Business, Not Technology, Drives Cloud Adoption

Vertical Cloud Providers Can Increase Momentum

Service Provider FastFacts

View Cisco IBSG Service Provider FastFacts Website

Cloud adoption is accelerating at an impressive pace. To gain a deeper understanding of the current rate of change, and the dynamics of cloud's evolution, the Cisco® Internet Business Solutions Group (IBSG) engaged with wide-ranging groups of IT executives and decision makers—first in 2010, and then again in 2012. Our in-depth interviews focused on five industry verticals: government, manufacturing, financial services, professional services, and retail.

In our interviews, we encountered many examples of cloud implementation projects, which we call "adoption dynamics," because they are nearly always part of the enterprise cloud adoption process. While there is no prescribed order, enterprises often begin with smaller, well-defined projects that fall into six categories:

1. Consolidation of IT resources into cloud-based architectures for true **cloud transformation**
2. **Next-generation workspace**
3. Simple back-office **business processes**
4. **Software development**
5. Agile and scalable **web presence**
6. Transformation of computer **grids and analytics**

Today: Different Industry Verticals Share Common Adoption Dynamics

The study identified a number of drivers and inhibitors of cloud adoption, and looked at the ways these play out across different industries. We found that, despite obvious differences among verticals, cloud projects in different industries are bound by the same set of drivers and inhibitors, and can be categorized within the same adoption dynamics. The way cloud adoption plays out may differ because industry-specific business strategies emphasize different key drivers and inhibitors. For instance, for financial services, security and privacy

are critical. On the other hand, because manufacturers are dependent on factory legacy systems, they choose different implementation paths, but the triggers for their adoption remain similar to those of financial services.

Figure 1. Examples of Industry Projects by Adoption Dynamic and Industry Vertical.

	Manufacturing	Financial Services	Public Sector
Cloud Transformation	• Factory floor app very old, cannot be migrated • Use grid expertise for wider cloud transformation	• Privacy—"Data is the new currency" => private cloud • Core banking apps remain on legacy systems	• Building a central IT service provider to serve government agencies
Next-Generation Workspace	• Collaboration for CAD and design • VDI for S/W developers in remote locations	• Use VDI for large call center operations and branches	• Wide-scale VDI deployment for schools & temporary workers • Mobilize applications for government staff
Simple Business Processes	• HR systems, payroll, accounting: simplify and reduce cost, enable mobile access • Some companies aiming for high percentage of SaaS (for example 50% of IT workloads)		
	• M2M firmware updates • Supply / distrbution support	• SaaS enablement of street surveys and queue breakers	
Software Development	• Legacy of independent development in global factory operations • Design data sets too large	• Extensive software development and "over-customization"—use internal IaaS	• PaaS for consistent user experience
Web Presence	• Cloud apps for connected TVs, etc.	• Variability of online banking traffic • Web portal, mobile app for customer front end	• Variable workloads for citizen services • Inter-agency customer-facing portal consistency
Grid / Analytics	• R&D simulations • Silicon chip synthesis • Thermodynamics modeling & crash testing	• Credit-scoring service • Price and risk analysis	• Disaster prediction • Tax analysis and prediction

Source: Cisco IBSG, 2012

To underscore this point, Figure 1 highlights industry-specific projects categorized by the six adoption dynamics. Many examples reveal how specific cloud projects in vertical-industry segments are motivated by the same set of drivers and inhibitors:

- In next-generation workspace, we found that manufacturing companies may use virtual desktop infrastructure (VDI) for developers in remote locations, while banks often use VDI for call centers. While the use cases differ significantly, both were motivated partially by a desire for security and ease of management.
- Both manufacturers and financial-services institutions have distinct legacy situations that slow down the migration of core assets. In manufacturing, these applications are found on the factory floor; in financial services, they are among the core banking applications.
- All sectors have to safeguard the privacy of their data, but the focus is different. Manufacturing companies seek to maintain intellectual property, while both financial services and the public sector are concerned with safeguarding their customer data.

We also tested the importance of horizontal (not industry-specific) cloud applications. Most enterprise representatives agreed that horizontal workloads (such as email,

collaboration, and HR) would migrate to cloud faster than vertical-specific applications. Horizontal workloads have a faster innovation cycle, greater application readiness, and greater scale. Thus, they tend to migrate faster.

Although they are all motivated by similar drivers and inhibitors, every enterprise will make its choice of cloud technologies in the context of its vertical-specific business strategy, and technical solutions will need to link and appeal to business drivers. Cloud service providers, then, need to adapt their go-to-market, sales, and product-bundling strategies to reflect vertical specifics.

The Future: Vertical Cloud Providers

Many interviewees also highlighted the emergence of vertical cloud providers. This is a cloud play for service providers where vertical industry insight is combined with horizontal cloud technologies. Together, these elements provide solutions for key industry challenges, such as smart grid management, health solutions, price management for retailers, or a security lifecycle. This can be seen as an extension of the adoption dynamic we call "simple business processes," which to date has focused primarily on horizontal processes, but in the future will also embrace vertical-specific processes.

Several clear implications for service providers emerged from our study:

- Adoption dynamics provide a flexible structure that applies to all verticals and ties cloud adoption to a business rather than technical discussion.
- Service providers may apply adoption dynamics to create efficient go-to-market models that apply to, and are tailored for, all verticals.
- Dependency on vertical industry segments exists on the level of the go-to-market strategy, where specific industry processes are in focus. This is the area for vertical-specific partnerships.

To learn more, please download our white paper, "Enterprise Journey to the Clouds."

More Information

Cisco IBSG (Internet Business Solutions Group) drives market value creation for our customers by delivering industry-shaping thought leadership, CXO-level consulting services, and innovative solution design and incubation. By connecting strategy, process, and technology, Cisco IBSG acts as a trusted adviser to help customers make transformative decisions that turn great ideas into value realized.

For further information about IBSG, visit http://www.cisco.com/ibsg

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **www.cisco.com/go/offices.**