Introduction

In only a few short years, cloud has altered the information technology landscape for both large enterprises and midsize businesses — and yet the transformation is only beginning. Increasing end-user technical and experience demands, rapid and simultaneous technology transitions, and a constantly shifting business environment are all fueling further cloud proliferation. And organizations are being challenged with a fundamental shift in the IT consumption lifecycle (see Figure 1). In this environment, they are looking to accelerate their adoption of this game-changing cloud technology while effectively mediating multiple sources of services and service assets, modularizing architectures, and delivering a complete service to their constituents.

Another factor in this transformation is unprecedented Internet growth. Cisco estimates that there were “only” about 200 million things connected to the Internet in the year 2000. Driven by advances in mobile technology and the “bring your own device” (BYOD) trend, among others, this number has increased to approximately 10 billion today. A dramatic upsurge to 50 billion connected people, processes, and things is expected by 2020. The resulting Internet of Everything (IoE) will drive the next wave of explosive Internet growth, with cloud as a pillar of this transformation.

In this wide-ranging study, Cisco® Consulting Services (CCS), in partnership with Intel®, sought to pinpoint just how these trends are impacting IT. We explored the powerful changes affecting IT consumption at all stages — how businesses plan, procure, deploy, operate, and govern IT services. In addition, we focused on the ways in which lines of business (LOB) — human resources, sales, and other areas that are end users of IT — are altering overall IT consumption.

The “Impact of Cloud on IT Consumption Models” study surveyed 4,226 IT leaders in 18 industries across nine key economies, developed as well as emerging.
In a world of “many clouds,” companies have many options regarding how they choose to plan for, source, and assemble cloud solutions, as well as deploy, operate, and support cloud services. Whether adopting a full stack of private cloud capabilities, selecting a single enterprise application delivered as a service via a public cloud provider, or sourcing specific service assets to complement internal solutions, IT organizations are being forced to cope with tremendous dynamism in the vendor landscape of cloud offerings and unprecedented choice. In this light, the overall goal of the study was to ascertain the bigger cloud picture — what is happening now, how leaders believe IT will be consumed (bought, managed, supported) in the future, and what this will mean for their organizations.

In short, what will the IT organization of the future look like, and what will its leaders have to do to be successful in that environment? This paper presents the top 10 insights from our analysis.

**Figure 1.** IT Consumption Lifecycle.

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**Figure 1.** IT Consumption Lifecycle.

Despite the challenges and added complexity that cloud brings to IT organizations, a strong majority feels that the business upsides outweigh the negatives. For example, 83 percent of respondents believe that cloud will positively impact IT planning. In addition, 81 percent see a positive impact from cloud on “IT funding and procurement.” Similar percentages apply across all other IT consumption lifecycle stages.

Despite being cited as the number-one inhibitor for cloud, “enhancing security and risk management” is also among the top three business drivers for cloud adoption in both emerging and developed markets alike. With third-party solutions flooding into organizations on the LOB side, cloud will certainly add security headaches for IT but could offer its own security solutions, especially next-generation capabilities such as automated policy enforcement.
Insight No. 2: Cloud Is Here ... and Growing.

Cloud – whether public, private, or hybrid – already represents a significant share of our respondents’ total IT spending, at 23 percent. In three years, the percentage is expected to reach 27 percent. Private cloud is the most prevalent cloud deployment method at 45 percent.


In general, the emerging economies featured in our study – Brazil, China, India, and Mexico – are upbeat about cloud and the impact it can drive for their organizations. They are investing heavily in what they see as the transformational potential of cloud. For these emerging economies, the number-one cloud adoption driver is increasing business productivity. In contrast, respondents from developed economies indicated they are primarily looking at cloud to lower costs.

Insight No. 4: Satisfaction With Cloud Providers Is High, but So Are Expectations.

Fifty-one percent of our respondents described themselves as “very satisfied” with their cloud providers, while 35 percent were “somewhat satisfied.” But this high rating comes with high expectations from IT leaders: security capabilities, the ability to build custom solutions, and guarantees on service levels were cited as the most critical success factors for cloud service providers. Overall, cloud providers are well positioned, but they will likely find themselves in an increasingly demanding marketplace.

Insight No. 5: IT Wants To Feel Safe in the Cloud.

Security concerns ranked as the number-one inhibitor to cloud adoption. Second was complexity of managing third parties, and the third inhibitor was the lack of integration and interoperability across internal systems and those of providers.

In addition, robust security and data protection capabilities were seen as the most critical factors for cloud service providers to succeed in winning business.
To a far greater degree than ever before, IT and the LOBs will shape IT consumption together.

**Insight No. 6:**
**There Is No “One-Size-Fits-All” Approach.**

The cloud market is evolving rapidly, and companies today can choose from many different approaches for sourcing, deploying, and operating cloud solutions. There is no “one-size-fits-all” approach. Rather, companies will need to formulate an approach that enables them to meet the overarching goals for their organization. In many cases, companies will be looking to use cloud solutions to do one or more of the following:

- Reduce complexity of the IT environment — from multiple workloads, multiple systems, multiple vendors — and drive predictability of service
- Transform their organization to expand beyond a traditional “support” role, enabling new revenue models and faster time to market via the elastic service capacity and operating flexibility provided by cloud solutions
- Lower overall operating costs and improve company competitiveness through means such as “pay-as-you-go” service models and automation
- Drive efficiencies for some specific applications that are critical to their business

In crafting their strategy for cloud, IT leaders should consider how they can best partner with key stakeholders, such as the LOBs and third-party providers, to pursue an approach that is tailored for their unique needs.

**Insight No. 7:**
**IT Views Itself as Being Front and Center ...**

IT leaders in our survey believe they will retain much of the oversight and authority that has characterized their relationship to the business in recent years. Indeed, increased centralization and coordination of IT resources is top of mind for our respondents. Fifty-six percent saw IT becoming more centralized (in Asia Pacific, this rose to 79 percent), rather than more fragmented as LOBs’ role in IT consumption grows. The belief is that greater centralization will yield greater efficiencies and consistency of policy, user experience, etc., than is afforded by a more distributed IT function (i.e., in which LOBs have their “own IT group.”) Fifty-seven percent of respondents saw the size of the IT organization and its headcount increasing. In Asia Pacific, this was 80 percent; in Latin America, 69 percent.

Yet respondents in Asia Pacific and Latin America were nearly twice as likely to project an increase in the size of their IT organization than were their counterparts in Europe and North America, where just four in ten foresaw a cloud-driven increase in headcount. Given the attitudes registered toward the issues of centralization and organizational size, respondents in Europe and North America are clearly more reticent about what cloud will mean for the resources they oversee than are their peers in emerging markets.
IT leaders will need to reimagine what it means to partner with the business and share in value creation.

**Insight No. 8:**  
**... But Lines of Business Are Gaining IT Influence.**

The influence of lines of business (LOBs) will extend across all IT lifecycle stages and create unprecedented complexity for IT organizations as they grapple with security issues and technical support across far-flung organizations. Overall, 44 percent of IT funding is already coming from LOBs, either directly or as chargebacks to IT. Sixty-nine percent of respondents believe that authority over buying decisions will increasingly reside with LOBs.

Given the much-increased influence of LOBs across all lifecycle stages, it is imperative for IT to rethink its strategy. Indeed, LOBs can no longer be considered as buying centers alone. The LOBs are clearly moving into areas such as planning and governance, and IT will need to partner with them on a deeper level than ever before.

**Insight No. 9:**  
**A Renewal of the Business–IT Partnership.**

Whether centralization and greater resourcing for IT is realistic remains to be seen. What is clear, however, is that IT and the LOBs will shape IT consumption together, and to a far greater degree than ever before. As LOBs look to partner with an IT organization that is both flexible and business savvy, attempts to mandate monolithic, top-down consumption models – that is, from IT to the business – may prove less viable.

While our IT respondents do not envision a diminished role for themselves, retaining a central role will require an increased level of partnership with the LOBs across all stages of IT consumption. In the view of the IT leaders surveyed, IT will evolve to be a broker of services to LOBs, acting as a critical intermediary and orchestrator within the business, overseeing service, procurement, and delivery, while also providing technical support and security. Seventy-six percent of our respondents believe that IT will act increasingly as a broker of cloud services for LOBs across internal and external clouds. While this may not be the only means by which IT is likely to be consumed by the business, as rogue purchasing and so-called “shadow IT” are both projected to increase in coming years, IT decision-makers made clear that they see their organizations gaining relevance through this orchestration function.

This partnership though is a two-way street: many LOBs will source cloud services directly to address fast-moving business requirements, circumventing IT. In some instances, this option may be the norm, and may even be desirable. But LOBs must also recognize the value of a strategic approach to sourcing and governance that IT can bring to the table in terms of risk management, economies of scale / lower total cost of ownership, and consistent policy.
In crafting their strategy for cloud, IT leaders should consider how they can best partner with key stakeholders, such as the LOBs and third-party providers, to pursue an approach that is tailored for their unique needs.

**Insight No. 10: A Wake-up Call for IT.**

Our respondents foresee both growing influence of LOBs as well as a leadership role for IT. They also anticipate a greater focus on metrics such as return on investment, and, ultimately, on improved business outcomes. Shared accountability for business outcomes (for example, reduced business travel costs due to the use of video conferencing and collaborative tools) may become the norm for IT. Yet many IT leaders expect to retain (and indeed, increase) a reliance on traditional funding mechanisms such as chargebacks, which could curb adoption of innovative capabilities, positioning IT less as an enabler of growth and more as a conventional cost center. This is just one example of how the operating models of old may conflict with emerging expectations from the LOBs.

To be sure, the bar for how IT adds value to the organization is being raised. The growing influence of LOBs should serve as a wake-up call for IT: the ability to move at speed, to foster innovation, to enable new end-user experiences, and positively impact business outcomes in a measurable way will be instrumental. If IT does not step up to these challenges, LOBs are likely to invest independently in the cloud-enabled innovations they demand, creating still more complexity while failing to achieve the efficiency and consistency that underpin IT’s charter and performance metrics.

We believe these changes demand a wholesale reappraisal of how IT adds value. To that end, IT leaders will need to focus on the following areas, in particular, to ensure success in the future:

- **Collaboration:** Given the increasing influence of LOBs across the IT lifecycle, IT leaders will increasingly need to collaborate with line-of-business leaders. This will involve understanding their key business issues and ensuring alignment with their measures of success.

- **Value Creation:** IT leaders will need to reimagine what it means to partner with the business and share in value creation. This extends to funding mechanisms, budgeting, metrics, risk, planning and governance models.

- **Innovation:** Cloud will unlock the opportunity for employee-led innovation by making capabilities that were once limited to large enterprises and specialized roles widely available. IT leaders should actively seek out opportunities to drive business transformation for their companies, making IT an engine for growth.
Conclusion

These insights — and the sweeping changes they illustrate — represent a clear call to action for IT leaders. Cloud providers should focus on the areas that our respondents deemed most important for their success: robust security and data protection capabilities; the ability to build custom solutions; and guarantees on service availability and quality.

CIOs, meanwhile, should embrace an emerging role: facilitating productivity; negotiating complex deals; managing constituent expectations via close partnerships with LOBs across all IT consumption lifecycle stages; enhancing organizational skills to support cloud service delivery; and understanding a rapidly evolving IT landscape. Combining all of these requisite skills will create a recipe for success. As key enablers of cloud-driven value, Cisco and Intel are committed to helping our customers on every step of this journey.

To download the full report, please visit: http://www.cisco.com/web/about/ac79/docs/re/IT-Consumption_PoV/

For more information on the Internet of Everything, please visit: http://www.internetofeverything.com

For more information on the Cisco cloud strategy, please visit: http://www.cisco.com/go/cloudstrategy

For more information about Intel in cloud computing, please visit: http://www.intel.com/cloud

More Information

Cisco and Intel have collaborated for more than a decade around solutions to advance Enterprise IT value to the business. When ready, the heavily virtualized enterprise can move to the next stage of evolution in the data center by deploying an elastic, high-performing, and secure cloud solution built on Cisco UCS with Intel® Xeon® processors. We also are working to give enterprises the flexibility to utilize business-class cloud solutions through several industry partners that are Cisco Cloud Builder Certified and build upon hardware and software security solutions to ensure enterprise IP and data security when using a hosted cloud solution.