

IBM Institute for Business Value

Cloud for telecommunications

Improving efficiency, reducing costs and increasing revenue



Overview

Market and technology trends are forcing communications service providers (CSPs) to change the way they do business. CSPs today face the threat of commoditization, competition from new players offering alternative communication services over the Internet and evolving customer expectations for quality experiences. Within this landscape, cloud computing offers the opportunity to transform the CSPs' business and operating models. CSP leaders have shared with us their top reasons to adopt cloud computing: new revenue streams, improved internal business process efficiency and reduced costs, among others, through the transition to cloud-based networking.

Using a combination of cloud-delivered services, companies accelerate time-to-market and enhancements that differentiate the customer experience. Cloud can drive significant value creation and competitive advantage. So how can CSPs realize the benefits of the cloud?

Our experience with cloud computing underscores its power to fundamentally shift competitive landscapes by providing a new platform for creating and delivering business value.¹ To take advantage of cloud's potential to transform internal operations, customer relationships and industry value chains, organizations across industries must determine how best to employ cloud-enabled business models to drive sustained competitive advantage.

CSPs have a unique opportunity to capitalize on cloud computing, both as providers and users. As providers, they are the backbone of cloud technologies, helping all other industries translate capital expense into operational expense, reducing total cost of ownership and enhancing performance. With cloud, CSPs can radically change their positioning in the value chain and create new monetization avenues as digital service providers offering enterprise and consumer cloud-based services.

As users of cloud technology, CSPs can transform internal IT and datacenter operations. Moreover, the industry is transitioning to cloud-based networking, in which functions previously delivered as appliances are delivered as software components running on a cloud infrastructure. The emergence of software defined networking (SDN) and network function virtualization (NFV) is crucial for CSPs, enabling significant cost take-out, greater agility and faster time-to-market.

Cloud is transforming the business of telecom

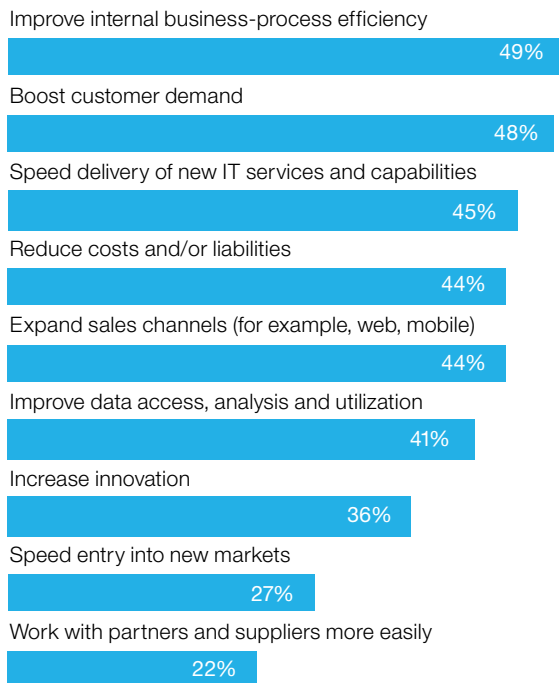
For the telecom industry, cloud computing offers the potential for significant improvements. Cloud can help CSPs create new businesses, redefine customer relationships, transform and optimize operations, and expand business agility and capability.



Figure 1

Telecom executives report improved efficiency, increased demand and reduced costs from cloud technologies

Clients have realized significant benefits as a result of cloud adoption during the last two years



Source: "Mapping the cloud maturity curve" by EIU, March 2015.
Question: "What business benefits has your company realized as a result of using cloud technologies?" n=100

Leading CSPs leverage cloud for:

- *Operational innovation* – Simpler and faster processes drive internal efficiency; reduced complexity enables better governance and expanded access to more and broader data to manage risk; and IT capacity is better aligned to business volumes.
- *Revenue model innovation* – Customer relationships, data and other assets are monetized more readily; time-to-market is enhanced; and relevant partner services are incorporated more easily.
- *Business model innovation* – Third-party services extend into the telecom ecosystem; open collaboration and sharing are expanded; new types of business can be pursued; and innovation is introduced systematically.

As part of the "Mapping the cloud maturity curve" survey by the Economist Intelligence Unit (EIU) in March 2015, 100 CSP executives were asked to identify their organizations' top business drivers behind cloud adoption. The top-three drivers cited were to improve data access, analysis and utilization (cited by 43 percent); expand sales channels (36 percent); and boost customer demand (36 percent).

In addition to seeking the motivations behind cloud adoption, the survey also asked telecom executives which benefits their organizations have realized as a result of cloud. Forty-nine percent of the same industry executives said cloud has improved internal business-process efficiency, while 48 percent indicated that it boosted customer demand, followed by 45 percent who said it sped delivery of new IT services and capabilities (see Figure 1).

As cloud adoption by CSPs matures, other benefits will also accrue. CSPs and their customers will be able to design, prototype and deploy applications quickly. Organizations will benefit from new user-driven, mobile and cloud-centric information technology. Cloud will support transformation of enterprise IT functions, roles and responsibilities. And business managers will increasingly use cloud for application development to enhance agility.

Along with benefits for the enterprise, cloud brings increased customer benefits. Cloud can facilitate new and expanded channels, as well as improve access to client data, allowing for better tailored products and services. Cloud also enables CSPs to transform and redefine how people consume video. By fostering more integrated, compelling customer experiences, cloud helps strengthen customer loyalty.

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Access the full “Mapping the cloud maturity curve,” study here: ibm.com/cloudmaturity

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Charting the path for cloud adoption

To succeed with cloud, CSPs have to assess its impact on the operating model and determine what actions are required.

- *Source and manage partnerships and alliances efficiently.* Automate procurement and sourcing functions. Define service-level agreements to secure customer data in a shared environment.
 - *Proactively redesign business architecture and processes.* Integrate legacy processes into new cloud-enabled, dynamic processes. Establish available and reliable cloud-based platforms.
 - *Change organizational design and governance.* Prepare to mitigate data privacy and compliance risks with strong risk management systems.
 - *Evaluate existing performance management.* Develop strategy and metrics that address new levels of reporting complexity. Build performance metrics into contracts for cloud-based services.
 - *Develop critical new cloud capabilities.* Foster skills in customer and service orientation; virtualization and network technologies; and relationship management. Build deeper analytic and operational capabilities.
 - *Increase adoption of emerging technologies.* Update IT strategy to support new business strategy and cloud enablement. Adjust budgets to cover costs of legacy systems and new network bandwidth.
 - *Reassess location strategies for optimal cloud adoption and to enhance the customer experience.* Decommission or consolidate technology assets.
 - *Promote organizational culture changes.* Educate employees about organizational changes, addressing resistance by IT and other functions.
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How can IBM help?

IBM has a unique position in the marketplace with consulting services and enterprise-grade cloud offerings. We are ideally positioned to engage clients in conversations to identify cloud adoption entry points that move beyond cost cutting to transforming business models through cloud capabilities that include:

- Business and technology strategy consulting services that help clients leverage cloud to develop executable strategies and transform their businesses, operations and organizations by delivering business value through technology.
- The next generation, enterprise cloud service delivery platform, IBM Cloud solutions offer clients unprecedented service level control. This common IBM architecture for private, public and hybrid clouds is based on IBM hardware, software, services and best practices.
- A robust set of IBM Cloud services: computing, storage, backup, SAP, security and unified communications.
- Consulting, design, implementation and infrastructure component management services that create an IT environment dynamic enough to effectively support cloud computing deployment.
- IBM next-generation cloud-based network technology, including SDN and NFV, and IBM cloud-based video delivery solutions.



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Reference

- 1 Fox, Bob, Nick Gurney and Rob van den Dam. “The natural fit of cloud with telecommunications: Winning in a new game through new business models.” IBM Institute for Business Value. September 2012. <http://www.ibm.com/services/us/gbs/thoughtleadership/ibv-telecom-cloud.html>; Berman, Dr. Saul, Lynn Kesterson-Townes, Dr. Rohini Srivathsa and Anthony Marshall. “The power of cloud: Driving business model innovation.” IBM Institute for Business Value. January 2013. <http://www.ibm.com/services/us/gbs/thoughtleadership/ibv-power-of-cloud.html>



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