Unlock the Promise of Cloud: A Strategic Perspective

Introduction: Keeping Pace in a Changing World

In today's fast-moving business environment, change is the only constant. To keep up with your competitors, you're under more pressure than ever to innovate and adapt to new challenges and market conditions. As in most businesses, you need to accommodate new technologies, more connected devices in the workplace, and regulation and compliance issues. Your employees are becoming more technically savvy, and they are bringing their own communication devices and apps to the workplace.

These challenges are having a dramatic impact on the role of your IT group. Not long ago, IT focused on managing technology and keeping business operations running smoothly. Today, your IT department is being asked to expand its scope beyond just running the overall IT environment. IT is expected to support more strategic initiatives such as growing the business, promoting innovation, and improving customer experiences. In essence, to add value, IT leaders must adapt, especially in areas of collaboration, innovation, and value creation.¹

This dynamic environment is also changing the way that IT works with your line-of-business (LoB) departments. More than ever, LoB leaders are leading new technology requirements. They have more direct access to technology, and they aren't afraid to take the lead in launching new initiatives on their own.

How can IT remain relevant and keep control in this new environment? To be successful, your technology group has to redefine itself as an agent of change and become a strategic business partner. IT departments must:

- Deliver and prove business value fast.
- Remain flexible to align business and IT objectives.
- · Make the most of budgets and technology investments with automation.
- Take an active role in transforming your business with new models, processes, and opportunities.

To achieve these goals, IT groups and business leaders are rapidly embracing the cloud. Migration to the cloud is transforming network and data center environments across companies of every size and type. And it is creating new business models that are changing the way that organizations think about technology, procure it, and deploy it. With the right strategy, you can tap the potential of cloud technology and unleash an abundance of new benefits.

Making IT a Strategic Enabler

Imagine the possibilities of an IT group with the agility, flexibility, and reach to help your organization seize new opportunities. With cloud technology, you can build a more relevant IT department that has the power and control to become a more strategic, transformative partner for your business.

¹ Source: "Impact of Cloud on IT Consumption Models," a Cisco study in partnership with Intel, August 2013

Cloud computing 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.²

Cloud helps the organization become a more proactive player that can aggregate, integrate, and customize the delivery of cloud services to meet your specific business needs. 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 (Figure 1).





- Boost agility and efficiency: Rapidly align business and IT needs and deliver a superior user experience through an IT delivery model that is service oriented and value based.
- Automate for savings: Automate critical processes to be able to make the most of limited budgets, rebalance your priorities, and invest where it most matters.
- Get more from your investment: Make the best of traditional IT environments and private and public cloud deployments all at the same time and dynamically, through open, secure hybrid cloud environments.
- Take charge of sourcing: Easily accommodate new and multiple IT consumption models, while presenting build-or-buy IT services sourcing recommendations.
- Let employees work their way: Let employees, contractors, and partners work whenever and however they want, without boundaries, with workspaces that are mobile and matched to the individual's lifestyle, while providing enhanced management and security and retaining control over shadow IT applications.
- Make more informed decisions: Gain data from a comprehensive set of sources and gain business insights for real-time, strategic decision making.
- Promote change: By understanding that every company is a technology company or can become one you can reinvent your industry by enabling your business to become a cloud service provider itself.

² Source: "Impact of Cloud on IT Consumption Models," a Cisco study in partnership with Intel, August 2013

Your Cloud Strategy, Our Perspective

What is needed to help IT seize these new opportunities? We are truly in a World of Many Clouds[™], where cloud solutions are easy to purchase from multiple vendors and service providers. But not all clouds are created equal. To make the most of the cloud opportunity, you need a partner that can provide the strategic flexibility you need to source your cloud services - a partner that understands the need for you to capitalize on your existing IT investments while making the most of what cloud can offer to meet your overall business requirements.

Cisco has developed a comprehensive strategy that will continue to help us capitalize on this powerful trend. We can put our strategy to work for you and help you achieve a high level of business flexibility, reduce risk, and boost your agility and competitiveness. Our strategy is centered on five major pillars (Figure 2).

Figure 2. Five Pillars of the Cisco Cloud Strategy



Your Choice of Consumption Models

One of the most appealing qualities of the cloud is the variety of ways that it can be delivered and consumed. A successful cloud strategy will let you take advantage of the full range of consumption models for cloud services to meet your specific business needs. The type of cloud solution you choose may depend on the applications you are using, total cost of ownership (TCO), security needs, and service-level agreement (SLA) requirements.

Cisco enables businesses to build private clouds, enables cloud providers to deliver differentiated cloud services, and offers software as a service (SaaS) in selected categories in which we have unique intellectual property. In essence, together with our partners, we give you complete freedom of choice to build your own private cloud, or to purchase software or infrastructure as a service from a Cisco public-cloud provider partner. You may even want to employ a mix of public and private clouds, to take advantage of a hybrid cloud environment that is tailored to your business needs.

If you're seeking to build a private cloud environment, Cisco offers a comprehensive portfolio of integrated infrastructure solutions, cloud management, and automation software. We also provide professional services to help you plan, build, and manage your cloud environment and keep it running at its best.

Our partners offer a variety of Cisco Powered cloud services, so you can connect with confidence. As the industry standard for cloud and managed services, Cisco Powered offerings help you achieve faster time to value and experience assured performance that scales to meet your changing business needs. Our solutions help you lower your operating costs and reduce risk by reducing complexity during the entire technology lifecycle. These capabilities free your organization to focus on its core competencies. Because providers must undergo rigorous certification and a third-party audit of their solutions, each Cisco Powered cloud service has been verified to deliver superior service, security, and support 24 hours a day, 7 days a week. You'll also stay ahead of your competition by taking advantage of industrywide innovation from Cisco's extensive R&D investment and leadership in advancing open standards. You can choose from a variety of services. Your cloud provider will work closely with you to understand your business and develop a solution that is tailored for your needs.

You can also purchase complete Cisco cloud services directly from Cisco to support specific applications and services. Cisco offers cloud solutions that build on our expertise in collaboration, security, network management, and many other areas.

Infrastructure and Intercloud

Your business is constantly evolving and changing, so your technology will need to be flexible to handle change as well. To be built to last, a cloud solution should be based on a modular, scalable, and programmable infrastructure. A fabric-based, common platform for physical, virtual, and cloud services, together with a common operating model, gives you a solid foundation with room to grow. Programmability enables development and operations (DevOps) processes and application agility. Our customers and cloud providers both expect an open, programmable solution to master the art of provisioning, automating, and managing their servers. This combined model facilitates automation, makes IT management easier and more efficient, and helps your organization be more productive and agile.

Our integrated infrastructure solutions bring together the industry's most powerful data center technologies to make rolling out the applications you need fast and simple. To avoid getting locked into one specific deployment model or public-cloud service provider, you also need support for open and secure migration of IT services across hybrid cloud environments. This implies the capability for you to be in control: for you to deploy your applications and data in a public cloud and have them return to your data center secure and intact according to your policies and business needs. Open and secure intercloud portability of applications should be an option for you to use.

Cloud technology is constantly moving forward, guided by innovations such as software-defined networking (SDN), network function virtualization (NFV), and network programmability. The network is critical to the cloud. Every cloud is some combination of a service and deployment model. Regardless of the type of cloud, however, one fact remains true: no network means no cloud. Without networks, users cannot access their cloud services. Without networks, applications, data, and users cannot move between clouds. Without networks, the infrastructure components that must work together to create a cloud cannot do so. Our multicloud model is designed to evolve to adopt the latest developments in cloud computing. 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.

Cisco Applications and Cisco Cloud Fusion

The promising potential of the cloud, together with evolving user demands, is changing the way that IT views the deployment of applications. Businesses want the capability to use the best of on-premises solutions and the best of the cloud. Cisco Cloud Fusion lets you use the best solutions and extend them to all. Connect and collaborate your way - across multiple applications and platforms, using any consumption or deployment model, with confidence and without compromise. Cisco Cloud Fusion brings together clouds and fuses applications that are cloud based with on-premises applications. The result is a complete set of secure, manageable applications, delivered in the way that makes sense for your business. Cisco Cloud Fusion puts the power of the World of Many Clouds to work for you.

Our cloud-based Cisco Web Security and network management offerings provide additional software-as-a-service (SaaS) capabilities to help you control risk and simplify network administration. And if you want to support a specific enterprise software application such as SAP, you can work with a number of Cisco partners who can build and deliver a tailored SaaS solution.

Interoperability and Open Standards for Cloud

Your cloud environment doesn't run in a vacuum. It needs to interact smoothly across a wide world of network components, applications, and services that make up today's extended enterprise. There's no reason 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 strategy is to support multiple cloud approaches, give you choice and flexibility, and serve our customers' business needs.

OpenStack is an important part of our strategy for companies that want to purchase or deliver cloud solutions. It 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 scale out 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.

End-to-End Security for Peace of Mind

In an environment of changing threats and new regulations, security, compliance, and data sovereignty laws are main considerations for every organization, regardless of the size or industry. No matter what type of solution you are employing, you and your cloud provider share responsibility for compliance with government and industry regulations such as the Health Insurance Portability and Accountability Act (HIPAA), the Federal Information Security Management Act (FISMA), Payment Card Industry (PCI) requirements, and other mandates.

To safeguard your sensitive business data and protect your customers and your reputation, you need complete, end-to-end security that spans your network and your cloud services environments. In the past, traditional security solutions such as firewalls could protect your network perimeter and provide strong security. But hybrid cloud environments need protection that extends across your physical, virtual, and cloud domains. Your security policies need to be agile and consistent, too. They must adapt to constantly changing traffic patterns that derive from the cloud's dynamic consumption models.

Delivered and Supported Through a Comprehensive Ecosystem

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 vendor that can deliver the products, complete solutions, and services - all backed by expert partners who understand your business.

Cisco uses an ecosystem approach to delivery of cloud solutions. Together with our partners, we align our cloud portfolio with our strategy to provide a complete cloud solution that is tailored to your needs and helps you control costs, build a more agile business, and better manage risk.

After you have identified your need for a cloud solution, you can put your plan into action by engaging Cisco Services for Cloud Strategy, Management, and Operations. Through this comprehensive portfolio of services, Cisco and our channel partners can help you:

- Enhance your business flexibility with a choice of consumption models.
- Reduce exposure to risks throughout the journey, including assessments of cloud use, your risk profile, and cloud spending.
- Intelligently secure and automate your cloud environment.

According to an IDC survey, Cisco services are tied for most used across all three cloud categories: cloud applications, application platforms, and infrastructure³. In the recent <u>IDC MarketScape Cloud Professional</u> <u>Services report</u>, Cisco was rated a "Worldwide Major Player" for cloud professional services⁴. Services engagements with Cisco and our channel partners have resulted in 15 to 20 percent faster time to revenue, 30 percent lower infrastructure costs, 50 percent faster disaster recovery, and 90 percent reduction in deployment time.

We've helped customers achieve these results because Cisco offers the right people, processes, and tools as a result of more than 28 years of industry experience, more than 50 million devices deployed, and more than 6 million customers encounters every year.

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 positions⁵ to support either service providers building public clouds or businesses building private clouds, according to Synergy Research. Additionally, <u>The Forrester Wave[™]</u>: <u>Private</u> <u>Cloud Solutions, Q4 2013</u> by Forrester Research, Inc. report ranked Cisco in the top three for cloud management (Cisco Intelligent Automation for Cloud [IAC]) and self-service access (Cisco UCS[®] Director) and earned top marks on strategy for strategic vision and roadmap in private cloud software solutions.

Our solutions are backed and delivered through a partner-centric strategy. You can choose from 2600 service instances, from 300 unique cloud and managed services, all delivered by 190 certified partners worldwide. Cisco Powered services include cloud offerings such as infrastructure as a service (IaaS), collaboration, desktop as a service (DaaS), telepresence, and disaster recovery as a service (DRaaS). They also include a wide range of managed services. For a complete list of Cisco Powered cloud and managed services, or to find a certified partner, visit http://www.cisco.com/go/ciscopowered.

³ Source: 2013 IDC Services Group Survey. U.S. Professional Services Opportunities Related to Cloud Services, Doc #239862, March 2013, N = 223 for Applications, N = 173 for Application Platforms, N = 178 for Infrastructure.

⁴ Source: IDC MarketScape: Worldwide Cloud Professional Services 2013 Vendor Analysis, doc #242401, August 2013.

⁵ Cisco leads the market in hardware revenue, with 15 percent in Q1 through Q3 2013, according to Synergy Research Group.

The cloud is transforming today's businesses, enabling them to become more agile, flexible, and productive while controlling costs and reducing risks. By employing a carefully planned cloud strategy, you can empower your IT department to be more proactive and help guide critical business priorities. A partnership with Cisco is an excellent way to get started moving forward to embrace today's World of Many Clouds.

For More Information

To learn more about how Cisco solutions can help you unlock the promise of the cloud, visit http://www.cisco.com/go/cloudevolution.



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