

A Strategic Approach to Meeting the Demand for Cloud

Introduction: New Customer Challenges Propel Cloud Adoption

In a dynamic business environment, enterprise customers are under more pressure than ever to innovate and adapt to new challenges and market conditions. They need to accommodate new technologies, more connected and mobile devices in the workplace, and regulation and compliance issues. Their line-of-business (LoB) groups are playing a stronger role in shaping new technology requirements. To stay relevant, IT departments are expected to support more strategic initiatives such as initiative to grow the business, support innovation, and improve customer experiences.

And the Internet of Everything (IoE) - bringing together people, process, data, and things to make networked connections more relevant and valuable than ever before - is accelerating the pace of these changes. Customers will require computing models that are able to cope with dramatic exponential growth.

To address these challenges, businesses in every industry are rapidly embracing the cloud. They want the agility, security, and performance that cloud technology delivers. And they want the flexibility to deploy their choice of workloads securely to the cloud. At the same time, they're seeking consumption models that deliver the advantages of the cloud without the associated infrastructure, management, and technical issues.

This growing demand for cloud services is creating new opportunities for cloud providers like you to lead the transition to cloud technologies. In a recent survey of IT and business executives, IDG reported that 34 percent of IT budgets are allocated for cloud solutions. And that number is expected to grow. According to the Cisco® Global Cloud Index, global cloud IP traffic will account for nearly two-thirds of total data center traffic by 2016¹.

Seizing the Opportunity

What makes the cloud such an attractive option for enterprises? The cloud empowers IT to act as a broker of business-critical IT services. It helps the organization become a more proactive player that can aggregate, integrate, and customize the delivery of cloud services to meet specific business needs. Instead of working in a technology vacuum or owning the entire IT value chain, IT can make build-or-buy decisions in the context of IT services sourcing recommendations.

Enterprises are leading the demand for cloud services, and they are becoming more sophisticated in the ways that they can consume cloud services. Flexibility and freedom of choice are critical. These businesses are looking for greater self-service and the capability to connect to multiple clouds. Studies show that nearly three-quarters of all enterprises will adopt a hybrid cloud computing strategy by 2015².

¹ Cisco Global Cloud Index: Forecast and Methodology, 2012-2017

² Gartner Data Center Summit, December 2012

It is clear that the cloud provides a compelling opportunity. But to take advantage of this trend, you'll need to apply a deliberate approach to your strategy for building and offering cloud solutions. A successful strategy will enable you to:

- Address your enterprise customers' growing demand for increased flexibility and workload mobility
- Apply a secure, open architecture to boost customer adoption of your managed cloud services by facilitating connections to public and virtual private cloud resources
- Build new revenue streams with multiple-cloud solutions for enterprises, offered as a service
- Accelerate time-to-market for deployment of new offers and expand your global customer reach

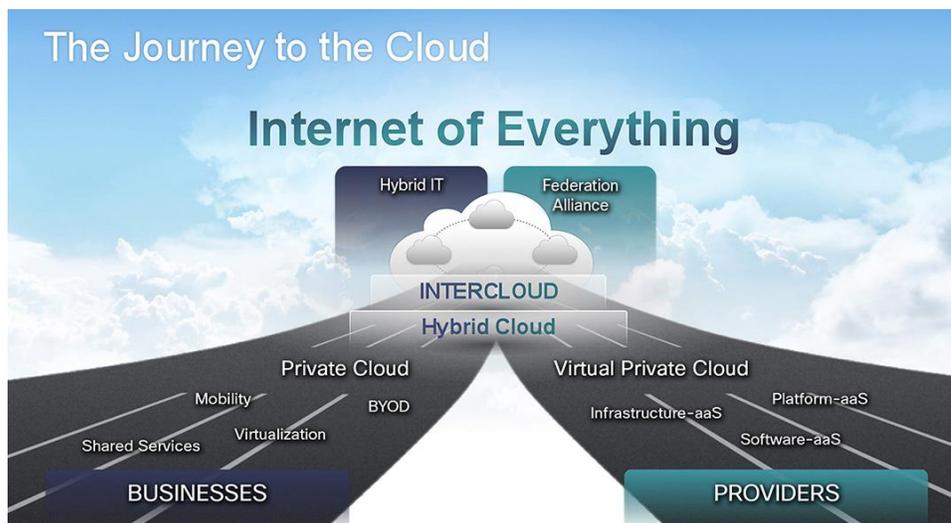
Making IT a Strategic Enabler

Cloud empowers IT to act as a broker of IT services. According to a Cisco study in partnership with Intel, 76 percent of respondents believe that IT will act as a broker, or intermediary, of cloud services, orchestrating the planning and procurement process for LoBs across internal and external clouds.³

Cloud helps business organizations become more proactive and nimble. Instead of working in a technology vacuum or owning the entire IT value chain, IT can present build-or-buy decisions in the context of IT services sourcing recommendations. This approach will enable you to aggregate, integrate, and customize the delivery of cloud services to meet your customers' specific business needs through a World of Many Clouds™.

The World of Many Clouds can be viewed as the evolution of the intersection between traditional customer IT environments and public cloud services. As the line separating these two environments continues to fade, it becomes clearer that hybrid cloud, and more broadly hybrid IT, is the new normal. Additionally, the ability to move cloud workloads across heterogeneous environments with consistent network and security policies is becoming a key requirement. And with the brokerage of IT services driving cloud services toward the concept of cloud federation, cloud providers will be able to build a global marketplace through a federation of services from multiple peer providers. Just as the Internet grew out of the connection of multiple isolated networks, the intercloud is based on the assumption that no single organization can keep up with the scale required for the IoE (Figure 1).

Figure 1. Cisco's Cloud Point of View (PoV)



³ Source: "Impact of Cloud on IT Consumption Models," a Cisco study in partnership with Intel, August 2013

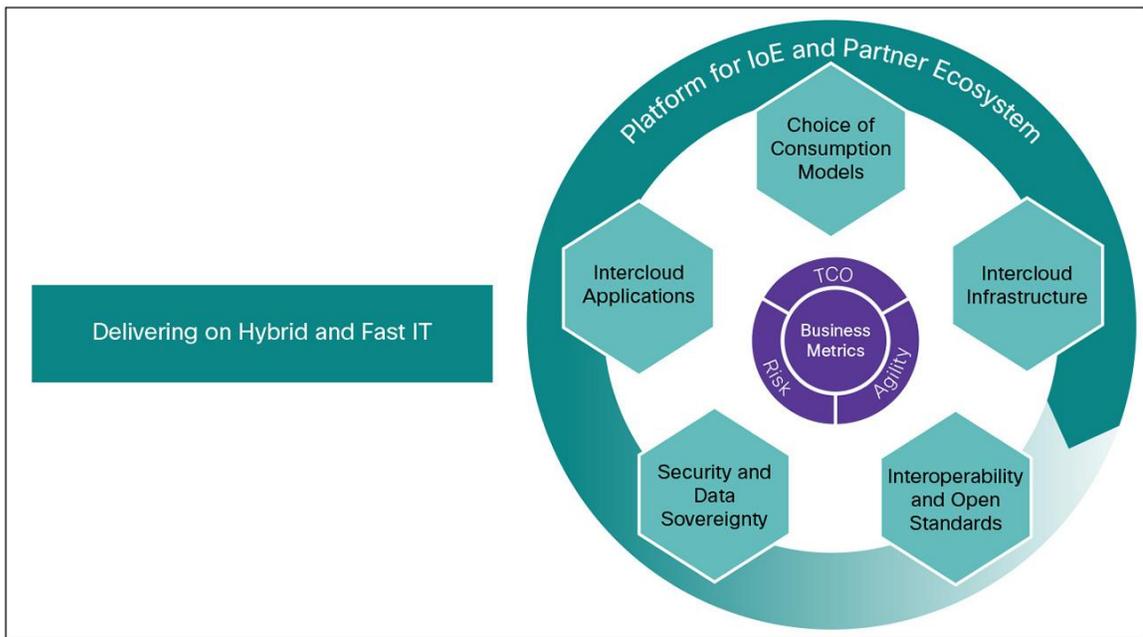
A Complete Strategy for Cloud

Cisco understands cloud technology and has developed a comprehensive strategy that you can apply to drive new revenue and make the most of the promise of the cloud. But not all clouds are created equal. By partnering with Cisco, you can put our strategy to work for you, to develop attractive cloud offerings that will help customers boost flexibility, reduce risk, and enhance their agility and competitiveness.

Cisco's cloud strategy is to build the platform for the Internet of Everything with our partner ecosystem by connecting the World of Many Clouds to the Intercloud. We do this by enabling businesses and cloud providers to build hybrid-ready private clouds, by providing ready-to-consume public cloud services, and by enabling secure workload migration across public and private clouds through the Cisco Intercloud Fabric suite of software products. This strategy enables businesses and cloud providers to increase ROI, reduce TCO, lower risk, and enable business agility by using the increased efficiency, automation and management capabilities, enhanced security, transformative potential, and innovation edge that the Cisco cloud solutions, services, and partner ecosystem can provide.

Our strategy is focused on the areas shown in Figure 2.

Figure 2. Cisco's Cloud Strategy Focus Areas



Choice of Consumption Models

One of the most appealing qualities of the cloud is the variety of ways in which it can be delivered and consumed. With the Cisco Cloud portfolio of solutions and extensive partner ecosystem, you have the flexibility to deliver the types of clouds that your customers want, based on their applications, service-level agreements (SLAs), security needs, and business objectives. Cisco Cloud gives you the capabilities to address your customers' demand for increased flexibility and workload mobility.

We enable cloud providers to deliver differentiated cloud services, and we offer software as a service (SaaS) in selected categories in which we have unique intellectual property. Working together with our partners, our objective is to make it easy for end customers to purchase software or infrastructure as a service from a Cisco partner public cloud provider - or to build their own clouds. We can also help you support customers who want to employ a mix of public and private clouds, to take advantage of a hybrid cloud environment that's tailored to specific business needs.

By offering your cloud services as Cisco Powered™ Cloud Services, you can take advantage of the confidence that your customers will have in knowing that their cloud services are running on the same reliable and secure solutions that they would deploy in their own data centers. Cisco Powered Cloud Services provide an attractive set of revenue-generating solutions for you, including collaboration, telepresence, infrastructure as a service (IaaS), desktop as a service (DaaS), disaster recovery as a service (DRaaS), and other partner solutions. You bring a unique understanding of customer needs to the discussion, so you can work closely with your customers to tailor a differentiated solution that is right for their needs

Intercloud Infrastructure

Your customers' requirements are constantly changing, and you need solution offerings that are flexible to handle their evolving demands. Deploying multiple clouds successfully requires a fabric-based common platform to easily operate and manage physical, virtual, and service features. Cisco Integrated Infrastructure unifies these functions while retaining flexibility. And our policy-based unified platform - which includes Cisco Open Network Environment (ONE), service management and orchestration, provisioning, and element management - supports an application-centric approach to the development of cloud services.

Cloud technology is constantly moving forward, guided by innovations such as software-defined networking (SDN), network function virtualization (NFV), and network programmability. Cisco's model for the Intercloud is designed to evolve to encompass the latest developments in cloud technology. Our solutions use consistent, open APIs to support a common framework and programmability model across enterprises and cloud providers for hybrid cloud deployments and consistency across cloud providers.

Intercloud Applications

We believe that IT infrastructure must adapt to the intercloud - and so too must applications. The promising potential of the cloud, together with evolving user demands, is changing the way that your customers view application deployment. You must be able to offer the ready-to-use services that customers want, or help customers move their chosen workloads to the cloud. Cisco Intercloud Fabric for Providers enables you to easily assign and deploy customers' data and applications to the appropriate cloud resources and keep them within geographic boundaries. Cisco Powered Cloud Services and partner programs provide validated end-to-end solutions and joint go-to-market programs designed to help you differentiate your cloud offerings from those of the competition and achieve faster time to value for your customers.

Your customers may want the capability to employ the best on-premises solutions and the best of the cloud. Cisco's unique approach brings together clouds and fuses customer applications that are cloud based with on-premises applications. Cisco's cloud strategy lets you connect and collaborate your way, across multiple applications and platforms, using any consumption or deployment model, with confidence and without compromise. The result is a complete set of secure, manageable applications, delivered in the way that makes sense for a customer's business. Cisco's cloud strategy puts the power of the World of Many Clouds to work.

Interoperability and Open Standards

Interoperability is essential for partners like you. You need a highly flexible offering that can interact smoothly across the full range of network components, applications, and services that make up today's extended enterprises. Your customers don't want to be locked into a particular vendor's solution. That's why Cisco is committed to an open, interoperable, and standards-based approach to the cloud. Our standards-based infrastructure helps reduce software release-cycle times and enable interoperability with other open development environments and investments from our partners and customers. We enable you to support multiple cloud approaches and give your customers exceptional flexibility.

OpenStack is another a critical part of our strategy. OpenStack is an international open source cloud operating system developed by a community of developers and organizations. OpenStack is designed to make it easier to provision and extend IT resources and applications. Our open-source, standards-based infrastructure is designed to work smoothly with other OpenStack development environments and investments from our partners and customers.

Cisco also is a member of leading industry organizations that promote cloud standards, such as the Cloud Standards Customer Council and the Cloud Security Alliance.

Security for Customer Peace of Mind

Your customers are facing new security threats and compliance requirements. They need to be confident that you can deliver end-to-end security across cloud deployments, regardless of the types of clouds they use.

To safeguard your customers' sensitive business data and support SLAs, you need complete, end-to-end security that spans the entire network and cloud services environments. Hybrid cloud environments in particular need protection that extends across physical, virtual, and cloud domains.

Cisco's advanced security capabilities are built into its cloud architecture and infrastructure, and consequently into Cisco Powered cloud services, to secure your customers' data and reduce risk. Cisco Cloud Consulting Services also help you deploy secure cloud services with confidence.

Partner-Centric Approach

Employing a strategic approach to the cloud is crucial to planning a successful cloud deployment. But to make this vision a reality, you need to partner with a cloud leader such as Cisco. Cisco has proven success with businesses all over the world that can help deliver complete cloud solutions and services.

Cisco uses a partner-centric, ecosystem approach to delivery of cloud solutions and go-to-market. Together with our partners, we align our cloud portfolio with our strategy, to enable complete solutions that are tailored to end-customers' needs.

At the core of the ecosystem is our comprehensive set of cloud infrastructure products. Cisco is a leader in IT cloud infrastructure, with leading market share positions⁴ to support both service providers building public clouds and businesses building private clouds, according to Synergy Research.

⁴ Cisco leads the cloud infrastructure equipment market according to the Synergy Research Q43 2013 Totals Worldwide Market Share Report

Cisco Cloud Portfolio solutions give you a comprehensive range of options for delivering money-making services. And when you offer these services as Cisco Powered Cloud Services, you can deliver the industry standard for cloud and managed services. Our comprehensive portfolio delivers:

- Faster time to value, with proven Cisco validated architecture and a broad range of solutions to connect providers and consumers: Our solutions are all backed by our lifecycle approach to professional services.
- Assured performance, through end-to-end, secure, reliable operations: Cisco cloud solutions employ third-party audited components and can scale smoothly to accommodate changing customer requirements.
- Continuous innovation, guided by Cisco's proven capability to lead technology transitions: Our open standards-based solutions interact smoothly with existing devices and applications, giving you the flexibility you need to build and monetize compelling offerings for customers. Cisco also has one of the highest R&D investment-to-revenue ratios in the industry.

Conclusion

Cloud technology is rapidly transforming the way that businesses think about technology. Cisco's cloud strategy empowers you to get out in front of this changing environment and turn change into opportunity. It offers an industry-leading perspective to help you quickly deliver and demonstrate business value, flexibly align services with your customers' business objectives, automate core IT processes, and create new revenue streams.

For More Information

To learn more about how you can partner with Cisco to address new markets and find new revenue opportunities, visit <http://www.cisco.com/go/intercloudfabric>.



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