IT-as-a-Service (ITaaS): Redefining Value and Success in IT

ITaaS Defined

▸ IT as a Service (ITaaS) is a technology-delivery method that treats Information Technology as a commodity, providing an enterprise with exactly the amount of hardware, software, and support that it needs for an agreed-on monthly fee or subscription based model. In this context, IT encompasses all of the technologies for creating, storing, exchanging, and using business data

▸ ITaaS is further divided into three broad delivery models namely: Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS)

▸ Organizations can deploy IT in a private cloud for increased security and customization, a public cloud for reduced cost and time to market or a hybrid approach taking advantage of both deployments

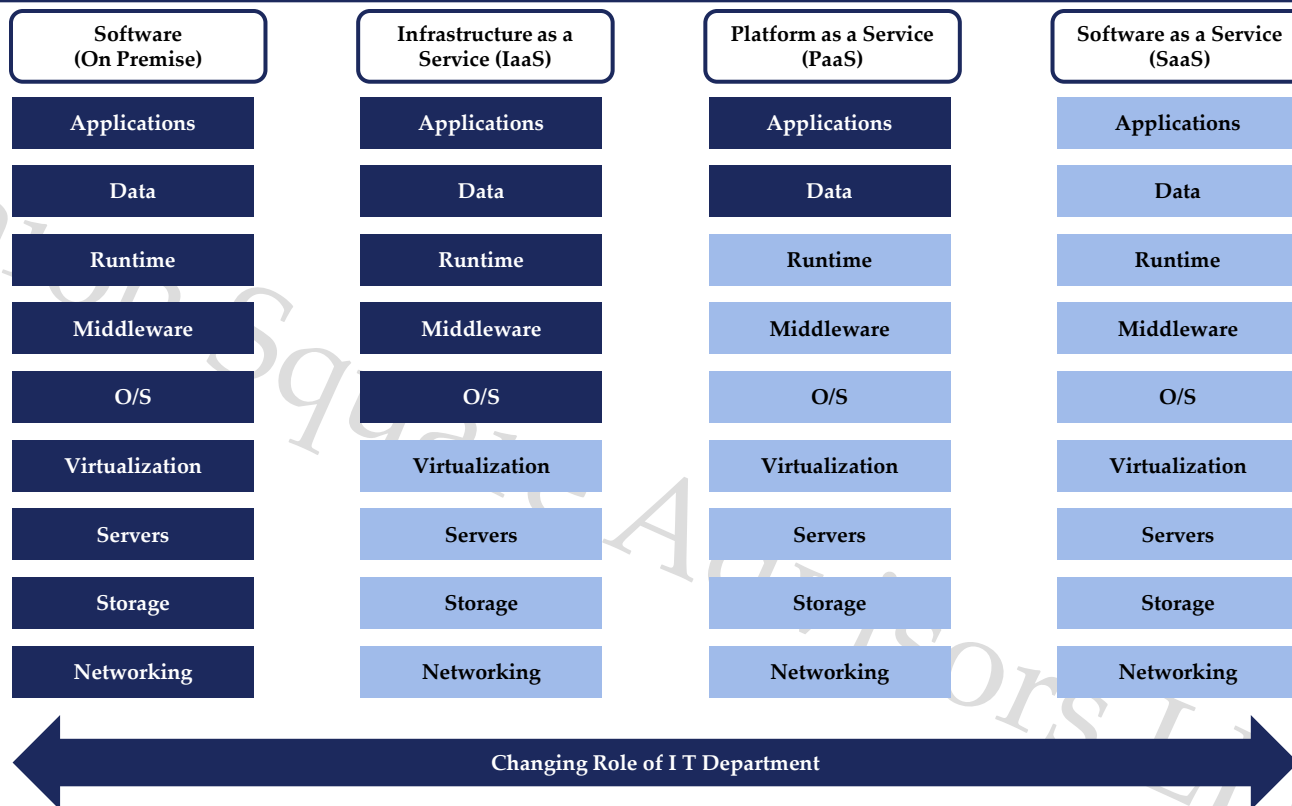| Business Case for ITaaS	Different Aspects of the Cloud
▸ **Minimal Upfront IT Investment:** Adopting ITaaS in the public cloud requires virtually no investment and organizations pay per use, drastically reducing costs of setting up IT capabilities ▸ **Financial Transparency:** Managers can identify exactly which applications are costing them more per month, and track shadow IT usage ▸ **Multi-tenancy:** Hosting data, systems and applications of many organizations on the same hardware using virtualization allows efficient allocation of resources ▸ **Scalability (Elasticity):** This feature gives organizations the freedom to pay for as much or as little as they use, in real-time ▸ **Regular Software Upgrades and Patches:** Responsibility of upgrading and maintaining hardware/software falls with the service providers, helping organizations to concentrate on more strategic issues	

Key Trends	▸ As per McKinsey's Disruptive Technologies report, the potential economic impact of cloud computing in 2025 across all sized applications is expected to be $2–6TR ▸ Revenue from public IT cloud services exceeded $16BN in 2009 and is forecast to reach $56BN in 2014, representing a 27.4% CAGR[1]

Shift of Key it Operations from inside the Enterprise to the Cloud

Software (On Premise)	Infrastructure as a Service (IaaS)	Platform as a Service (PaaS)	Software as a Service (SaaS)
Applications	Applications	Applications	Applications
Data	Data	Data	Data
Runtime	Runtime	Runtime	Runtime
Middleware	Middleware	Middleware	Middleware
O/S	O/S	O/S	O/S
Virtualization	Virtualization	Virtualization	Virtualization
Servers	Servers	Servers	Servers
Storage	Storage	Storage	Storage
Networking	Networking	Networking	Networking

Changing Role of I T Department

Innovations provide a silver lining for a new IT function[1]

▸ Innovations like cloud computing are an opportunity to reposition IT as a function that can continually exploit technological advances to drive business value

▸ The IT department is now expected to operate as a translator of business-generated demand

▸ Potential for IT to improve and evolve into a value-adding partner to the business

▸ A key role for the CIO and IT function is to engage the help of key service providers; selectively partnering with them on the delivery of joint innovation projects

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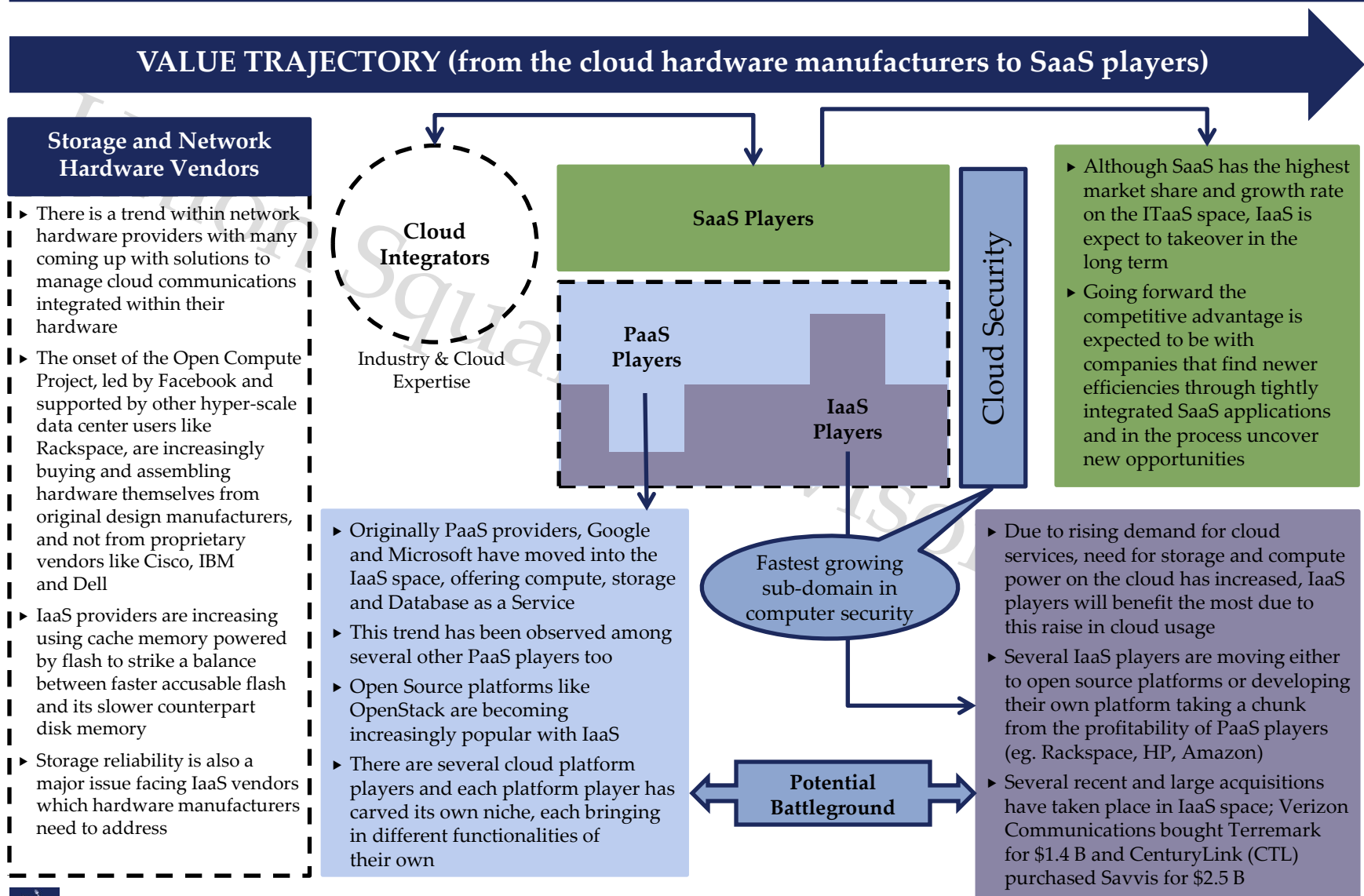# Top 5 Ways Cloud Technologies are Changing the IT Landscape

IT Infrastructure	▸ Shift to cloud computing will not only affect hardware and software but also change the relationship between internal IT processes and vendors ▸ For companies that have a regulatory-driven IT environment, such as banks or insurance companies, the change will require a well thought out plan on how IT can respond to future industry changes ▸ Small to medium businesses can adapt more quickly to new cloud technologies
Job Skills	▸ Skills such as application management and performance monitoring will require a shift towards the tool-sets offered by cloud service providers ▸ Application developers will be required to learn how to develop, test and deploy applications to virtualized cloud environments rather than to physical machines
Platform as a Service (PaaS)	▸ As cloud computing evolves and matures, PaaS will play a crucial role in reducing the cost, risk and complexity of evaluating, buying, deploying and maintaining enterprise-class business applications ▸ Developers will have the freedom to flex their creative muscles rather than fight against inadequate development and testing environments
Data Management	▸ By moving enterprise data to the cloud, availability, fail-over, backups and security management can be handled transparently ▸ The role of the database administrator will change as new vendor data management tools must be learned
Security	▸ IT shops have not been so quick to migrate to the cloud but chances are that vendor-supplied platforms and cloud computing infrastructures will be more secure than the traditional IT shop ▸ Managed cloud services have security experts dedicated to protecting and securing the infrastructure ▸ Vendors are typically SAS70-certified which means they must follow a specific set of operating principles in order to show proper safeguards are in place for customer data

Conclusion

▸ By moving certain key infrastructure and development processes to the cloud, both business and IT agility can be effectively realized

As Value Moves from SaaS Across the Value Chain More Players are Trying to Become One Stop Shop for all ITaaS Requirements

VALUE TRAJECTORY (from the cloud hardware manufacturers to SaaS players)

Storage and Network Hardware Vendors

- There is a trend within network hardware providers with many coming up with solutions to manage cloud communications integrated within their hardware
- The onset of the Open Compute Project, led by Facebook and supported by other hyper-scale data center users like Rackspace, are increasingly buying and assembling hardware themselves from original design manufacturers, and not from proprietary vendors like Cisco, IBM and Dell
- IaaS providers are increasing using cache memory powered by flash to strike a balance between faster accusable flash and its slower counterpart disk memory
- Storage reliability is also a major issue facing IaaS vendors which hardware manufacturers need to address

Cloud Integrators

Industry & Cloud Expertise

SaaS Players

PaaS Players

IaaS Players

Cloud Security

- Although SaaS has the highest market share and growth rate on the ITaaS space, IaaS is expect to takeover in the long term
- Going forward the competitive advantage is expected to be with companies that find newer efficiencies through tightly integrated SaaS applications and in the process uncover new opportunities

Fastest growing sub-domain in computer security

- Originally PaaS providers, Google and Microsoft have moved into the IaaS space, offering compute, storage and Database as a Service
- This trend has been observed among several other PaaS players too
- Open Source platforms like OpenStack are becoming increasingly popular with IaaS
- There are several cloud platform players and each platform player has carved its own niche, each bringing in different functionalities of their own

Potential Battleground

- Due to rising demand for cloud services, need for storage and compute power on the cloud has increased, IaaS players will benefit the most due to this raise in cloud usage
- Several IaaS players are moving either to open source platforms or developing their own platform taking a chunk from the profitability of PaaS players (eg. Rackspace, HP, Amazon)
- Several recent and large acquisitions have taken place in IaaS space; Verizon Communications bought Terremark for $1.4 B and CenturyLink (CTL) purchased Savvis for $2.5 B

Select M&A in the ITaaS Space

Acquirer/Company	Details[1]	Commentary
CSC / servicemesh	▸ Deal Date: October 2013 ▸ Deal Value: $295MM [2]	▸ ServiceMesh provides ServiceMesh Agility Platform, an enterprise cloud management platform, to automate the deployment and management of enterprise applications and platforms across private, public and hybrid cloud environments ▸ The strategic acquisition of ServiceMesh enables CSC to continue its strategic undertaking as it aims to migrate from an IT outsourcer to an IT integrator
NTT Communications / Virtela	▸ Deal Date: October 2013 ▸ Deal Value: $525MM	▸ Virtela provides cloud-based wide area networking, software defined networking, network cost optimization and network monitoring and analytics software and services ▸ The acquisition of Virtela will provide the Japanese telecom giant to expand its presence into the US and aboard; additionally the acquisition will expand its networking services portfolio and spur its organic efforts to offer SDN capabilities
SAP / hybris	▸ Deal Date: June 2013 ▸ Deal Value: $1,341MM	▸ Hybris provides e-commerce management SaaS for businesses globally ▸ With the acquisition of Hybris, SAP will bolster its portfolio for e-commerce and customer engagements through the combination of Hybris' agile omni-channel commerce solutions and SAP's in-memory, cloud and mobile technology to provide new levels of customer insight and engagement
IBM / SOFTLAYER	▸ Deal Date: June 2013 ▸ Deal Value: $2,000MM	▸ SoftLayer provides hosted services featuring colocation and application hosting, managed storage, data backup and recovery and manage security services ▸ With SoftLayer, IBM jumped directly into the modern infrastructure market, accelerating the build-out of its public cloud infrastructure
IBM / urban{code}	▸ Deal Date: April 2013 ▸ Deal Value: Undisclosed	▸ UrbanCode automates the delivery of software, helping businesses quickly release and update mobile, social, big data and cloud applications ▸ The natural fit of UrbanCode's software will extend IBM's DevOps strategy, while enhancing IBM's SmartCloud and MobileFirst initiatives
CISCO / solvedirect Smart Service Integration	▸ Deal Date: March 2013 ▸ Deal Value: $22MM	▸ SolveDirect provides IT service management integration SaaS for enterprises ▸ With the acquisition, Cisco will extend its portfolio of smart and connected IT services to a global ecosystem of customers, partners and resellers ▸ The acquisition fits with Cisco's goal of developing and delivering innovative solutions that streamline data and workflows across a unified network
Rackspace HOSTING / ObjectRocket	▸ Deal Date: February 2013 ▸ Deal Value: Undisclosed	▸ ObjectRocket provides MongoDB database application hosting services for businesses ▸ Rackspace broadens its Open-Stack-based open cloud platform with the addition of ObjectRocket's open source-based MongoDB solution ▸ With the acquisition, Rackspace will establish a strong presence within the high growth, NoSQL database market
CISCO / meraki	▸ Deal Date: November 2012 ▸ Deal Value: $1,200MM	▸ Meraki provides indoor and outdoor wireless access points and switches related to security appliances for businesses globally ▸ The acquisition of Meraki expands Cisco's networking portfolio by providing scalable solutions for midmarket businesses ▸ Meraki complements Cisco's ongoing strategy to accelerate the adoption of software-based business models that simplify network management, empower mobile workforces and generate new revenue opportunities for partners
SAP / ARIBA	▸ Deal Date: May 2012 ▸ Deal Value: $4,304MM	▸ Ariba combines cloud-based applications with the world's largest web-based trading community to help companies discover and collaborate with a global network of partners ▸ The combination of SAP and Ariba will enable customers to collaborate more efficiently with their global network of customers and partners through an industry leading end-to-end cloud procurement solution ▸ SAP plans to provide open access to the Ariba business network, extending the benefits of business collaboration to more than 195,000 customers through pre-built integration points

Cloud Computing—SaaS, in Particular—and Smart Mobility Drove Higher Merger and Acquisition Deals During the First Quarter of 2013

Acquirer/Company	Details[1]	Commentary
ORACLE / responsys	▸ Deal Date: December 2013 ▸ Deal Value: $1,500MM	▸ Responsys provides email marketing campaign design, management and analytics software and SaaS ▸ The acquisition combines two distinct marketing-automation fields onto a single platform dedicated to serving the unique needs of the CMO in B2B and B2C industries, allowing them to drive exceptional customer experiences throughout the customer lifecycle from a single platform
BARRACUDA NETWORKS / SignNow	▸ Deal Date: May 2013 ▸ Deal Value: $2MM	▸ SignNow provides online electronic document signature capture software that enables businesses to obtain encrypted paperless signatures via mobile devices or links ▸ This acquisition will bring significant expansion and expertise that the security and storage vendor s can use to boost cloud data storage growth
box / crocodoc	▸ Deal Date: May 2013 ▸ Deal Value: Undisclosed	▸ Crocodoc operates as platform to mark-up, share, and review documents and presentations ▸ Box acquired Crocodoc to improve the way documents are rendered for viewing on its enterprise storage and file sharing service ▸ Box will integrate Crocodoc's HTML5 technology into its product and use it to replace its existing document preview feature
Walmart Save money. Live better. / TASTY LABS OneOps	▸ Deal Date: May 2013 ▸ Deal Value: Undisclosed	▸ OneOps automates and accelerates processes related to environment management, application deployment and data center operations monitoring ▸ PaaS capability of OneOps will enable Walmart to significantly accelerate its PaaS and Private Cloud (IaaS) strategies ▸ WalMart picked Tasty Labs, a social software connection start-up that might lead customers to the right product
DELL / enstratius	▸ Deal Date: May 2013 ▸ Deal Value: $70MM	▸ Enstratius is a cloud-management software and services provider that delivers single and multi-cloud management capabilities ▸ As the need for public, private and hybrid clouds increase for enterprises, the need for controls, security, governance and automation become critical to the success of cloud-management solutions ▸ With the Enstratius acquisition, Dell positions itself to deliver a differentiated complete cloud-management solution
ORACLE / Taleo	▸ Deal Date: February 2012 ▸ Deal Value: $1,900MM	▸ Taleo provides workforce management software as a service (SaaS) that features employee recruitment, performance management, compensation oversight and training technologies ▸ The acquisition of Taleo provides Oracle with a low cost, low risk human capital management asset that bolsters their SaaS portfolio and giving the company another growth driver
INTERMEDIA / Telanetix	▸ Deal Date: January 2013 ▸ Deal Value: $55MM	▸ Intermedia is a provider of cloud services and one of the largest third-party providers of hosted Microsoft Exchange services ▸ With this acquisition, Intermedia plans to expand its office in the cloud strategy, which includes an integrated suite of cloud services for small and medium businesses
redhat / ManageIQ	▸ Deal Date: January 2013 ▸ Deal Value: $104MM	▸ ManageIQ is a provider of enterprise cloud management and automation solutions that enable organizations to deploy, manage and optimize private clouds, virtualized infrastructure and virtual desktops ▸ With the acquisition, Red Hat expands its open hybrid cloud portfolio ▸ The deal was driven by the complementary nature of both cloud offerings

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