimensions of an IT infrastructure and workload portfolio in order to identify the right mix of internally delivered services and broker with external service providers.

One infrastructure services manager at a 100,000 employee company commented that migrating across IT platforms such as Java and .NET has demonstrated a need to build a broader architecture and “understand the pieces that feed the overall delivery of the service to the customer.” Another VP of IT for a $2 billion firm noted that agility isn’t about accommodating every technology that comes along. “What it means is that you have to select the things that will become part of your core architecture.” Moreover, “You have to make some decisions about your standards and you have to try to do that in a way that does not completely box you in for the next 20 years.”

Putting ITaaS to Work

There are three primary lessons learned from the IDG research and executive interviews.

- Business objectives must drive the ITaaS strategy and guide the transformation process.
- An enterprise must devise a plan for collaborating with and nurturing different IT user groups and helping them adapt to the change.
- IT must substantially reinvent itself as a nimble, innovative service provider instead of a general cost-centric technology group.

ITaaS within an SDDC can encompass both new and longstanding IT initiatives and resources. In either case, several key strategic issues impact results:

- Changing the conventional IT mindset that revolves around managing infrastructure to viewing it as an agile software service delivery model for ITaaS.
- Gaining senior-level executive support and leadership.
- Aligning roles, organizational structure and KPIs with a service-oriented delivery organization. Among other things, this means recalibrating the Information Technology Infrastructure Library (ITIL) and IT Service Management (ITSM) model to better align with business practices, procedures and metrics.
- Adopting the tools and mechanisms to use ITaaS to further develop your SDDC for the underlying that enables it.
- Building a governance framework that supports and fosters ITaaS.

Conclusion

Making the leap to an IT as a Service approach is tremendously beneficial to organizations. In today’s business environment, disruption and transformation are the foundations for all things digital. How enterprises collect, manage, store and use data is undergoing a profound change. Agility and flexibility are paramount and ITaaS complements, if not, encompasses, other IT initiatives, including IaaS and

Call to Action

There are several best practices that organizations can adopt to increase the odds for ITaaS success.

Internal Steps for Organizations

- Conduct an internal assessment and alignment to business priorities.
- Establish, socialize and plan the ITaaS strategy, based on these business priorities.
- Review, build and refine processes and timelines.
- Review and address project ownership and governance, as well as the evolution of people skills and knowledge
- Lastly, tackle technology and product issues.

External Steps for Organizations:

- Reach out for assistance from peers or partners that are experts and have undergone an ITaaS transformation. Besides industry colleagues, these may include:
  - VMware’s Accelerate Advisory Services
  - Peer Groups, including VMware’s CXO Corner.
SaaS which is why a SDDC is critical to this journey. Ultimately, CIOs, CTOs and other senior IT executives must have a deeper understanding of the business and how technology touches employees, business partners, customers and others.

However, achieving success requires a clear strategy and ongoing attention to strategic as well as tactical elements of IT. It’s critical to gain executive support; IT must take a leadership position and obtain executive support for any ITaaS initiative; it’s essential to identify both internal and external factors that can derail a project; it’s vital to realign processes to support this emerging model; and IT must ensure that staff is attuned to the ITaaS model within an SDDC.

**Supporting Links and Resources**

- VMware Executive Resource Center (ERC):

- CXO Corner: www.facebook.com/vmware/app_280927348591518

- Accelerate Advisory Services:
  www.vmware.com/services/accelerate/

- Software-Defined Data Center: