

The Impact of Cloud on IT Consumption Models

Insights from Cisco/Intel Study of 4,226 IT Leaders Across 18 Industries and Nine Key Economies

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Produced in partnership with Intel®



One of the clearest expressions of this cloud-driven change is the emergence of lines of business (LOBs) – human resources, sales, R&D, and other areas that are end users of IT – both as direct consumers of cloud-based services, and as ever more prominent influencers of companies' IT agendas.

Introduction

In recent years, explosive Internet growth has created extraordinary opportunities – as well as new challenges – for IT leaders. But an even greater transformation is upon us in the form of the “Internet of Everything” (IoE), which Cisco defines as the networked connection of people, process, data, and things.

Cisco estimates that there were “only” about 200 million things connected to the Internet in the year 2000. In the wake of unprecedented innovation on a host of fronts – including video, mobility, social media, and cloud – this number has risen to approximately 10 billion today, and a significant upsurge to 50 billion connected devices is expected by 2020. By connecting the unconnected, IoE will give rise to new sources of value for organizations in the coming years (<http://www.internetofeverything.com>). Cloud, as a democratizing force for IT-led value, will be one of its principal enablers.

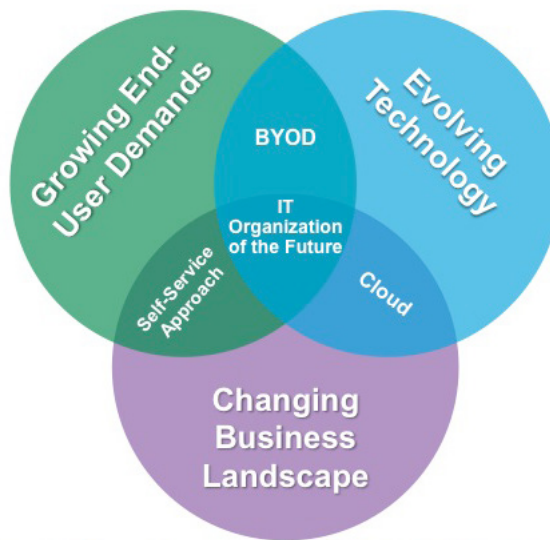
While the growth trajectory of cloud has been extensively charted, there is comparatively little understanding of how cloud will impact IT organizations themselves, along with their remit, structure, and strategies. In a wide-ranging study, Cisco® Consulting Services, in partnership with Intel®, sought to pinpoint just how cloud is driving change in IT. The “Impact of Cloud on IT Consumption Models” study explored the dramatic changes affecting IT at all key consumption lifecycle stages – how businesses plan for, procure, deploy, operate, and govern IT. Once leaders have a clearer picture of where and how cloud will change IT consumption patterns, they will optimize the strategies to confront this change and deliver the services their businesses need to succeed.

One of the clearest expressions of this cloud-driven change is the emergence of lines of business (LOBs) – human resources, sales, R&D, and other areas that are end users of IT – both as direct consumers of cloud-based services, and as ever more prominent influencers of companies' IT agendas. Cloud is enabling astonishing

Cloud – whether public, private, or hybrid – already represents a significant share of our respondents’ total IT spending, at 23 percent.

technology-led innovations, many of which are occurring beyond the purview of the “IT organization” as traditionally conceived. The so-called “bring-your-own- device” (BYOD) phenomenon (<http://www.cisco.com/web/about/ac79/re/horizons.html>) is but one example of this shift toward a new IT organizational dynamic (see Figure 1). As cloud reduces barriers to adoption and places downward pressure on IT capital costs – while unlocking sources of potential innovation for LOBs – the relationship between the business and IT changes dramatically.

Figure 1. Drivers of IT Change.



Source: Cisco/Intel Cloud Study, 2013

In a “world of many clouds,” companies have many options regarding how they choose to consume cloud solutions across those IT lifecycle stages. Whether it is a full stack of private cloud capabilities or a single enterprise application delivered via a public cloud provider as a service, there is tremendous dynamism in the vendor landscape of cloud offerings and unprecedented choice for companies as consumers of IT. 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.

So, what do IT leaders need to know about the role of LOBs in the IT consumption lifecycle of the future? How do IT decision makers perceive this sea change in their organizations? What will IT organizations fundamentally look like in three years? And what must IT leaders do to ensure their continued relevance to the business? Answering these questions is critical if IT is to continue to discharge an expanded role in enabling innovation and business agility.

LOBs' influence 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.

Executive Summary

Here are some of the key findings:

- **In the Eyes of IT Decision Makers, Cloud Is Good.** Despite its challenges and disruptions, cloud is viewed, on balance, as a positive development for IT organizations. (Case in point: security may be an inhibitor to cloud, but it is also viewed as a solution to security fears.) Globally, more than four out of five respondents believe that cloud will positively impact their organizations.
- **Cloud Is Here...and Growing.** Cloud – whether public, private, or hybrid – is already here. Today, it occupies a significant share of IT spending, 23 percent, and our respondents see it rising to 27 percent by 2016. Private cloud is the most prevalent cloud deployment method at 45 percent.
- **Emerging Markets.** Despite the overall positive attitude toward cloud, important distinctions arise between emerging and developed markets. IT leaders in emerging nations are more upbeat about cloud, focusing on its transformational and innovative potential; in developed markets it is seen as a tool for cost-cutting.
- **High Marks for Cloud Providers.** In a competitive marketplace, cloud providers will need to offer end-to-end solutions while orchestrating an ecosystem of partners. Accordingly, high ratings for cloud providers in our survey come with high demands: for security capabilities, custom solutions, and guarantees on service levels.
- **IT Wants To Feel Safe in the Cloud.** No matter which industry or global region was surveyed, security and privacy issues are top of mind and seen as a clear inhibitor to cloud growth. Robust security and data protection capabilities are also seen as the most critical factors for cloud service providers.
- **One Size Does Not Fit All.** In a World of Many Clouds – public, private, and hybrid – companies will need to formulate an approach that enables them to meet the overarching goals for their organization. IT leaders should consider how best to partner with key stakeholders, such as LOBs and third-party providers, with an approach that is tailored for their unique needs.
- **IT Seen as Front and Center ...** Despite the rise of LOB influence, our IT respondents – especially those in emerging markets – believe that IT will maintain a centralized and well-funded role, managing cloud solutions with consistent policy and security solutions. (Respondents in Asia Pacific and Latin America are nearly twice as likely to project an increase in the size of their IT organization than their counterparts in Europe and North America.)
- **... But LOBs Are Gaining Influence.** The influence of LOBs will extend across all IT lifecycle stages and create unprecedented complexity for IT organizations as they grapple with security and technical support. As IT transforms to an “as-a-service” model, the interlocks and relationships between IT and LOBs will need to change.

Yet as LOBs seek out cloud offerings and business apps to meet their unique needs, IT will become a critical intermediary and orchestrator within the business, overseeing service, procurement, and delivery, while also providing technical support and security.

- **The IT-LOB Partnership.** Whether centralization and greater resourcing for IT is realistic remains to be seen. Regardless, IT will need to partner with LOBs in complex new ways. In the view of the IT leaders surveyed, IT will evolve to be a broker of services to LOBs, acting as an intermediary and orchestrator of internal and external cloud solutions within the business, while also providing technical support and security.
- **A Wake-up Call for IT.** Given the rising influence of LOBs, IT must step up to new challenges: moving rapidly, fostering innovation, enabling new end-user experiences, and positively impacting business outcomes in a measurable way.

Study Detail

The Current State of Cloud

The Cisco/Intel study indicated clearly that cloud is here, and it is growing fast. Across the nine countries involved in our survey, an average of 23 percent of IT spending is already devoted to cloud. Our survey respondents see cloud spending rising to 27 percent in three years, implying a growth rate of more than 17 percent in the overall share of IT that will be driven by cloud over the next few years.¹

A key difference between emerging and developed markets becomes apparent when we explore some of the core drivers for cloud. In developed economies, such as the United States, the United Kingdom, Germany, and Canada, the number-one business driver for cloud is lowering costs. While cloud is seen as a mechanism for cost takeout, it also affords the ability to “pay as you grow” and achieve more predictable cost controls. In emerging nations – Brazil, India, China, for example – the number-one driver is increased business agility and productivity.

This is consistent with other recent Cisco studies, including “The Financial Impact of BYOD” (http://www.cisco.com/web/about/ac79/docs/re/byod/BYOD-Economics_Econ_Analysis.pdf) and the “IoE Value Index” (<http://internetofeverything.cisco.com/learn/2013-ioe-value-index-whitepaper>), both of which have uncovered a high level of interest in the potential for innovative IT use among respondents from emerging markets. This may also reflect the tendency of emerging markets to “leapfrog” to new technologies, skipping, for example, the legacy landline architectures that still predominate in some developed nations.

As for key cloud inhibitors, security concerns loom large as the biggest impediment to adoption. With so many business processes migrating to external clouds – beyond the organization’s firewall – this is perhaps no surprise. And this inhibitor

¹ It is important to note that all respondents in the Cisco/Intel study were required to have implemented cloud within their company already, or at least be actively considering doing so. Accordingly, respondents tended to be already very “cloud-aware,” and many were making substantial investments in this area, meaning expected changes (i.e., how spending will change by 2016) reflect a high initial base of adoption. A survey of respondents that included companies that have not yet embarked on any cloud-oriented initiatives might reveal even higher anticipated growth.

While emerging markets focus on the transformational potential of cloud, respondents in developed markets primarily look at cloud to lower costs.

transcends geographical and industry divides. But an interesting duality in perceptions of cloud security is developing. Since cloud is also an enabler of security innovation – as automated policy enforcement and other next-generation capabilities take root – there is a concurrent belief that cloud can create better security.

So, security may be the number-one cloud inhibitor, but it is also the number-three driver for cloud adoption, in both emerging and developed markets (the number-two inhibitor is escalating complexity). Managing third-party cloud services and vendors will create new challenges for IT.

This will become especially apparent as LOBs assert their own independence, sometimes through “rogue” purchases of public cloud services that circumvent the traditional IT decision-making process. Fifty-five percent of respondents see a “somewhat” or “significantly increasing” incidence of so-called “shadow IT spending” over the past two years.

The third-most-prominent inhibitor is a lack of integration and interoperability across internal systems and those of providers. As connections between cloud-based and legacy systems grow, the IT department will need to smooth out glitches to ensure uptime and consistent user experiences.

But challenges are clearly anticipated. In some respects, IT leaders find themselves in a period of transition, in which they are expected to deliver innovations at speed, but also must never deviate from established expectations around everything simply “working” – ensuring interoperability of systems, preventing outages, and so forth. This twin imperative will be a test for IT leaders as technology spending and demand for innovation flow from LOBs.

Respondents cite a high level of satisfaction with their existing cloud providers. In general, and spanning geography and industry, more than half were “very satisfied” and another 35 percent “somewhat satisfied,” representing a total 86 percent positive rating.

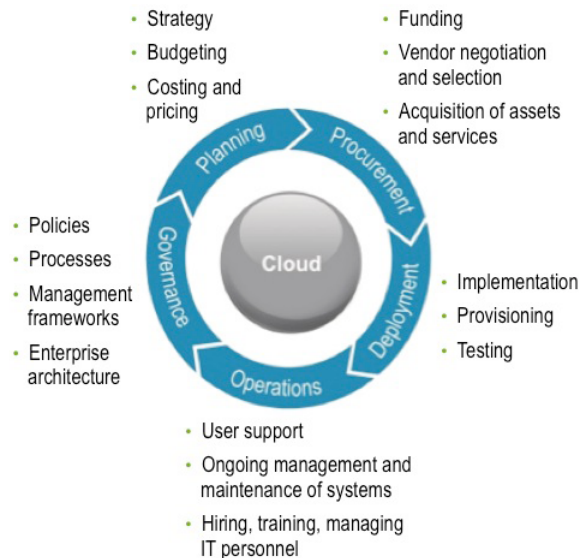
Given such high marks, cloud providers are well positioned today, although they must be prepared to operate in an increasingly demanding marketplace.

Impact of Cloud on the IT Consumption Lifecycle

In our survey, we defined IT lifecycle stages in terms of the categories illustrated in Figure 2.

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Figure 2. IT Consumption Lifecycle Changes.



Source: Cisco/Intel Cloud Study, 2013

Planning

One of the most important findings revealed by the study relates to the planning and procurement stages – and the increasing influence of LOBs. Seventy-five percent of our respondents, for example, believe that IT planning will increasingly involve stakeholders from the lines of business.

In response to the unique and dynamic needs of different business units, cloud providers have flooded the market with a vast array of services. This ever-expanding scope of offerings has the potential to upend key aspects of IT strategy, which have historically been based on standardization and control. Nearly three-quarters of respondents, moreover, believe that IT planning will increasingly take place with direct involvement from third-party vendors.

But far from viewing itself as marginalized, IT is taking on a new mantle as a “broker,” or intermediary, of cloud services, orchestrating the planning and procurement process for LOBs across internal and external clouds while managing third-party complexity. Among our respondents, 76 percent assert that IT planning will increasingly involve acting as a broker of cloud services for LOBs.

Procurement

The influence of third-party vendors also bears on our next finding, which is related to the procurement lifecycle stage. A further 71 percent of respondents believe that, more and more, the cloud-release cycles of vendors will impact IT buying decisions.

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In short, greater attention will be paid to the offerings of vendors and their latest solutions and launch dates will influence when and where companies invest.

A substantial portion of our respondents believe that authority over buying decisions will increasingly move to the lines of business (69 percent) – a significant finding. And 65 percent think that chargebacks to business units will be the primary IT funding mechanism. Interestingly, this trend toward increased reliance on chargebacks highlights a potential disconnect in terms of LOB expectations. While “lump sum” chargebacks are a straightforward and fairly conventional model for IT funding, the most innovative IT organizations will demonstrate their partnership with business leaders by pricing services according to business value achieved. Chargebacks may, in fact, serve as a disincentive for adoption within the business; this can act as a brake on IT impacts.

The Cisco/Intel study reveals LOBs are funding 44 percent of total IT spending globally, with this figure being more or less consistent across geographies. A majority of our respondents believe that LOBs will maintain or increase this percentage in the next three years. “Rogue” or “shadow” IT spending may imply an even higher percentage of IT spending by LOBs. What is clear, however, is that the emergence of LOBs as buying centers for IT is not a long-term prospect, but a reality.

Deployment

In terms of the deployment phase, integration looms as a key challenge: 77 percent are concerned about the added complexity arising from cloud integration with in-house IT systems. This reinforces our earlier finding on the need to integrate across different cloud providers. But 75 percent predict difficulties as solutions from different cloud vendors are introduced within an organization. Seventy-nine percent of respondents believe that IT is moving toward a more automated, self-service approach where provisioning follows an “app store” model. Our findings point to a need for IT to provide flexible consumption, self-service options, and an array of capabilities to LOBs. At the same time they will need to maintain a strategic view of challenges that are distinctly pan-organizational in nature, such as integration and interoperability of solutions.

Operations

During the operations stage, the advantages of cloud lie in its potential to streamline a range of IT processes, including user support and the ongoing management and maintenance of systems. Overall, 85 percent of IT decision makers believe that cloud will have a positive impact on IT operations and support by driving down costs and optimizing service delivery internally. The number-one advantage cited by our respondents is cloud’s ability to enable efficiencies through the use of more shared services. This was followed by cloud’s promise of “new analytical capabilities,” enabling greater optimization of IT resources and their use – essentially being smarter about services. Here, we anticipate a growing reliance on cloud-enabled Big Data and analytics to improve and optimize IT service delivery and asset

Despite the changes, disruptions, and challenges presented by cloud across all IT lifecycle stages, a strong majority of our respondents view cloud positively.

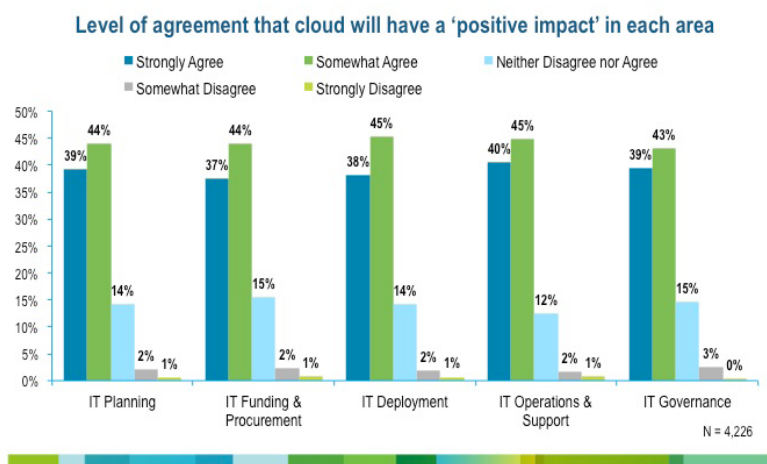
management. The number-three advantage is in “offering a single, unified view for monitoring and managing” the IT environment.

Governance

A high percentage of our respondents (82 percent on a worldwide basis) also predict that cloud will have a positive impact on the final IT lifecycle stage: governance. But they see a change in how governance, as a function, is performed. Eighty-one percent believe that automation will become central to IT governance processes. This will require a greater reliance on cloud itself for setting and enforcing policies. Seventy-six percent believe that the IT organization will become more metrics-driven. Along with the more traditional performance metrics related to system uptime and security breaches, our respondents expect to see more business-oriented metrics, particularly those involving return on investment.

Despite the changes, disruptions, and challenges presented by cloud across all IT lifecycle stages, a strong majority of our respondents view cloud positively (see Figure 3). Overall, 83 percent somewhat or strongly believe that cloud is fundamentally a good thing. Even in an area such as operations and support, where cloud intensifies complexity, it is nonetheless seen also as a solution, attenuating that complexity. Fully 85 percent of our respondents welcome cloud as a positive in the area of operations and support. Such numbers illustrate that our IT survey respondents see the advantages of cloud outweighing its added complexity and inherent challenges.

Figure 3. Positive View of the Impact of Cloud Across the Entire IT Lifecycle.



Source: Cisco/Intel Cloud Study, 2013

But Cisco and Intel's research demonstrates that LOB impacts extend well beyond who writes the check, and will be felt throughout the IT consumption lifecycle, specifically as a result of cloud.

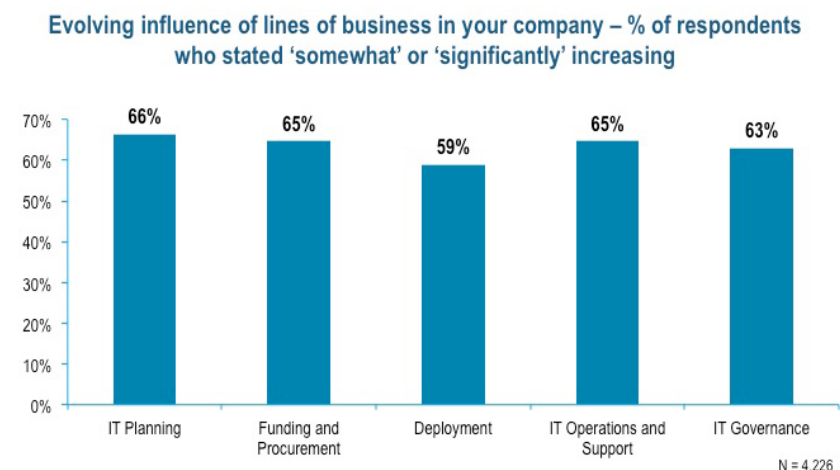
The Rising Role of LOBs

Much has been written about LOBs as new "IT buying centers." But Cisco and Intel's research demonstrates that LOB impacts extend well beyond who writes the check; they will be felt throughout the IT consumption lifecycle, specifically as a result of cloud. The study reveals two key forces that are driving LOBs to seek more control over their IT experience: 1) business users expect to be able to use a greater variety of devices (82 percent overall), as we have seen with the advent of BYOD in the enterprise; and 2) they increasingly want to access IT services through a "self-service" model (73 percent overall).

Meanwhile, the influence of LOBs is being felt strongly, especially in (although not limited to) public cloud adoption. Our respondents identify the top three impacts in this area as 1) identifying business requirements, 2) recommending solutions, and 3) researching products, technologies, and brands. Thirty percent of survey respondents also state that LOBs are involved in approving purchases. These findings are significant in that they clarify that LOBs have moved beyond simply engaging low-cost cloud providers in an ad-hoc fashion. Increasingly, they are actively shaping all facets of IT consumption. In fact, LOBs are scoping IT needs and gaining influence in isolating problems, recommending solutions, and suggesting products and technologies.

A significant percentage of our respondents believe that as LOBs continue to gain influence, stakeholder management by IT will be critical. Sixty-six percent believe LOB influence to be "somewhat" or "significantly" increasing for IT planning, and 65 percent for both funding/procurement and IT operations/support, as shown in Figure 4. Similar numbers applied to all other IT lifecycle stages; these percentages essentially held true across all geographic regions and industries.

Figure 4. LOBs Are Gaining Influence Throughout the IT Consumption Lifecycle.



Source: Cisco/Intel Cloud Study, 2013

According to our respondents, the greater use of cloud services will not marginalize IT departments. On the contrary, a total of 57 percent believe that the role and responsibilities of IT will increase relative to third parties.

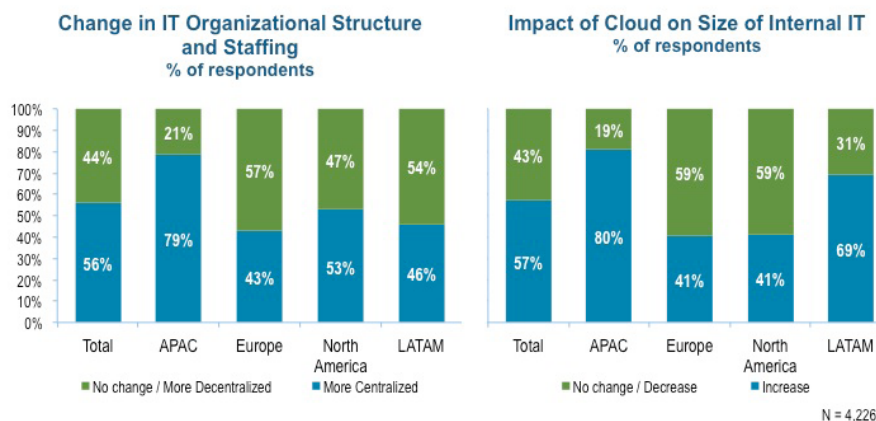
The IT Organization of the Future

As we have seen, evolving IT consumption models present profound changes for IT's mission, organizational structure, and strategies. Some observers have even questioned the ongoing relevance of IT as a function, suggesting IT is simply dissolving into the fabric of the business.

At least in the eyes of our respondents, the greater use of cloud services will not necessarily marginalize IT departments. Globally, a total of 57 percent believe that the role and responsibilities of IT will increase relative to third parties, such as systems integrators or cloud service providers. The percentages were higher in Asia Pacific (68 percent) and Latin America (64 percent), while 50 percent of European respondents and 46 percent of North American respondents indicated that they foresee such an increase.

IT leaders in our survey believe they will retain much of the oversight and authority that has characterized their relationship to the business in the past. 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 (as shown in Figure 5).

Figure 5. IT Departments Will Become Larger and More Centralized in Coming Years.



Source: Cisco/Intel Cloud Study, 2013

Globally, 57 percent of respondents saw the size of IT increasing (i.e., in full-time IT headcount); in Asia Pacific this was 80 percent, and in Latin America 69 percent. Notably, respondents in Asia Pacific and Latin America are 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 4-in-10 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

A sizable majority of respondents believe that their IT organizations will become larger and more centralized.

cloud will mean for the resources they oversee than are their peers in emerging markets. This is perhaps an interesting companion insight to the earlier data cited in this paper on adoption drivers, in which IT leaders in the developed world emphasized cost takeout as the key focus, and respondents from emerging markets were far more likely to call out the wider potential for business transformation enabled by cloud.

In some respects, an increase in the centralization of IT resources may seem counterintuitive, given LOBs' expanding reach in IT consumption. Yet respondents, especially those in emerging markets, pointed to the need to provide a level of coordination, consistency, and security atop what is clearly a fragmented innovation landscape among LOBs, including both customers and partners. More centralization, however, should not be conflated by CIOs with greater levels of control. 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.

Whether centralization and greater resourcing for IT is realistic remains to be seen. What is clear, however, is that IT and LOBs will shape IT consumption together, and to a far greater degree than ever before. While our IT respondents do not envision a diminished role for themselves, retaining a vital role will require an increased level of partnership with LOBs across all stages of IT consumption. As noted earlier, more than three out of four respondents believe that IT will act increasingly as a broker of cloud services for LOBs across internal and external clouds, playing the role of intermediary and orchestrator within the business.

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.

These shifting roles will require new approaches to IT leadership and decision making. To gain a better understanding of the core qualities CIOs will need, we asked our respondents to rate the hallmarks of successful IT leaders in a cloud-driven world.

First was the ability to align IT strategy to the company's business priorities. And while successful CIOs have always done this, in the cloud age it is imperative for IT decision makers to grasp a challenging environment that is increasingly shaped by the needs of a rapidly changing LOB user base. A premium will be placed on agility and alignment with those needs.

The second quality for CIO success calls for understanding emerging technologies and cutting-edge IT practices. IT leaders will need to stay ahead of the technology curve as LOBs bring a constant pulse of innovation into the organization, often leveraging cloud-based services to do so. Moving forward, it will be ever more

As IT departments expand and centralize, new workforce skill sets will be required.

critical to stay fluent in all kinds of outside technology innovations, offerings, and services that could impact (positively or negatively) a firm's competitive standing.

The IT decision makers in our survey also stress that new workforce skill sets will be required. These, in turn, will give rise to new IT labor patterns and operating expenditures. According to our respondents, IT security is the skill that will be in highest demand. This is in keeping with our findings on inhibitors to cloud adoption, where security also ranked highest.

Implications for Cloud Providers

Amid all of the mounting complexity, there is a strong preference for a single-vendor approach for sourcing cloud services. The top three reasons are "simpler ongoing management of cloud solutions, including troubleshooting and repair"; "improved interoperability"; and "easier vendor management." These reasons also relate to the aforementioned issue of integration with legacy IT systems.

Overall, 70 percent of survey respondents considered a single vendor to be either "important" or "very important." Latin America, at 89 percent, and Asia Pacific, at 85 percent, had the highest interest, while Europe and North America both stood at 55 percent. Improved interoperability among cloud solutions is deemed significantly more important in Asia Pacific than in other regions.

Survey respondents also weighed in on which success factors will be most critical for cloud providers in winning their business. Consistent with previous findings, robust security and data-protection capabilities ranked highest. Second was the ability of cloud providers to build custom solutions. Guarantees on service availability and quality that de-risk cloud adoption ranked third.

Conclusion – and a Wake-up Call

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 lump-sum 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 emergent expectations from business leaders.

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-

CIOs must now look for ways to use new IT models to change fundamentally how IT is bought, delivered, and managed, from the ground up.

enabled innovations they demand, creating still more complexity while failing to achieve the efficiency and consistency that underpin IT's charter.

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:** IT leaders will increasingly need to collaborate with LOBs, who are influencing all IT lifecycle stages. In particular, the interlock and relationships between IT and LOBs will need to change as IT transforms to an “as-a service” model.
- **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, planning, governance models, and all aspects of how IT—as a function—is managed.
- **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 and revenue creation.

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 – multiple workloads, multiple systems, multiple vendors—of their IT environment 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 LOBs and third-party providers, to pursue an approach that is tailored for their unique needs.

All respondents in the survey were drawn from the IT function; no LOB respondents were included.

CIOs must 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.

Please refer to Cisco's recent "IoE Value Index" (<http://internetofeverything.cisco.com/learn/2013-ioe-value-index-whitepaper>) for a more detailed discussion of competitive change associated with the proliferation of cloud capabilities.

Survey Methodology

Cisco and Intel commissioned Global Market Insite (GMI), a division of Lightspeed Research, to conduct a survey of 4,226 IT leaders across 18 industries in nine countries. The online questionnaire was fielded during March and April 2013, and was conducted on a "double-blind" basis, meaning respondents provided their answers anonymously, and Cisco and Intel were not called out as sponsoring the research.

All respondents in the survey were drawn from the IT function; no LOB respondents were included. Ninety-six percent of respondents indicated that they were directly involved in the company's IT decision-making process, with 63 percent identifying themselves as the final decision maker; 33 percent stated they were "very involved" in the decision-making process of selecting and approving IT products and services. Four percent stated that while they did not make the decisions themselves, they were part of the decision-making process and acted as key influencers. Senior-level IT decision makers (CIOs, senior VPs, and VPs) represented 29 percent of the respondent base; the remainder comprised director-level (25 percent) and senior-manager-level respondents, having a minimum of five direct reports (46 percent).

To be eligible to participate in the study, all respondents were required to be at least somewhat familiar with concepts such as software as a service, platform as a service, infrastructure as a service, virtualization, and so forth. The companies they represented had to have either experience with cloud solutions or immediate plans to invest in them.

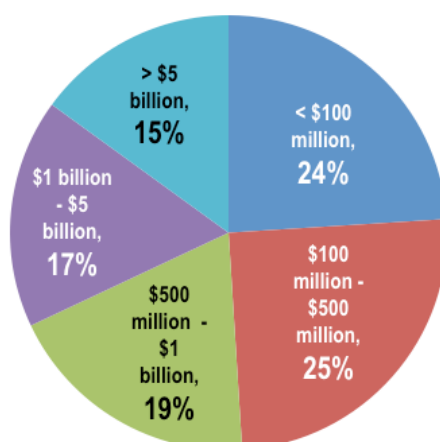
Geographic Breakdown

Forty-six percent of respondents worked in developed countries, while 54 percent came from emerging economies. A detailed countrywide breakdown of respondents is shown below:

Country	Respondents
Brazil	500
Canada	291
China	600
Germany	412
India	605
Mexico	298
Russia	286
United Kingdom	608
United States	626

Enterprise-class companies (i.e., firms with more than 1,000 employees worldwide) represented 60 percent of the sample, and midsize companies (500 to 999 employees globally) represented 40 percent. Eleven percent of companies reported employing more than 10,000 people globally. Figure 6 offers a survey breakdown by company revenue.

Figure 6. Breakdown of Survey Respondents Based on Company Revenue.



Source: Cisco/Intel Cloud Study, 2013

For more information on Cisco's 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>

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

Additional 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.



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