The cloud grows up

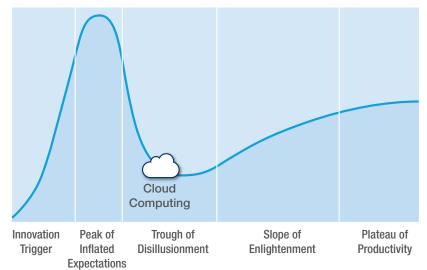
The cloud gets real

As cloud computing entered the mainstream in the early years of this decade, businesses got very excited about its potential. In fact, sometimes they got a little too excited. That is not to say that the cloud is not a very big deal—it is—but certain expectations for quick and broad payoffs were exaggerated.

This happens a lot with new technologies. In fact, Gartner came up with a name for the typical trajectory of IT innovations, from early promise to hard reality to useful and sustainable deployment at scale: the Hype Cycle for Emerging Technologies.

Our survey of 200 senior business and IT executives from around the world, fielded first in 2012 and again in late 2014, shows that cloud is moving along Gartner's famous curves. It has gone from the so-called Peak of Inflated Expectations and through the Trough of Disillusionment, and is now on its way up the Slope of Enlightenment to the Plateau of Productivity.

The 2014 Gartner Hype Cycle for Emerging Technologies



Source: Gartner

Businesses today are more likely than they were in 2012 to say they are using cloud to develop new business models.



Sponsored by





The practical implications of this journey are profound. As companies move through the cycle, their expectations for implementing cloud across the business—and their expected payoffs from doing so—change a lot. Now that they are well into the hard work of making the cloud an everyday reality, they have more mature approaches to deployment, more strategic business goals, and more nuanced approaches to risk.

For example:

- General fears over cloud security have given way to targeted issues, with more respondents now concerned with details like lack of end-to-end monitoring and proprietary integration interfaces.
- Specific issues like sprawl and redundancy of cloud services and the role of non-IT administrators have taken precedence over less-focused concerns.
- IT still has responsibility for cloud risk management in half of companies, but more firms are giving this responsibility to the operations function.

Still, some things have stayed the same: optimism remains at the heart of businesses' use of cloud, along with the belief that getting it right can result in big rewards.

Changing expectations

When we first fielded our global survey in 2012, respondents were very enthusiastic about some of the benefits they expected from cloud. Over two-thirds then expected the cloud to significantly improve their company's productivity, speed and efficiency, and innovation, despite the fact that many did not have the knowledge of operational details and specific implementation challenges they needed to be effective.

In the two years between our surveys, businesses have gotten a firmer grasp on the challenges of moving business processes to the cloud. Today, for example, they point to a wide range of specific security concerns and implementation challenges, instead of the less well-defined issues reported in the previous iteration of study.

This maturity explains in part why 2014 respondents are comparatively reserved about the extent of future benefits like revenue growth, cost cutting, and productivity from their use of cloud (slightly less than half are expecting significant improvement in these areas—a robust count, to be sure, but down from the earlier version).

Yet overall enthusiasm has not been dampened: while companies today are less likely to say they expect immediate benefits from their cloud computing, they are more likely than they were in 2012 to say they are using cloud to develop new business models, and less likely to say cloud is only for cost and efficiency.

Our latest survey shows sustained enthusiasm for using the cloud to meet changing market needs, developing new apps, and deploying new business models. According to CIO Don Whittington of ASR Group, the world's largest cane sugar refiner, his industry is likely to benefit in areas like collaboration, both internally and with partners and suppliers. Even as the focus on strategic goals grows more targeted, ASR Group is still realizing reductions in cost and efficiency as cloud delivers significant benefits in terms of TCO for technology spending.

Expectations of the cloud will likely continue to evolve. After all, technology is constantly changing, learning and adaptation beget fresh perspectives, and the business environment requires new strategies to meet emerging challenges.

2014

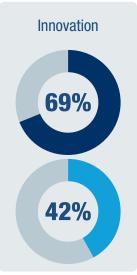
There is sustained enthusiasm for using the cloud to meet changing market needs, developing new apps, and deploying new business models.

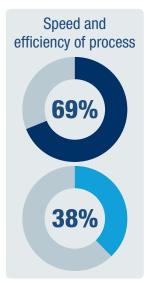


Shifting expectations for cloud

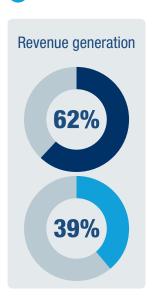
To what extent do you expect your company's adoption of cloud computing to improve the following business activities?

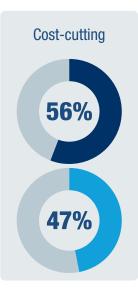






2012





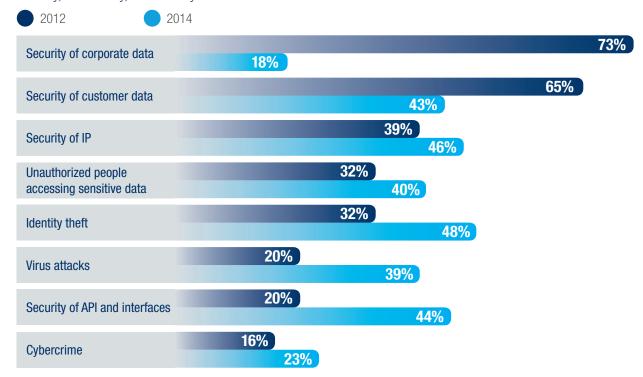
Moving targets for operations and risk

In the early days of cloud adoption, companies were unsure of precisely where to focus their efforts. One thing nearly everyone agreed on was that moving valuable information out of the familiar confines of a corporate data center seemed a scary proposition. Ensuring consistent security was the highest-rated challenge among our survey respondents back in 2012—a worthy mission, but not exactly one with pinpoint targets.

Now these generalized fears about the safety of corporate and customer data are on par with more specific threats like security of IP (46%), identity theft (48%), and virus attacks (39%). Security concerns over business networks have become more specific, too. While general security was most likely to be a top challenge for business networks in 2012, today's respondents are most likely to say lack of end-to-end monitoring (56%) and proprietary integration interfaces (48%) are their chief concerns.

Security concerns become more nuanced

Please rank your top three concerns in the area of cloud security. Primary, secondary, and tertiary concerns shown below.



Strategies for addressing risks

Both the 2012 and 2014 versions of our survey show an emphasis on user tracking, risk assessment, and audit as the main methods for tracking and measuring security within the company. But some things have changed: compliance inspection has grown in stature (from 37% in 2012 to 46% in 2014)—a further sign of the routinization of cloud computing.

While companies have taken a number of steps to deal with security concerns in the cloud—including identity and access management, and embedded protection in cloud applications—regular security audits are still not common enough (only 53% say they perform them regularly).

Approaches vary slightly across regions. For example, firms in Asia-Pacific are much more likely to say they use identity and access management, while firms in Latin America are less likely to say so. Respondents in Asia-Pacific are less likely to say that they collaborate with cloud partners on security strategy and implementation, and least likely to say they have engaged third-party security partners.

Businesses have come a long way in their understanding of security risks in the past few years, and their greater focus on details should mean continued progress in successfully implementing and maintaining cloud operations.

The cloud grows up: The cloud gets real

Now that many companies are well into the migration process for core business functions (see our Think Piece on the cloud's transformative potential, *The Cloud Gets Down to Business*), their first-hand experiences give them broader and more specific views of the challenges they face. For ASR Group, security is paramount—but Mr. Whittington says it was a bigger issue four years ago, before the company established strong protocols with cloud partners to ensure more protection of their data than they are capable of providing internally.

In the same manner, London-based multinational British American Tobacco has taken a continuous approach to understanding and upgrading security, and has integrated data protection into internal processes while still remaining cautious about what information it chooses to store in the cloud. These approaches to cloud security highlight the same sharpened focus on risk reported by our survey respondents.

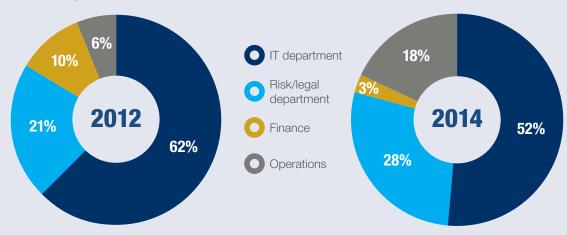
Who runs risk management?

As companies get a better grasp of the specific challenges and risks facing them as they work through cloud implementation, many are rethinking their strategies for risk management.

IT still has responsibility for cloud risk management in half of companies, but more firms today report giving this responsibility to the operations department—reflecting the transition to operational concerns. The number is even higher in North America, where 28% say their operations department has this responsibility.

More companies giving cloud risk responsibility to operations

Who manages cloud risk and security in your company?



North America is also significantly more likely to give this job to the risk/legal department, as are Latin American firms—a sign of maturity in risk management. Meanwhile, sizable majorities of respondents in EMEA and Asia-Pacific say this job lies with the IT department.

What does this shifting approach to governance mean for the future? Companies that give more responsibility for risk management to the operations department should see policies to protect data and systems becoming more embedded in organizational processes across the enterprise.

Toward transformation

While companies have modified their expectations and become more realistic about predicting quick wins from the cloud, they do expect to use it in ways that will have a transformative impact on the way business is done. The new realism should not obscure the opportunities businesses see to apply their hardwon knowledge of the cloud to increasingly strategic endeavors.

Supply chain, talent, and collaboration are high-growth areas for companies looking to the cloud for transformation across the enterprise, and more and more companies are relying on cloud to manage and make meaning from the growing amount of data available to them. The impact is only expected to broaden and deepen in the future. Within three years, companies expect the cloud will significantly change the way they develop new business models, interact with customers, collaborate internally and externally, and hire and retain talent.

Jeroen Scheer, a senior executive with Dutch energy firm Alliander, acknowledges that this huge transition is not easy. It takes time and attention to IT, processes, and organizational culture. The realistic expectations shown by companies today—and their determination to work through those challenges—point to their continued enthusiasm for cloud and to the benefits ahead for companies that get it right.

Conclusion

Great expectations are common when new technologies come online. And frequently, the impact of these technologies is as profound as promised. But rarely is the path from introduction to adoption to deployment to payoff anything resembling a straight line. So it has been with the cloud.

What is remarkable is not that the cloud has moved along the Hype Cycle, but that it has done so with such speed. The maturation of this new way of distributing, owning, and using software is still underway, but businesses are already seeing transformative results at scale, and expect more in the years to come.

Businesses are already seeing transformative results at scale, and expect more in the years to come.





