Cloud
The new engine of business
Cloud: The new engine of business

Introduction

Cloud is the new engine of business

No longer an emerging technology, cloud computing has matured into a powerful engine for business innovation and growth, and thus has become a strategic priority for companies worldwide across industries. Cloud services are delivering the kind of wide-ranging benefits organizations have come to expect from their on-premise IT environments—and more, as cloud provides enterprises with a platform that promotes collaboration among employees, with partners and customers, and across formerly disconnected business units.

This new breed of fluid collaboration drives innovation. “Some of cloud computing’s greatest successes to date have come from allowing groups and communities to work together in ways that were not previously possible,” says Andrew McAfee, principal research scientist at MIT Sloan School’s Center for Digital Business, in an article for the Harvard Business Review.

Not surprisingly, the cloud is at the forefront of near-term planning at most companies: 88% of respondents to a global survey conducted by Oxford Economics for SAP say they will make moderately heavy or heavy investments in cloud computing by 2016. Those investments, the research shows, often focus on enabling collaboration across, and beyond, the four walls of the business.

Fig. 1: Heavy cloud investment on the horizon
Level of anticipated cloud investment over the next three years
That said, progress into the cloud is not evenly distributed, with certain industries moving more slowly than others. Surprisingly, recent Oxford Economics/SAP research indicates cloud has a relatively slow uptake in the world of small and medium-sized enterprises (SMEs). In fact, adoption rates among all but the largest SMEs lag behind larger enterprises, and nearly 35% of SMEs acknowledge a lack of understanding of the cloud’s benefits.

But the arguments for cloud are getting stronger. Overwhelming majorities of organizations across industries, geographies, and sizes say they expect the cloud to deliver at least moderate improvement when it comes to innovation, revenue generation, and process speed, as well as efficiency, collaboration, productivity, and cost-cutting. Once touted largely as a cost-effective alternative to packaged software, cloud today has a more strategic role in delivering value on multiple levels. As a result, it is increasingly an imperative instead of an option. “You can’t have your head in the sand and think the cloud is going away,” says Dan Pontefract, Chief Envisioner at Canadian telecommunications firm Telus. “It is today’s business as usual.”

Beefing up capabilities across a range of areas is critical for companies to thrive in an increasingly competitive and technology-enabled marketplace. “Organizations need to be driving more innovation in their products and services,” advises a PricewaterhouseCoopers paper titled How to Drive Innovation and Business Growth: Leveraging Emerging Technology for Sustainable Growth. “They need to innovate rapidly, and they need to do it cost-effectively.”

**Fig. 2: Cloud delivers across-the-board impact**

Percent of respondents expecting the cloud to deliver high or significant improvement in the following areas:
Cloud-first approach

Given the level of investment in and expectations of the cloud, it comes as no surprise that the number of firms able to say a business function is “mostly cloud-based” will more than double over the next three years for every line-of-business category we surveyed—HR, purchasing, finance, marketing, sales, and supply chain—as well as for innovation environments. And as David Dean and Tamim Saleh of Boston Consulting Group point out in their white paper, Capturing the Value of Cloud Computing: How Enterprises Can Chart Their Course to the Next Level, cloud-enabling more areas of the business can have a multiplier effect. “New business models can be created by linking, sharing, and combining resources using cloud computing in an entire business ecosystem,” they write.

What’s more, companies expect the cloud’s numerous benefits to fuel various growth initiatives:

**Fig. 3: Cloud-powered innovation and growth**

![Fig. 3: Cloud-powered innovation and growth](image)

Much of this growth starts with a willingness to experiment with the cloud as an innovation platform, a capability to which growing numbers of companies are becoming attuned. “The cloud has become as much a medium for innovation play as business productivity,” wrote Michael Schrage, a research fellow and colleague of McAfee’s at MIT Sloan School’s Center for Digital Business, in a blog post for the *Harvard Business Review*. And, Schrage continues, “Nothing prevents an organization from hardening playful exploration into a profitable business process in the cloud.”
Cloud: The new engine of business

Fail fast—and adapt quickly

The cloud also affords organizations the ability to easily shift their explorations if they do not achieve the desired business results. Vijay Sethi, VP and CIO of Indian motorbike maker Hero MotoCorp, contends that one of the big advantages of the cloud is that if a cloud-based service does not prove its worth initially, it is simple and cost-effective to shift the service to another part of the business that might benefit from it. If the service still does not deliver bottom-line value, Sethi says, it can be dropped without fear of absorbing the kinds of costs that would accompany abandonment of on-premise systems and infrastructure.

Who took the survey?

In early 2013 Oxford Economics surveyed 200 executives from around the world—50 each from North America, Latin America, EMEA, and Asia-Pacific. Respondents work for companies headquartered in 11 countries, including the US (16%), Brazil (12.5%), India (12.5%), and China (6%). Respondents include CEOs (42.5%), IT (24.5%) and operations (18.5%) executives, and business unit heads (14.5%) from four industries: banking/capital markets (31.5%), retail (28.5%), consumer products (27.5%), and telecommunications (12.5%).
CASE STUDY: Better employee experience yields improved customer satisfaction at Telus

Canadian telecommunications provider Telus sees potential for the cloud to make an impact on all aspects of its business. Dan Pontefract, whose role as Chief Envisioner gives him a chance to help Telus’ evolving organizational culture, says that since the company began emphasizing use of the cloud internally in 2008, the employee satisfaction rate has risen from 53% to 83% and customer complaints have dropped 27% (while the telecom industry at large in Canada has seen customer complaints rise by 26%).

Telus accomplished this by using the cloud in a variety of ways—as a collaboration platform, as a source of more worker-friendly tools and processes, and as a learning environment injected with gamification. It is all part of what Mr. Pontefract describes as a steady move from a restrictive command/control orientation to a more empowering collaborative one.

“If you create that harmonious culture of access to the cloud and improving the employee experience via some of these cloud-based apps as complementary to that, you get a real interesting ‘Ticket to Ride’ as the Beatles would say,” states Mr. Pontefract. “If you’re not engaging employees, it will have a causal impact on customer satisfaction.”

Employee engagement also can have an impact on the bottom line. For instance, in twice-a-year surveys of all 40,000 employees conducted by an independent third party, Telus has seen employees’ “likelihood to recommend” products and services rise steadily from 60% to 89% over the past seven years.

The company’s multi-pronged strategy has paid off. While it is impossible to attribute specific business results to most of its improvements in employee and customer satisfaction, Telus has performed well since its turn to the cloud: revenue grew steadily from C$9.7 billion in 2008 to C$11.4 billion in 2013, and the company’s stock price rose from C$28 a share in the fall of 2008 to C$71 before splitting in April 2013.
Cloud Recasts IT as Innovation and Collaboration Enabler

IT has long struggled with its reputation as both a cost center and the department of “no.” The cloud has slowly chipped away at that, recasting IT not only as a valued partner to the business but also as a direct contributor to financial results.

This new role for IT is especially prevalent among organizations that have already deployed cloud broadly enough to realize competitive-advantage gains through improved innovation and collaboration. Oxford Economics research indicates that two-thirds of this group, known as Cloud Leaders, claim the cloud has strengthened the relationship between IT and the business.

And not only has the cloud greatly reduced the cost of applications and infrastructure, it has freed up IT to work on more core activities in support of the business.

One US-based nonprofit discovered this over the past couple of years as it has turned to the cloud to help centralize what had become a highly dispersed collection of unconnected operations. As the organization shed manual processes and saw data in new ways, it began to solve problems it didn’t know it had, says a senior project manager and supply-chain officer. For instance, as it developed visibility into the supplies its various local chapters had on hand, its IT team worked with a vendor to develop a smart phone application that puts that information in the hands of employees and volunteers. The application enables local chapters to search for nearby supplies, providing inventories and contacts for neighboring chapters.

As the nonprofit learned in introducing its mobile app, the cloud has also greatly increased the speed with which IT can roll out new technologies, enabling the business to be far more responsive to changing market dynamics. Ultimately, the cloud changes how companies develop and deliver new services, transforming not just IT but also the fundamental way business is conducted.

It follows naturally that success in the cloud is almost certain to result in a raised profile for IT, and our research indicates the extent to which this change has been occurring:

- 69% of respondents agree to some extent that the cloud has made IT a strategic partner of the business, with firms from Latin America (74%) and the banking/capital markets industry (76%) most likely to feel this way.
- 63% of respondents agree to some extent that the cloud has transformed IT into a profit center, with firms in Asia-Pacific (32%) and the consumer products (35%) and telecommunications (32%) industries most likely to agree strongly with this.
**Fig. 6:** IT emerging as a valued partner of the business, broken out by industry

Percent of respondents who agree (slightly or strongly) that the cloud has made IT a strategic partner of the business:

- Banking/Capital markets: 76%
- Consumer products: 67%
- Retail: 65%
- Telecommunications: 60%

**Fig. 7:** IT emerging as a valued partner of the business, broken out by region

Percent of respondents who agree (slightly or strongly) that the cloud has made IT a strategic partner of the business:

- North America: 62%
- Latin America: 74%
- EMEA: 68%
- APAC: 70%
Cloud security worries shrinking?

While security remains by far the biggest area of concern related to cloud computing, regardless of geography, industry, or size, there are some indications that worries are subsiding.

Johnathan Evarts, COO and CFO of mobile content cloud provider Mediafly, argues that concerns about security in the cloud are steadily dissipating amid growing awareness of how much cyber-security expertise cloud providers have in-house. Enterprises are increasingly aware that “they’re no less secure by moving to an enterprise-grade cloud provider than they are with an on-premise solution,” Evarts says.

Still, security remains top of mind. According to our research:

- 42% of respondents rank security as their biggest cloud challenge, far ahead of compliance with data-sharing and privacy regulations (18%) and migrating mission-critical on-premise systems into the cloud (15%).

- In ranking relative security risks, 49% of respondents rank the security of corporate data as their top concern, with security of customer data (22%) a distant second. This was consistent across geography, industry, job role, and organization size, with one exception: EMEA firms rank security of customer data (34%) slightly ahead of security of corporate data (32%).

- On the other hand, a number of security threats that used to represent giant red flags have become mere afterthoughts. Only 6% of respondents listed access to sensitive data by unauthorized people as their top security concern; a mere 3% gave the nod to either identity theft or virus attacks; and just 1% said cybercrime was their chief security worry.
A Range of Cloud Strategies

While there is little disagreement that the cloud is a game-changer for business on many levels, how companies approach the cloud varies greatly by both geography and industry. Such divergent cloud approaches may be a reflection of geographic cultural differences, as well as the contrasting business models necessitated by starkly different industry sectors.

Geographically speaking:

■ Latin American firms appear to place a greater premium on the cloud's collaborative capabilities than their peers in other regions, with 46% of companies there using the cloud to collaborate with partners, suppliers, and customers. In comparison, Asia-Pacific firms (32%) are the least likely to use the cloud this way.

■ Conversely, Asia-Pacific firms are the most likely to subscribe to Software-as-a-Service (SaaS) offerings (30%), whereas relatively few Latin American firms (14%) are SaaS users. Asia-Pacific firms are also most likely to provide their developers with Platform-as-a-Service (PaaS) resources (58%), with Latin American firms (34%) again bringing up the rear.

■ EMEA firms lead the way in using the cloud to expand their businesses, with 54% saying they use the cloud to develop/deploy new business models, more than double the 22% of Latin American firms that do this. EMEA firms also are more likely (54%) than peers in every other region to use the cloud to manage and analyze big data.

■ North American firms are the least likely to use PaaS resources to build or host applications for customer service (23%) or to support business collaboration (20%), but they are the most likely to leverage PaaS to collaborate with partners on creating new products and services (32%).

Meanwhile, on the industry front:

■ Firms in the telecommunications (60%) and banking/capital markets (52%) industries are significantly more likely than retail (42%) or consumer goods (36%) firms to employ a cloud-first strategy when acquiring new software.

■ The equation flips, however, when it comes to tapping the cloud for innovation, which retail (60%) and consumer goods (58%) firms are much more likely to do than their counterparts in banking/capital markets (46%) or telecommunications (44%).

While strategic approaches to the cloud vary, a team of experts at Boston Consulting Group believes that cloud objectives are relatively consistent. In its white paper Cloud Computing for the Enterprise: Questions for the C-Suite, BCG argues that the value of the cloud falls into one of three buckets: as a utility for delivering elastic computing resources; as a tool for achieving process transformation through improved integration and collaboration; and as a platform for business-model innovation by linking, sharing, and combining capabilities across a new ecosystem.
Cloud: The new engine of business

CASE STUDY: Danone’s cloud strategy driven by expansion

True to its region’s taste for leveraging the cloud to support expansion, French food multinational Groupe Danone is relying increasingly on cloud services as it expands its brand into new markets around the globe. It sees the cloud as a powerful platform for mobile initiatives, as a source of the kind of flexibility needed to scale quickly, and as a more digestible model for absorbing the required investments.

Because much of Danone’s expansion effort targets developing markets with limited traditional infrastructures, reaching consumers through their mobile phones is paramount. Developing a mobile cloud strategy clearly brings benefits to all markets. “If you say ‘cloud,’ you have to say ‘mobile,’” says Ralf Steinbach, Danone’s director of global software architecture. “The two things belong very much together, and that’s the way for us to go.” The cloud’s shorter refresh cycles allow Danone to innovate via the mobile platform much more rapidly than if it had to make constant infrastructure investments.

Similarly, the ability to quickly dial infrastructure resources up and down has made it economically feasible for Danone to support localized consumer-facing e-commerce channels in a way that minimizes cost—and risk. The company can’t predict how much traffic a localized website will generate, so having flexibility in provisioning infrastructure allows it to adjust its resource allocation as demand changes, says Mr. Steinbach.

Naturally, expanding into new markets requires investment, whether the growth strategy is powered by the cloud or on-premise technologies. But in an environment where keeping costs under control is always a consideration, the fact that cloud subscription models allow services to be accounted for as operating expenses rather than capital expenditures greases the funding wheels when it comes time to talk to the finance department. “Rather than asking up front for 10 million euros, it’s easier to ask every month for 10,000,” says Mr. Steinbach. “It’s very simple.”

Mobile strategies also run the gamut

One of the most important areas of cloud innovation involves mobile. Reflecting the variety of cloud strategies at large, there is ample evidence that a mobile cloud yields significant benefits for both employees and customers, with customers enjoying increased convenience and more personalized offers, while employees are able to collaborate more effectively and be more productive while on the go. In other words, it’s not an either/or choice; even if they favor one group or the other, mobile cloud efforts must address the needs of employees and customers alike to deliver maximum impact.

Despite the clear payoff on both fronts, recent research from Dynamic Markets suggests that employees are the key priority, as 89% of senior executives around the world say they believe that supplying employees with 24/7 mobile access to core business systems is important to their business. But our research indicates more of a mixed bag.
For instance, North American (38%), Latin American (36%), and EMEA (30%) firms say their mobile cloud strategies focus on customers, whereas Asia-Pacific firms favor internal productivity (32%) over customers (20%) in their mobile cloud pursuits. Similarly, companies in the banking/capital markets (40%) and telecommunications industries (also 40%) lean heavily toward a mobile focus on customers, while consumer products (35%) and retail (32%) firms instead favor internal productivity.

Company size appears to have a huge—and strangely divergent—impact on where companies fall in that debate. Companies that generate less than $1 billion in annual revenue emphasize customers over internal productivity with their mobile cloud approaches, while companies in the $1 billion–$4.9 billion range narrowly favor internal productivity and those in the $5 billion–$9.9 billion range heavily favor internal productivity. But that trend reverses dramatically toward the customer when a company’s revenue exceeds $10 billion.

That said, there is substantial agreement about where the focus should be once a customer-facing cloud strategy has been established: with the exception of firms in EMEA, respondents across geographies and industries agree that real-time customer service should be the priority, with that sentiment especially strong among Latin American (74%) and Asia-Pacific (72%) firms, as well as those in the banking/capital markets industry (75%).

**Fig. 8: Mobile cloud strategic focus by company revenue**

[Chart showing mobile cloud strategic focus by company revenue]
Conclusion

The cloud clearly presents companies with abundant potential business value, and while there are myriad ways to get at that value, our survey results indicate that there are steps companies can take, regardless of geography or industry, that will increase their odds for cloud success:

■ **Do not exclude any part of your business from realizing the benefits offered by the cloud.** The cloud positively affects every part of the business it touches. Prevailing philosophies have tended to focus on functions such as CRM and HR in the first wave of cloud adoption, but cloud technologies increasingly are prepared to handle the most sensitive enterprise data assets, such as finance and intellectual property. As the cloud’s capabilities and security models mature, and its acceptance and adoption grow, companies must evaluate their appetites for the cloud more deeply, giving serious consideration to migrations from which they might previously have shied away.

■ **The new role of IT should not include cloud security.** The companies we identified as Cloud Leaders believe in passing cloud security policy on to risk or legal departments. Security has long resided in the realm of IT, for good reason: the technologies that were being secured were also being deployed by IT. Today, IT is increasingly focused on adding value to technologies that are delivered—and secured—by third parties. IT no longer has to be the heavy who turns down requests for new tools, and thus it should be liberated from doing so.

■ **Think hard about the employee vs. customer debate.** There is little doubt the cloud can help on both fronts, but most companies prefer to focus, at least initially, on one or the other.

■ **Focus on metrics.** Analytics for measuring cloud performance and impact still often leave much to be desired, but tools for assessing the efficacy of cloud resources are getting better all the time. If you do not know how well you are doing, it is hard to make smart decisions about the future.