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Cloud | the way we see it

A Close-up View of Microsoft Azure Adoption

Business Decision-Makers are Driving Cloud Trends

People matter, results count.

Contents

Introduction

The Cloud has been portrayed as the next big IT trend: A 'pay-as-you-go' environment – a way of extending or replacing IT capacity without the capital investment in, for example, infrastructure, or larger operational teams.

Over the last few years, the Cloud appears to have developed from a rather nebulous concept to a set of highly practical solutions for today's complex IT landscape and the ever-growing requirements on the IT department from the business.

But we wanted to establish that this was indeed the situation with the users of the Cloud. Within organizations, who was leading on the Cloud, what were the drivers, how was it being managed? For this reason, Capgemini commissioned new research[1] into decision-makers' views on the Cloud, including a drill-down into Microsoft Azure in particular. Microsoft is one of our strategic partners[2] and we wanted to explore key factors influential in Cloud partner and vendor selection.

When we saw the results, we felt that our view of the market had been validated, but that perspectives seem to be shifting even faster than we had thought. With respect to Cloud adoption in general, a number of findings emerged from our research, of which the following three are the most significant to this Close-up View.

- Cloud decisions are being made more and more by *business managers* rather than, or as well as, by IT. We may be reaching a tipping point where the business typically takes control.

- Rather than making an all-or-nothing decision about moving to the Cloud – and potentially getting delayed by unavoidable obstacles – firms are increasingly seeing the move as a *careful, step-by-step progression*.

- *Newer applications* and business areas are hitting the Cloud first, with many going straight to the new platform, almost as a default. Legacy systems are mostly being left where they are for the time being.

In this report, we put our Azure research in the context of these overall trends. The most striking group of findings was about the level of interest in Azure, with more than three in five executives saying they had already evaluated it, and over half having made it part of their Cloud strategy. Given the Azure offering is relatively new, we explore what is supporting this trend.

We see this surprisingly high take-up partly as an effect of the influence of business decision-makers on Cloud choice. Business decision-makers are strongly interested in new business initiatives and hence new applications. Some of them have a preference for a public Cloud, which is suited to getting these applications up and running fast, and that leads them to look at public Cloud offerings such as Azure. However, the reality of existing and future IT landscapes will quickly increase the need for advanced Cloud orchestration, combining different (public and private) deployment options with a diverse collection of solutions.

We also see the specific interest in Azure as a manifestation of the high degree of trust that people place in Microsoft as a vendor: Trust remains a major issue for Cloud adoption as other findings show. It is also driven by the vast amounts of data that organizations are collecting, which in turn requires a need for a flexible and scalable offering. As we found out, this was the number one reason for selection of Azure.

In the future, companies will continue to work with multiple vendors and will progressively combine public, private, and hybrid Cloud models. Given this increasingly sophisticated Cloud landscape, platforms like Windows Azure will be evaluated in ever more depth on their flexibility, choice of operating system, language or development tool and level of sophistication (referring to its management tool support, interoperability, scale, security and reliability).

This sophistication, however, brings challenges. Dealing with those challenges – by orchestrating the overall Cloud landscape – will be the job of the CIO and IT function, and in many cases, this will be facilitated by systems integrators who have knowledge of the customer and the cloud vendor portfolio.

Our findings are based on an extensive study carried out for us by independent research company Coleman Parkes Research. The study consisted of 460 detailed interviews with enterprises (most with over 10,000 employees) from key sectors, from across the globe. IT executives and line-of-business decision-makers were represented about equally in our sample to give a rounded view.

We hope you find these insights into the Cloud, and within this, the trends regarding the selection of public Cloud and, in particular, Microsoft Azure adoption, of interest.

[1] For more discussion of Cloud trends, see *Cloud in the Real World: The State of Play Shifts Rapidly Capgemini*, November 2012

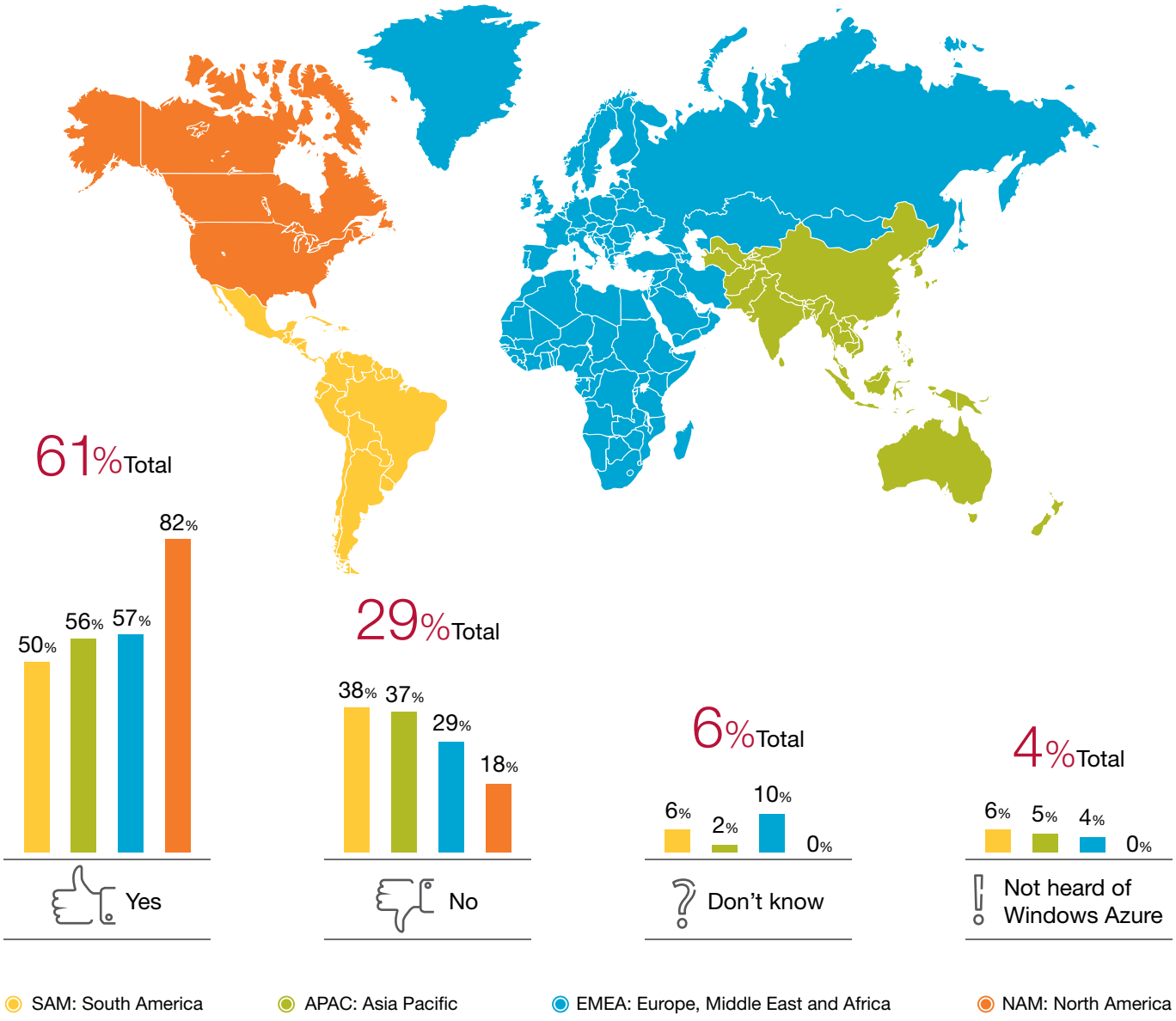
[2] Microsoft is the only vendor with the ability to deliver the same platform (server, sql and azure) and solutions (Exchange, SharePoint, Lync and Dynamics CRM) across public cloud, private cloud and on-premise

Key trends

Rates of evaluation and adoption of Azure are high

From working with our clients, we recognized that since its launch in February 2010, Azure is an increasingly popular choice, but were surprised to discover that over 60% of all respondents said they have carried out an evaluation of Azure, rising to 82% in the more mature IT market of North America (Figure 1).

Figure 1: Has your organization evaluated Microsoft Windows Azure?



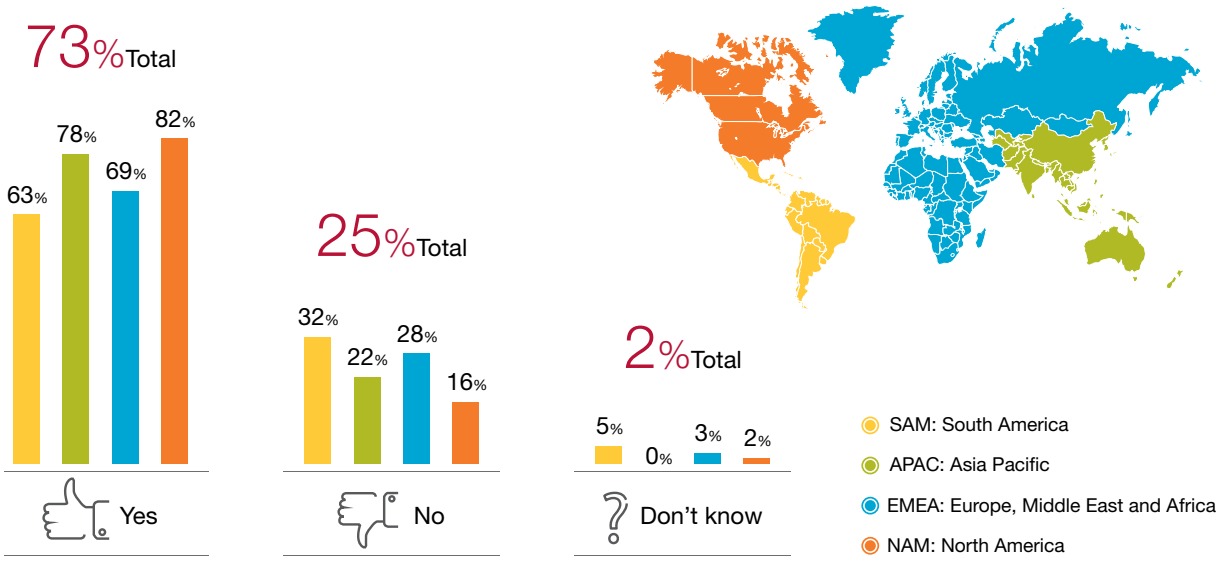
In the financial services sector – among the more progressive sectors in terms of Cloud adoption generally – 72% of executives have already evaluated Azure. That compares with only 27% in manufacturing and automotive, which is often held back by large volumes of legacy data and also has a much slower approach to Cloud adoption overall (Figure 2).

Figure 2. Has your organization evaluated Microsoft Windows Azure?
(Percentage answering "yes," by sector)

72%	68%	65%	58%	56%	27%
Financial Services	Energy/ Utilities	Retail	Telecommuni-cations/Media	Public	Manufacturing/ Automotive

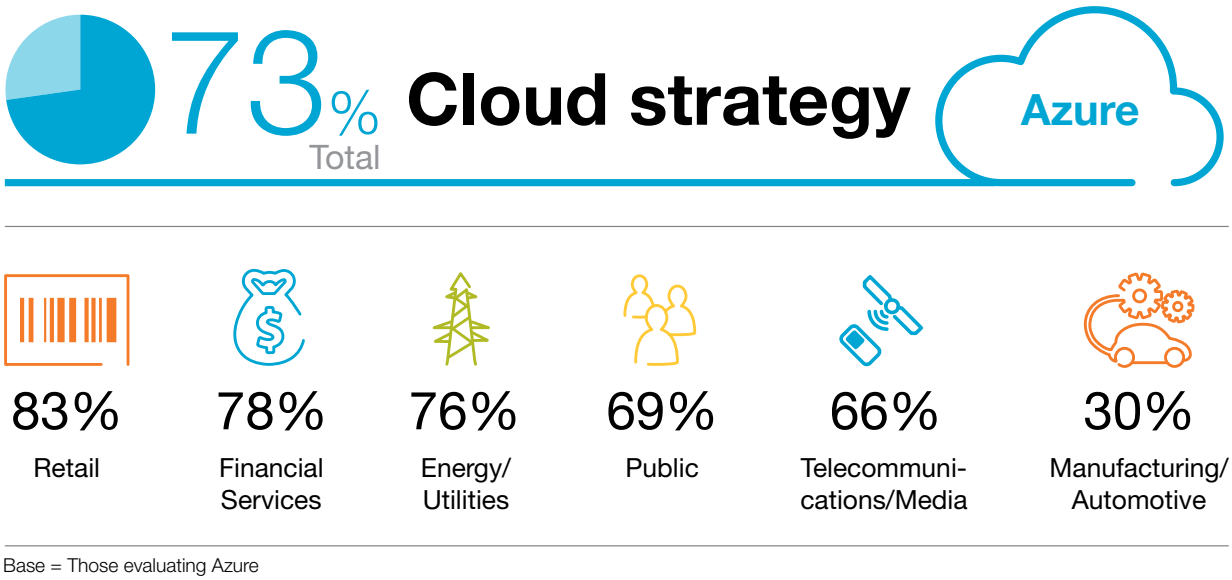
Of those with a Cloud strategy, 73% of respondents said they had already included Azure as part of their Cloud adoption strategy, with those in North America and APAC most likely to have done so (Figure 3).

Figure 3. Is Azure part of your Cloud strategy?
(Percentage of those with a Cloud strategy who answered "yes," by region)



As we might expect, the more directly customer-facing sectors – retail, financial services, and energy/utilities – will be the most interested in leveraging a public Cloud in some way, as they see it as a means of increasing their agility to meet changing customer needs. Manufacturing and automotive enterprises have less interest in public Cloud/Azure – a finding that probably reflects slower Cloud adoption rates overall, together with high business process complexity.

Figure 4: Is Azure part of your Cloud strategy?
(Percentage answering "yes," by sector)



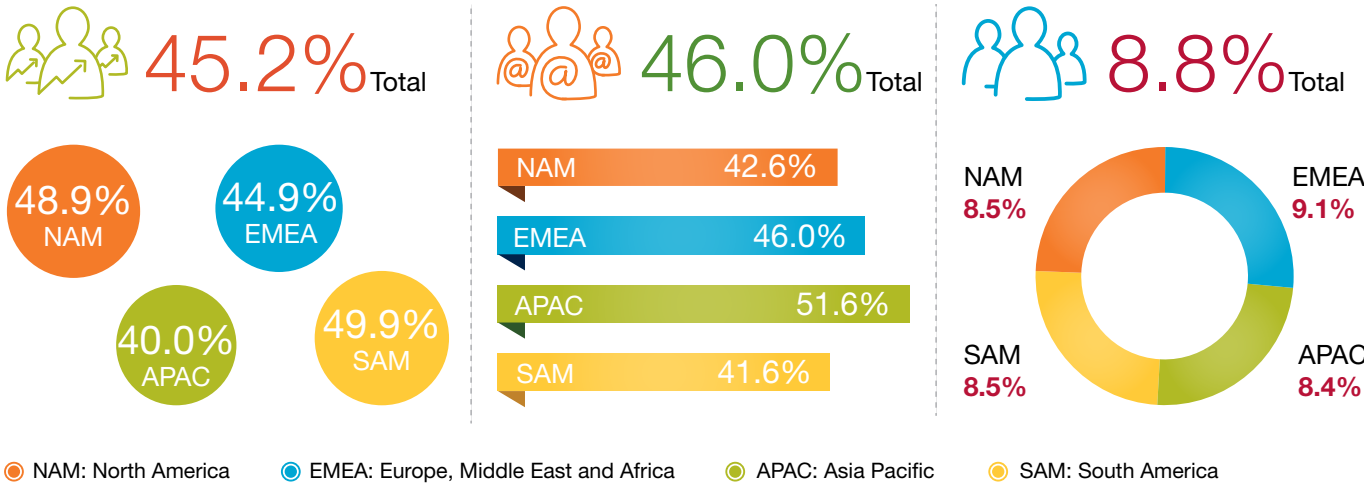
Base = Those evaluating Azure

Although this rate of interest and adoption is higher overall than we expected, other aspects of our findings help to explain why this is. We explore these in the next sections.

The business is in the driving seat

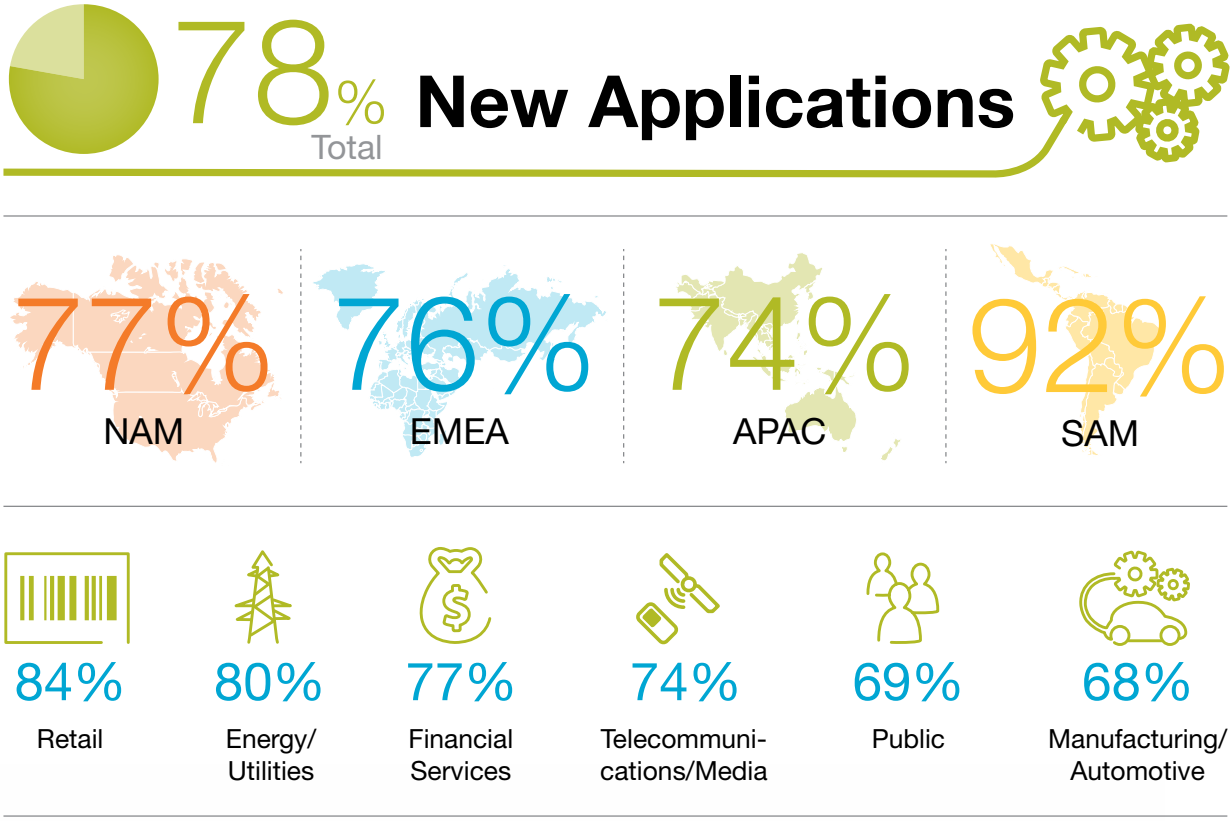
Business decision-makers are increasingly leading the move to the Cloud (Figure 5). Among organizations that have a Cloud strategy, responsibility for Cloud decisions lies with business units in 45% of companies, and with IT departments in 46%.

Figure 5: Who makes decisions about Cloud?



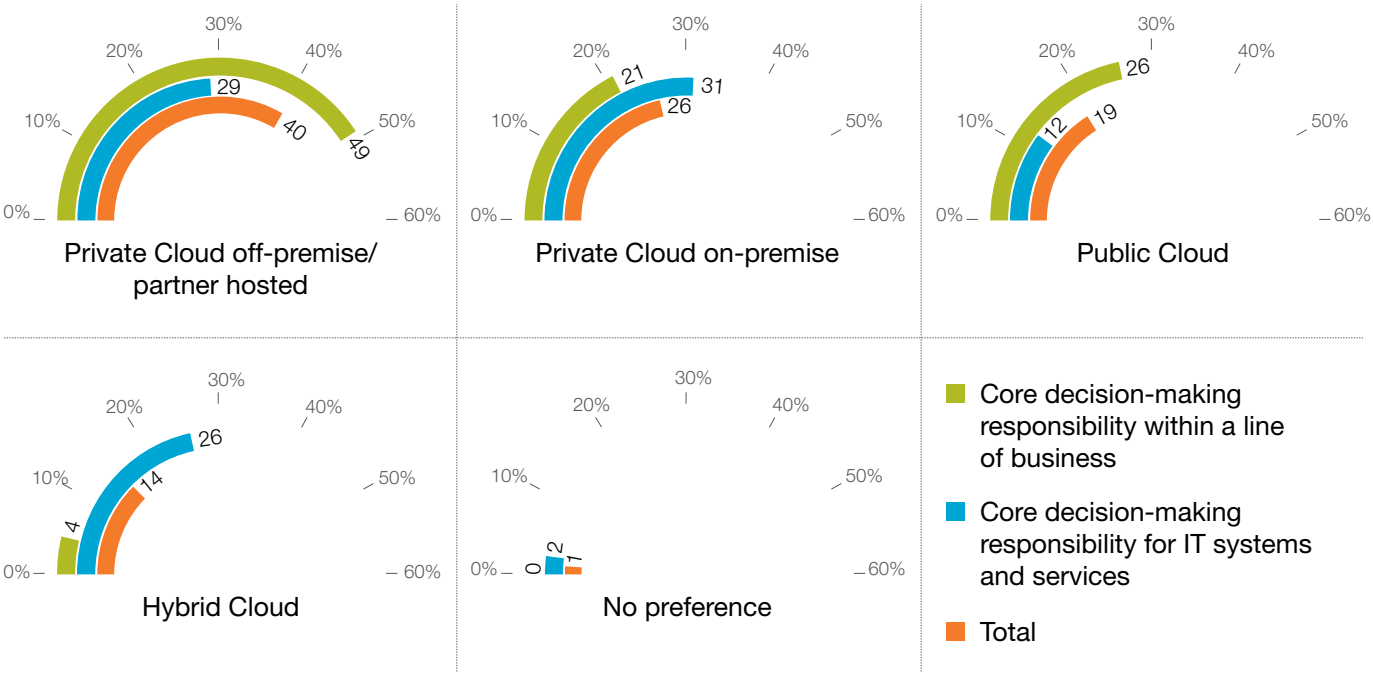
The focus of Business leaders is invariably on new applications and new business initiatives – where the benefits of Cloud, such as scalability and flexibility, are highly desirable and relatively easy to realize, because there are no legacy systems to worry about. This focus is reflected in Figure 6: 78% of companies' Cloud activity is focused on new, as opposed to legacy, applications. Even more – 83% – are using the Cloud to develop new applications, as well as running applications in the Cloud.

Figure 6: Does your Cloud adoption focus on new applications?
(Percentage answering "yes," by region and sector)



Public Cloud, especially, lends itself to these new applications and business areas, and this is likely one reason businesses are so interested in Azure. This is supported by our finding that business decision-makers (while also interested in private Cloud) are somewhat more likely than IT managers to favor public Cloud: They see it as a way to get their new ventures up and running fast.

Figure 7: What type of Cloud do you prefer?
(IT managers versus business decision-makers)

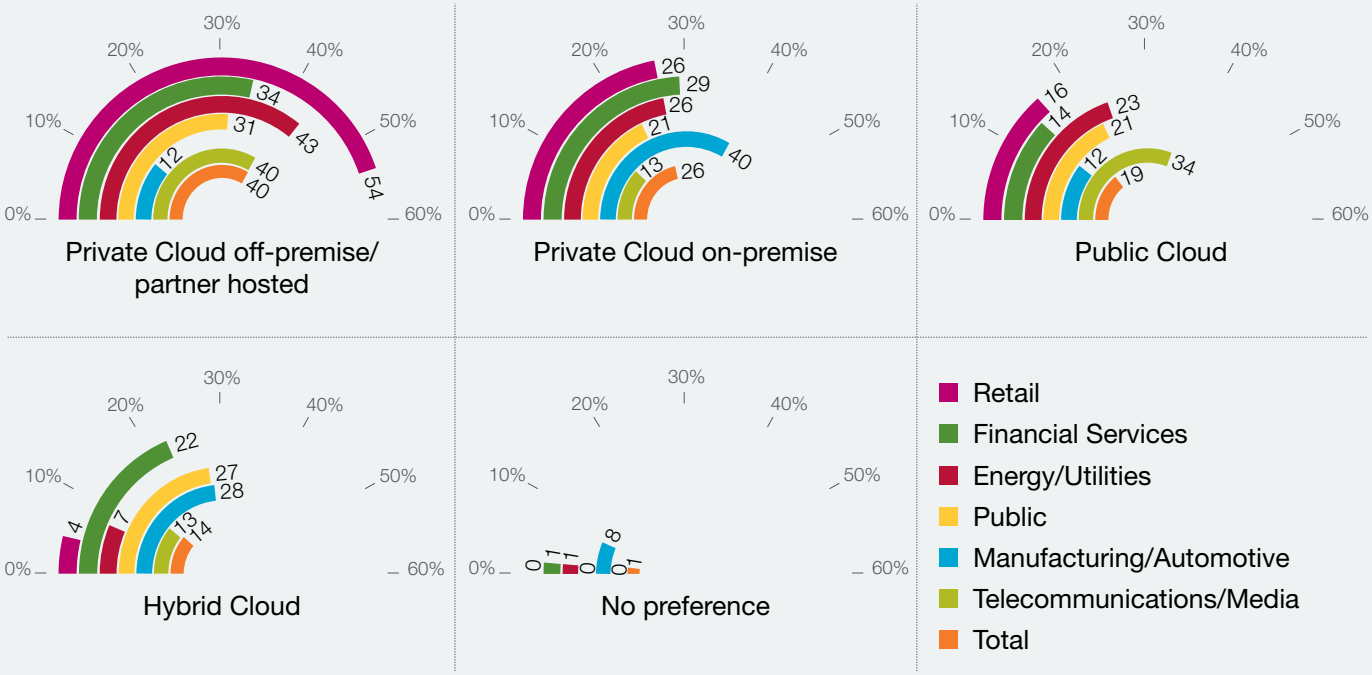


Base = Respondents with a Cloud strategy

Cloud preferences by sector

As Figure 7a shows, retailers have a clear preference for a private Cloud that is off-premise and partner hosted, most likely because they are protective of their customer-data which is essential in such a competitive environment. Manufacturing and automotive enterprises prefer private Cloud on-premise model, reflecting their security concerns and the fact that they have more legacy applications. Telecommunications and media firms are the most likely to prefer a public Cloud as they strive for increased agility and also greater cost savings; their IT dependency is far more significant than in any other sector.

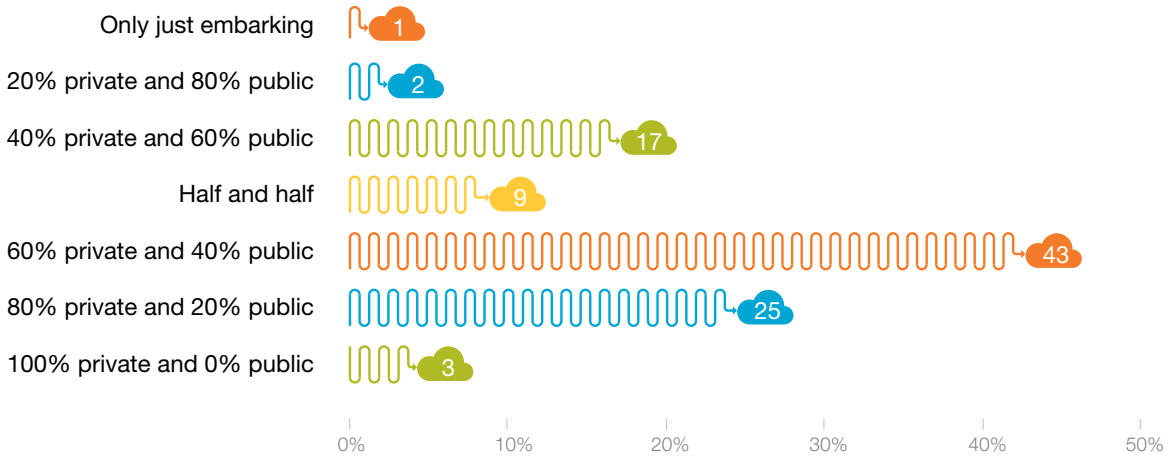
Figure 7a: What type of Cloud do you prefer?
(Responses by sector)



Base = Respondents with a Cloud strategy

The overall preference is for the private Cloud, and this is probably explained by IT executives' concerns about legacy systems and security. Respondents were also asked what their current balance was between private and public (Figure 8). 72% of respondents said that at least 40% of their Cloud activity was public Cloud.

Figure 8. What is your organization's current balance between private and public Cloud?

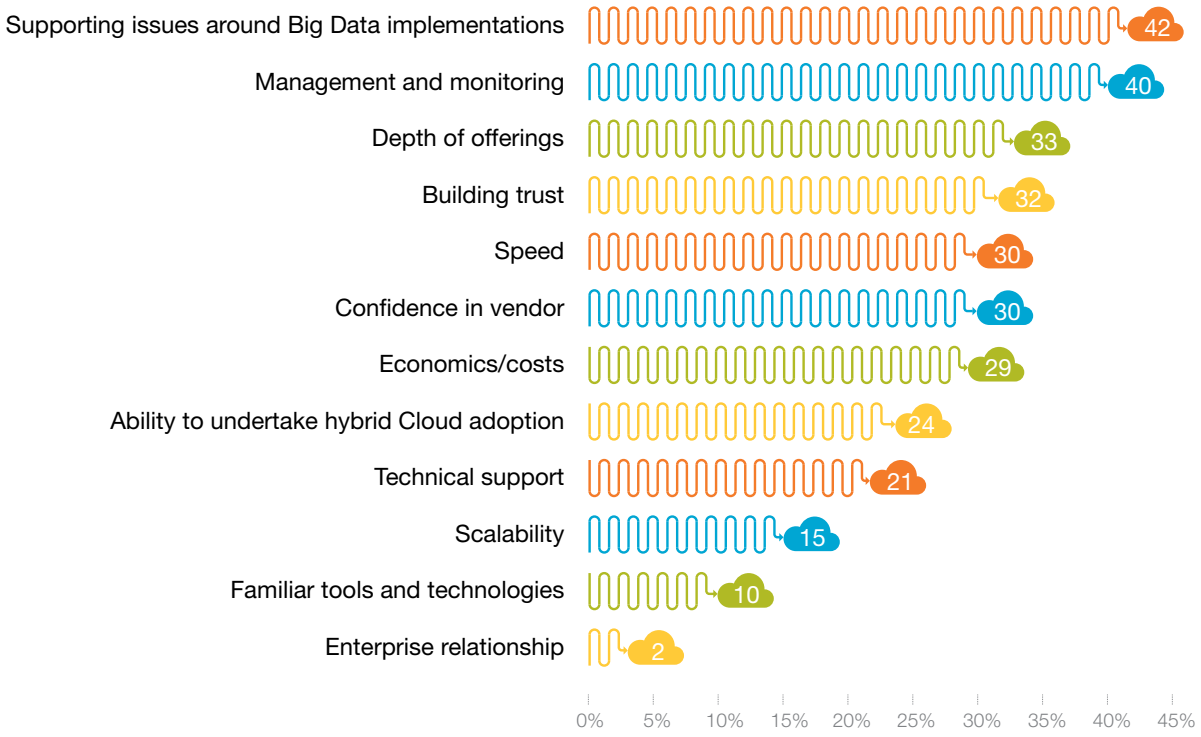


The survey results indicate that business decision-makers are taking the lead in the selection of a public Cloud, driven by the need for increased business agility and customer centricity. So based on this, what are the essential requirements that public Cloud vendors such as Azure need to provide? Perhaps unsurprisingly, trust is one of the key essentials for organizations to make public Cloud part of their Cloud portfolio and to allow them to explore the speed-to-market that public Cloud can offer.

Key drivers for selection of Azure

The number one driver for selection of Azure (Figure 9) was its ability to handle 'Big Data' (42%), allowing the business a highly scalable and robust means of storing, managing, analyzing and monitoring data. The second reason is the management and monitoring ability of Azure (40%), and third is its range of offerings that allows a highly flexible business model development. Underpinning these abilities, and without which they would probably not be so appealing, is that Azure is able to offer a Cloud platform that organizations can trust.

Figure 9: What benefits do you expect from Cloud adoption?



Base = Those evaluating Azure

Note: Multiple responses allowed

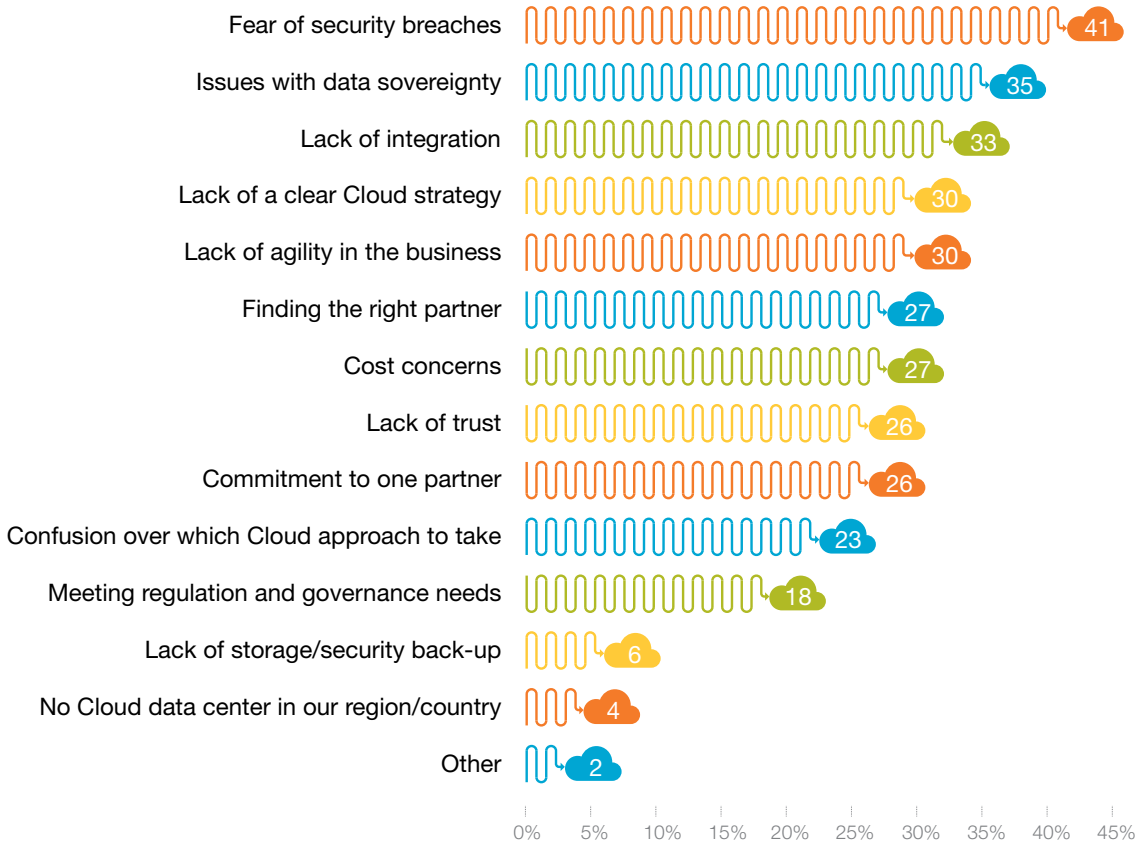
Azure addresses trust issues

Trust issues are fundamental to Cloud adoption as can be seen in the ranked list of benefits expected by our respondents from adopting Cloud (Figure 9). When questioned about the benefits of Azure in their Cloud strategy, "building trust" and "confidence in vendor" were both named by around a third of respondents, in addition to the key drivers articulated in the section above.

Obstacles to Cloud adoption

Our research additionally confirms that the single biggest obstacle to Cloud adoption in general continues to be the fear of security breaches (41%), closely followed by issues with data sovereignty (35%) as illustrated in Figure 10.

Figure 10: What are the top impediments preventing Cloud uptake?



Note: Multiple responses allowed

"We're reviewing our **Cloud approach** and looking for a solution that combines real business agility, flexibility and scalability and, at the same time, controlling costs while allowing line of business managers to own parts of the IT and innovation".

Line of Business Manager – Retail

"Selecting the **right Cloud adoption** approach is critical to the business now – it is less about private versus public versus hybrid but more about what applications we need to run on that platform to meet the business needs".

Head of IT, Financial Services

Security fears: regional and sector differences

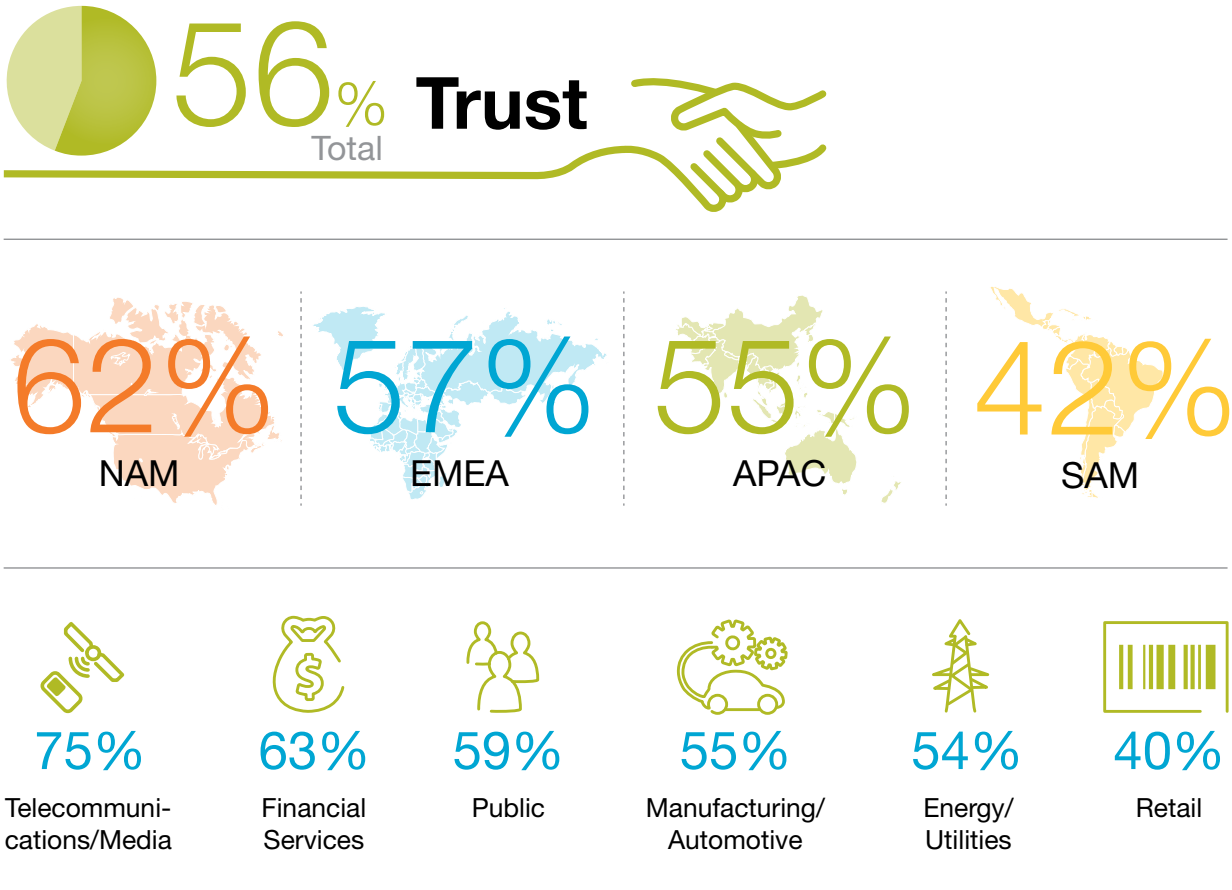
Security breaches are a key impediment to Cloud adoption for 41% of all respondents, but even more - over half - in South America. In manufacturing and automotive, the figure was 63%, which might further explain low levels of Azure evaluation and adoption in that sector.

Data sovereignty was important for 35% of all organizations, but more in EMEA (43%). Telecommunications and media firms were more concerned than average (48%), perhaps because of the data-centric nature of their businesses and their sheer volumes of data.

Trusting data to the Cloud?

Only 56% of organizations said they trusted the Cloud with their data (Figure 11), though again this varied significantly by region and even more so by industry, with a spread of 35 percentage points.

Figure 11: Do you trust the Cloud with your data?
(Percentage answering "yes," by region and sector)



Many organizations, especially those outside North America or in certain more bold sectors, expressed a preference for "going with what they know and trust" (Figure 12).

Figure 12: Do you go with a vendor that you know and trust?
(Percentage answering "yes," by region and sector)

Given that trust (together with data sovereignty) is so fundamental to the decision to use Cloud, it is not surprising that organizations are very willing to include Azure in their Cloud platform selection process, based both on the familiarity of the Microsoft brand and on the sound credentials of Azure itself. The fact that business decision-makers, as well as CIOs, know and trust Microsoft is particularly important, given our evidence that Cloud-related decisions are increasingly made by the business.

Azure addresses growing complexity

The Cloud landscape is becoming more complex for various reasons, not least the involvement of business decision-makers, who have needs and preferences that may differ from those of the IT department, and indeed from one another. Reflecting that complexity, as many as 72% of respondents are working, or planning to work, with more than one vendor (Figure 13)

In addition to considering multiple vendors, those who replied to the survey indicated that they are considering a range of architectures. One of Azure's features is its ability to support more than one "as a Service" architecture. Currently, Software as a Service (SaaS) is the most common approach as enterprises experiment with off-the-shelf offers in new areas of their business.

In the future, other approaches such as Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) will become increasingly prevalent. Figure 13 shows that, by 2015, 86% of companies will be running SaaS, up from 61% in 2012. But growth in PaaS will almost double in the same time period, from 32% now to 58% in 2015. The proportion of companies using IaaS also looks likely to double from 26% in 2012 to 52% in 2015.

Figure 13: Do you work, or plan to work, with more than one Cloud vendor?
(Percentage answering "yes," by region and sector)

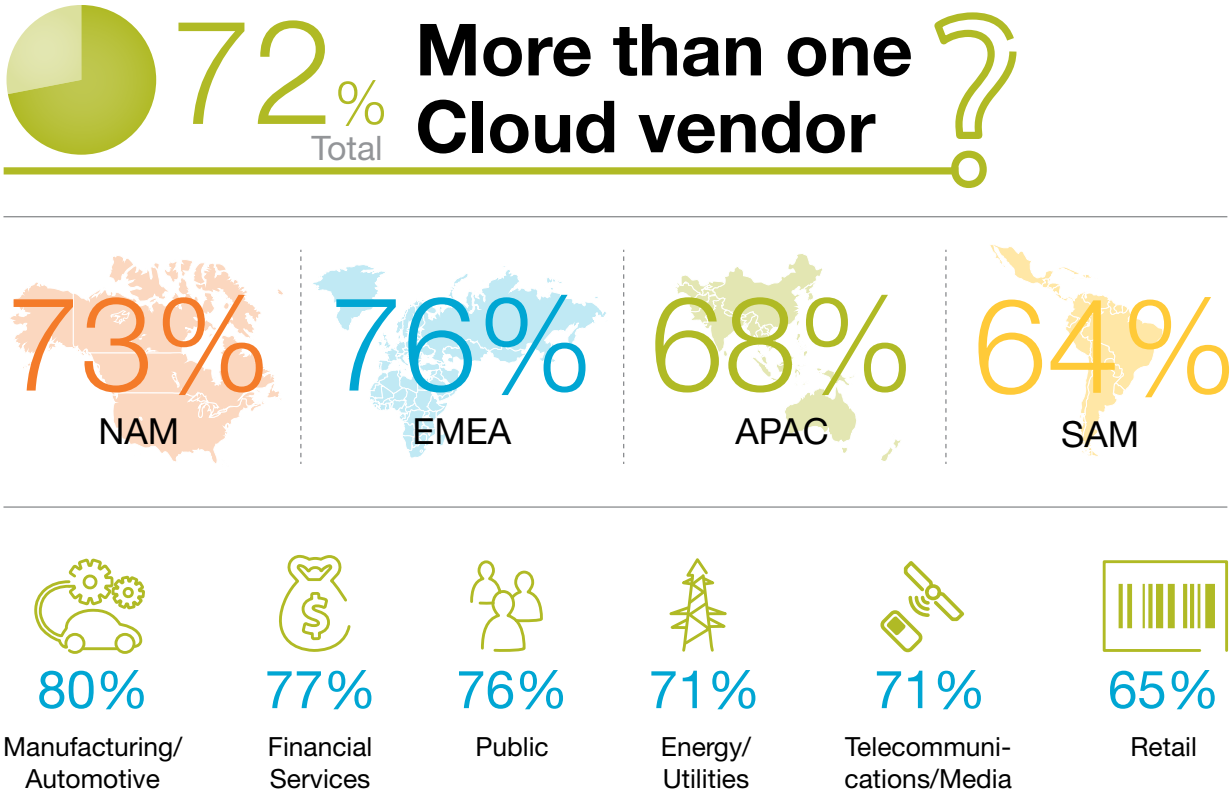
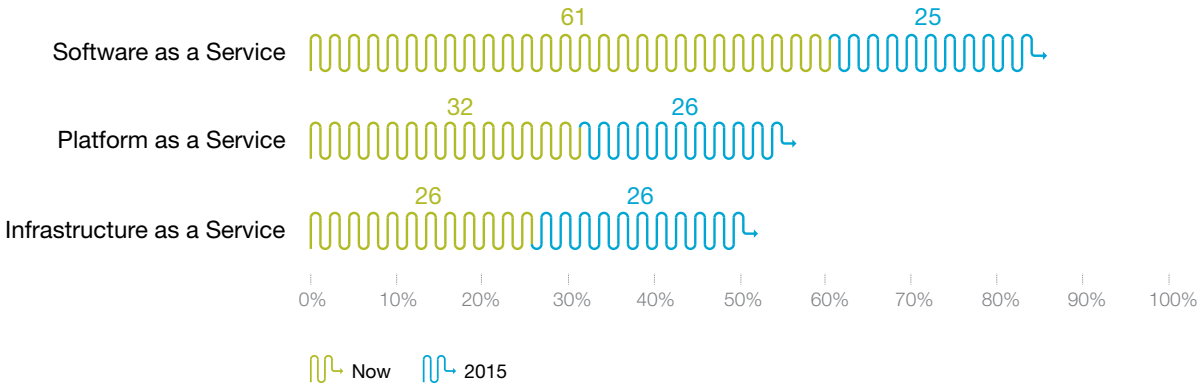


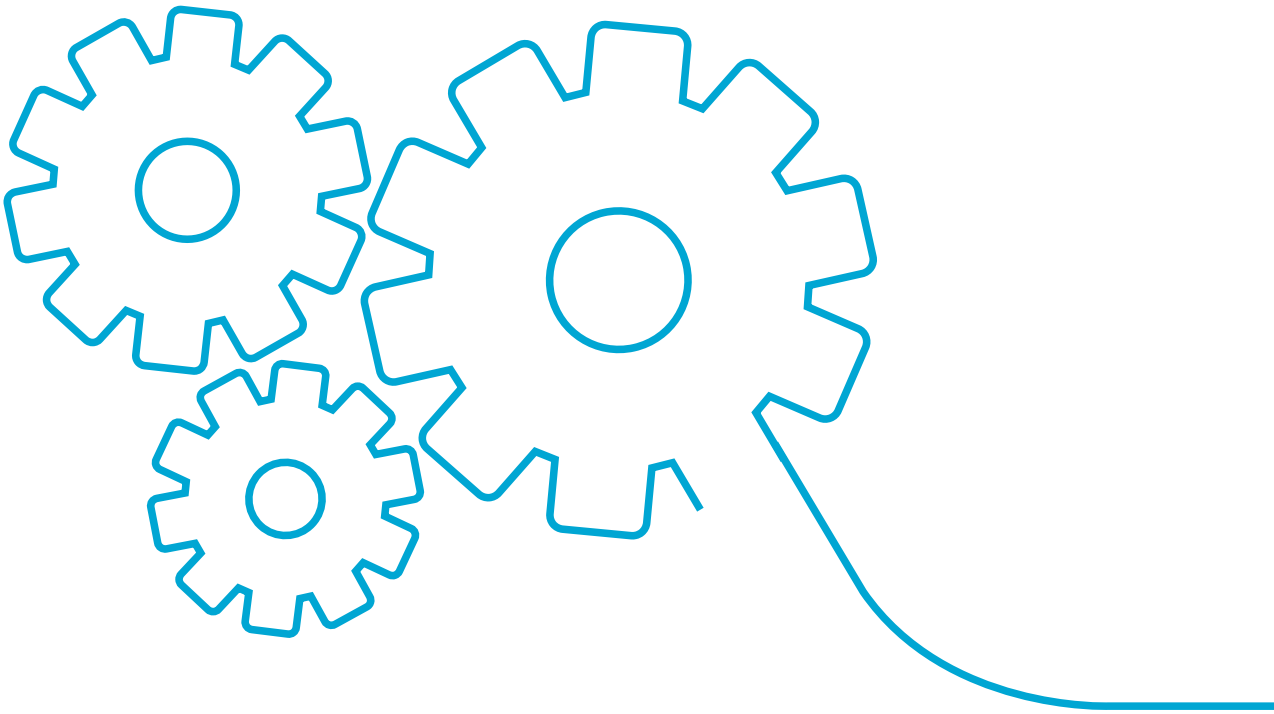
Figure 14: How do you use cloud now, and how do you expect your use to have changed by 2015?



At present, this is likely to be a reflection of the fact that respondents are adopting Cloud to support the needs of a specific department or function, such as the sales force, and choosing vendors that specialize in the relevant applications. If so, the fragmentation probably does not yet present any major integration issues.

However, that will possibly change as companies start putting large legacy systems into the Cloud, especially as they may want to choose private or hybrid Cloud for more sensitive applications and databases. Clearly, a large company's Cloud landscape could be highly complex in the future, with a mixture of SaaS, PaaS, IaaS, and other "as a Service" approaches, probably on a range of public, private, and hybrid platforms, by multiple vendors.

This complexity is one reason we are seeing a step-by-step migration to Cloud, as companies take their time to assess their options. But it is also a reason why companies are attracted to the depth of the Azure offering.

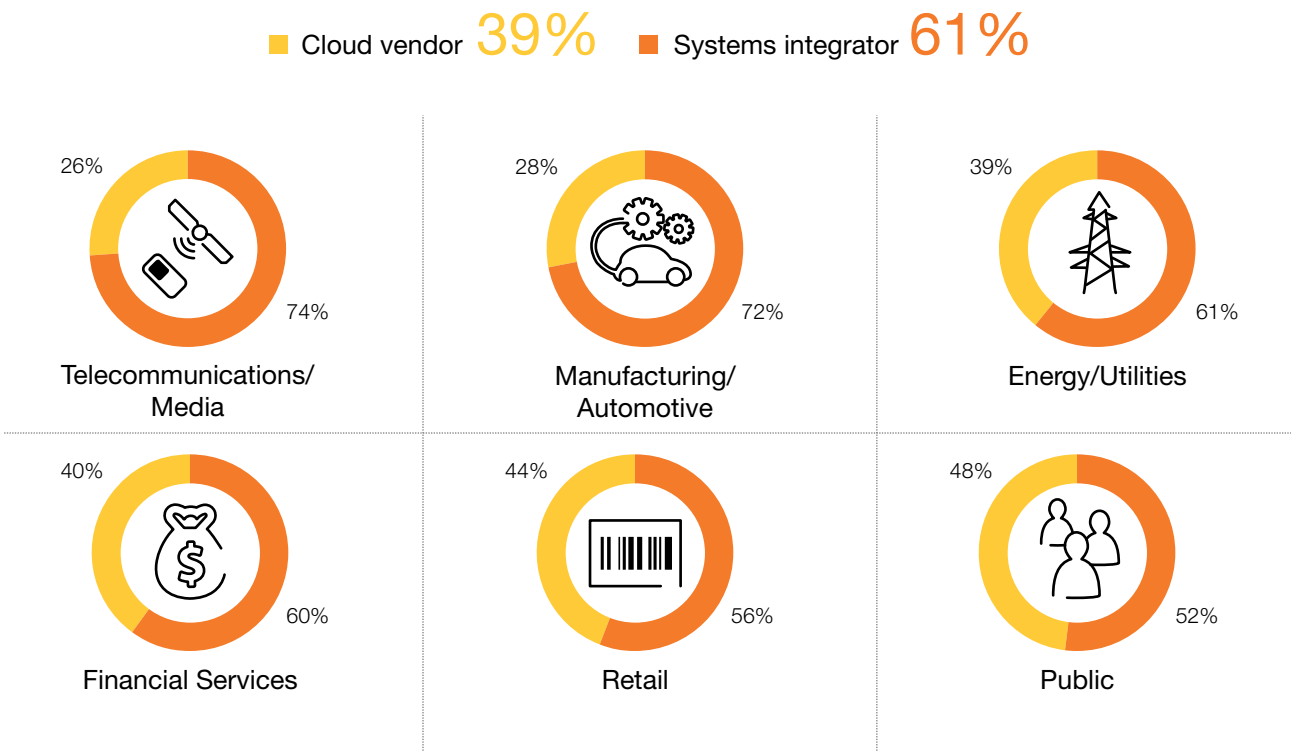


The role of the CIO

The increasing complexity suggests that the CIO and the IT function have a vital role to play in future Cloud adoption. While business decision-makers may be accelerating the take-up of Cloud, it is the CIO who will have to tackle the challenges of integration and make decisions about private versus public and IaaS versus PaaS. CIOs, in other words, have the bird's-eye view of the overall Cloud landscape and where Azure fits into it.

Our research suggests that businesses will also look to systems integrators for help in managing complexity. In our survey, 61% of respondents envisioned developing Service Level Agreements (SLAs) with a systems integrator, and only 39% with a Cloud vendor (Figure 15).

Figure 15: Who will be the focus for your development and management of SLAs? (Cloud vendor versus systems integrator)

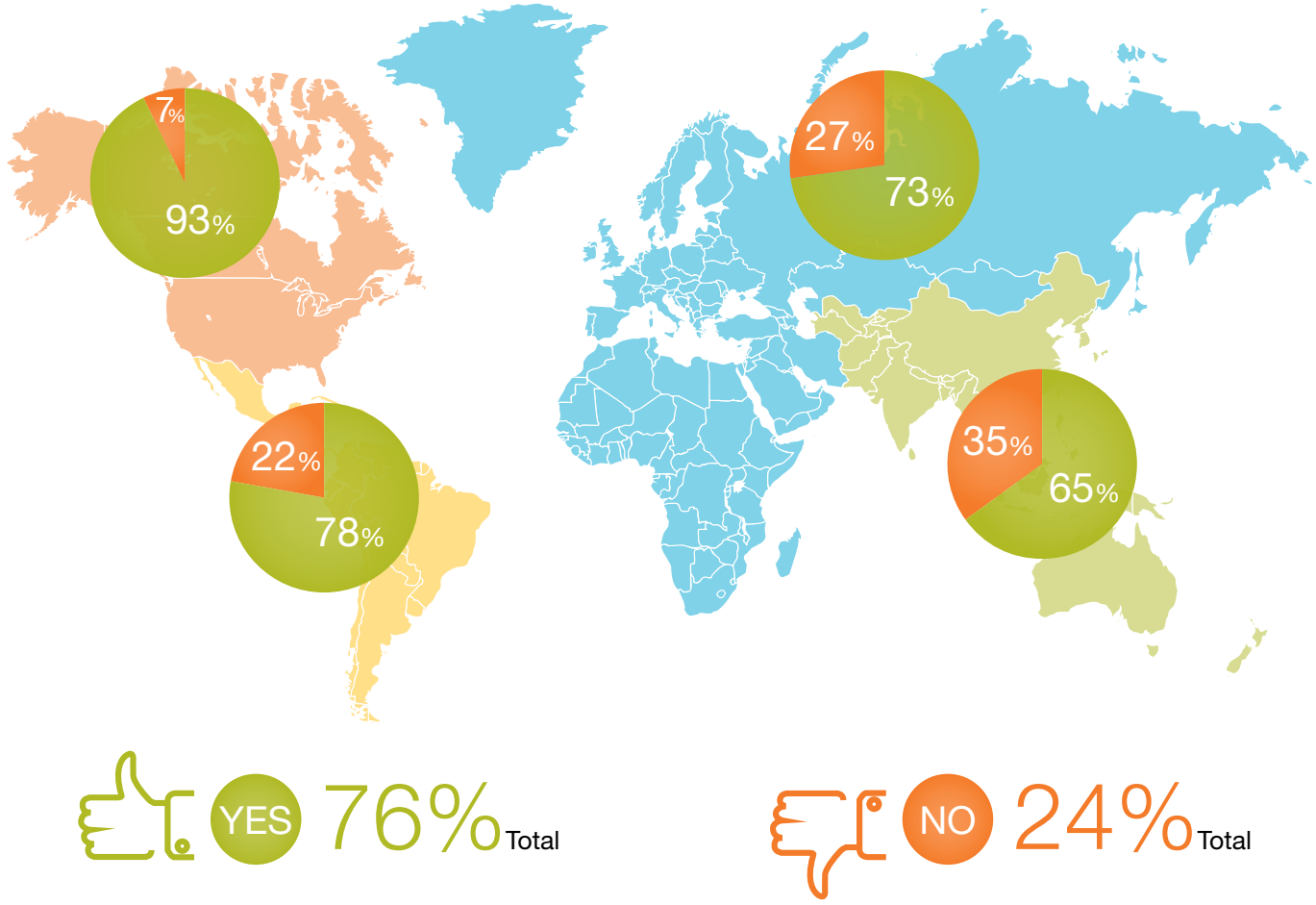


Cloud adoption strategy and drivers

Adoption strategy

More than three-quarters of executives in our survey said their company has a Cloud strategy in place (Figure 16) – and the number jumps to 93% in North America. This shows how far Cloud is taking hold in business today.

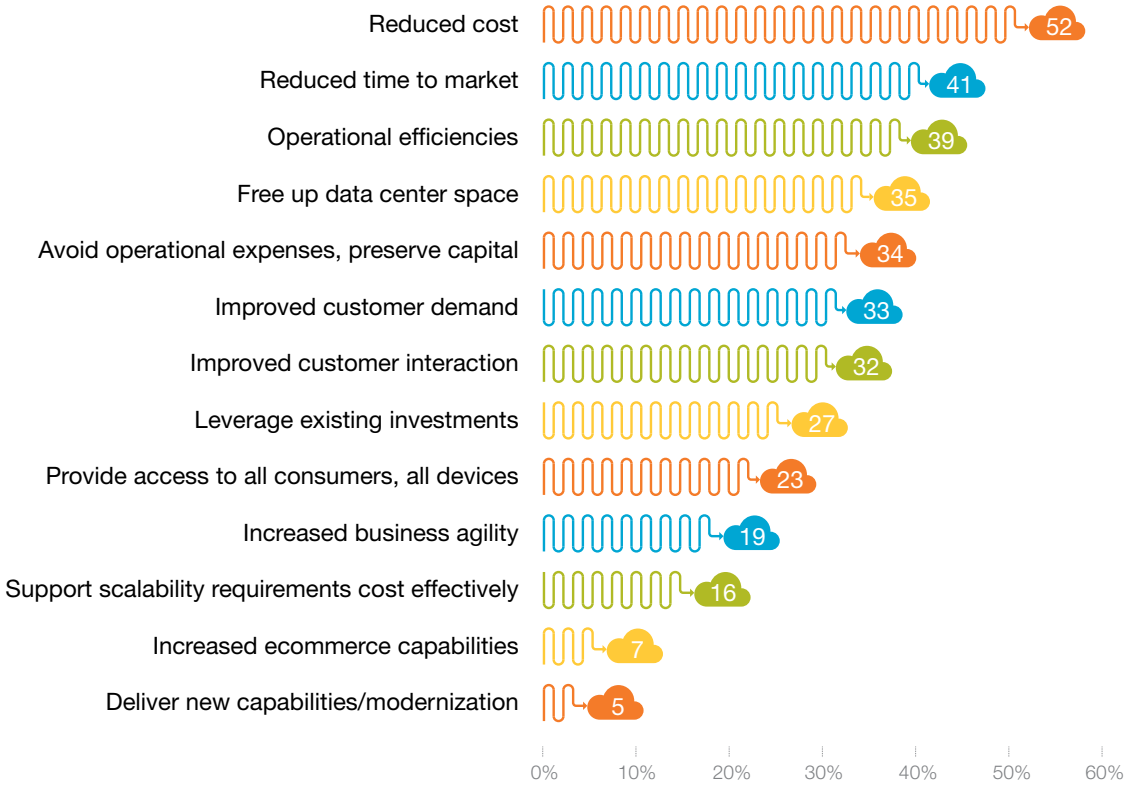
Figure 16: Do you have a Cloud adoption strategy in place?
(Percentage answering "yes," by region)



Business and IT drivers

Requirements such as reduced cost and time-to-market were identified as business drivers for Cloud adoption more frequently than technical factors such as “modernization”, (Figure 17). This reflects the dominance of business decision-makers in Cloud activity at present. Cost reduction is also one of the factors in the growth of public Cloud and vendors such as Azure, which allows expansion without capital expenditure.

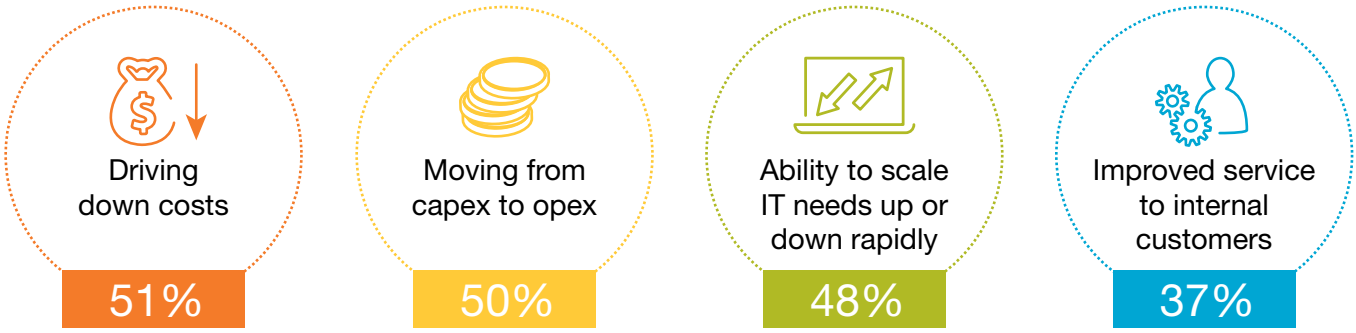
Figure 17: What are the business drivers behind moving to the Cloud?



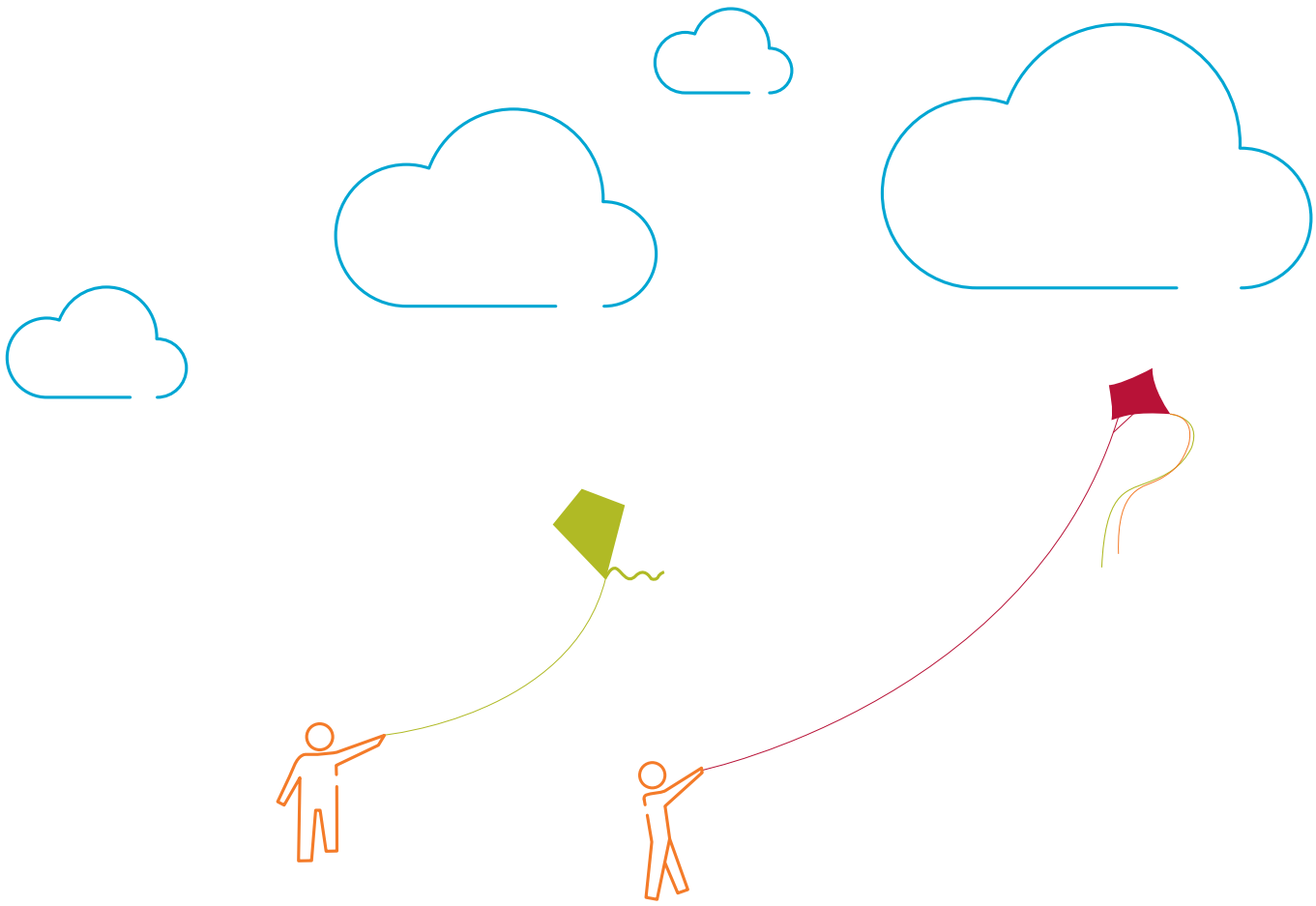
Note: Multiple responses allowed

We also asked about IT drivers. The responses, see Figure 18, confirmed the importance of cost, and moving to an opex model, but also revealed that rapid scalability was a high priority. We see the ability to scale up or down in areas such as Big Data as a key reason for the expansion of interest in public Cloud vendors.

Figure 18: What is the key IT driver for the move to Cloud?
(Top 4 responses)



Base = All companies with a Cloud strategy



Conclusions

Cloud hype used to be well ahead of the reality. Now, however, adoption is moving forward. On average, our survey found that enterprises will invest 25% more on Cloud activities next year compared to now – 28% more in the case of those in North America.

As reality catches up with the hype, the state of play is shifting, as evidenced by our key findings highlighted in this report: the rate at which business decision-makers are getting involved in Cloud decisions; the prevalence of a step-by-step approach to Cloud adoption; and the fact that new applications and new business areas are hitting the Cloud first.

These changes provide fresh insights into Cloud adoption. The fact that the business, rather than IT, is increasingly driving Cloud adoption reflects the fact that Cloud solutions offer a flexible and extremely cost-effective way to launch business-driven innovative activities that will allow expansion into new, and typically high-growth, areas.

Public Cloud options, such as that offered by Microsoft Azure, provide business-focused decision-makers, who have evolving business requirements, new and highly flexible offerings that support both public and hybrid landscapes. With the need for speed, alongside massively expanding 'Big Data' requirements for management and storage, vendors such as Microsoft with its Windows Azure platform seem likely to play an expanding role in the development of new business models. Azure is very well positioned here in its ability to deliver the same platforms (server, SQL and Azure) across public Cloud, private Cloud and on premise, offering cost reduction and business agility.

Azure's depth will become an equally important consideration as the platform and market develop further. Azure will be well-suited to an environment in which vendor solutions will become increasingly diverse and clients' requirements will be ever more sophisticated, with many organizations mixing and matching options for deployment, vendor sourcing, and architecture (hybrid, on-premise plus public cloud integration).

The business may be more and more in the driving seat, but organizations will need to look to CIOs to orchestrate overall Cloud strategy and platforms, and ensure integration for the business as a whole, in order to get the best from Azure and the rest of the IT landscape.

Appendix: About the survey

Sample

Our Cloud study comprises 460 detailed telephone-based interviews with individuals in enterprises (most with over 10,000 employees) across the globe. An equal selection of IT and business decision-makers were included to provide additional Cloud perspective.

Organizations in the following regions and countries were included:

- North America (NAM): USA
- Europe, Middle East and Africa (EMEA): UK, Germany, France, Netherlands, Sweden
- Asia Pacific (APAC): India and China
- South America (SAM): Brazil

The survey targeted specific vertical sectors: retail, financial services, energy/utilities, public, manufacturing/automotive, and telecommunications/media.

Data collection

Data collection took place in June and July 2012 with the program designed and undertaken by independent research company Coleman Parkes Research. Structured questions were posed to those taking part in order to elicit current thinking on Cloud.

Figure A1. Regional breakdown of responses

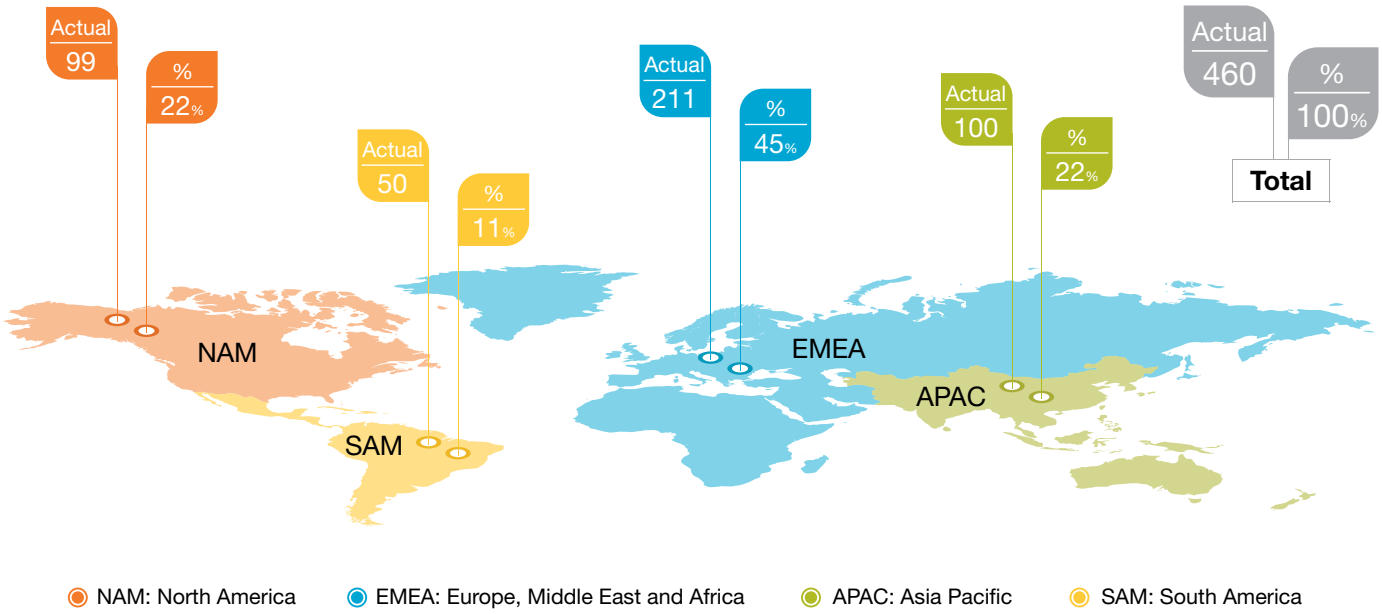
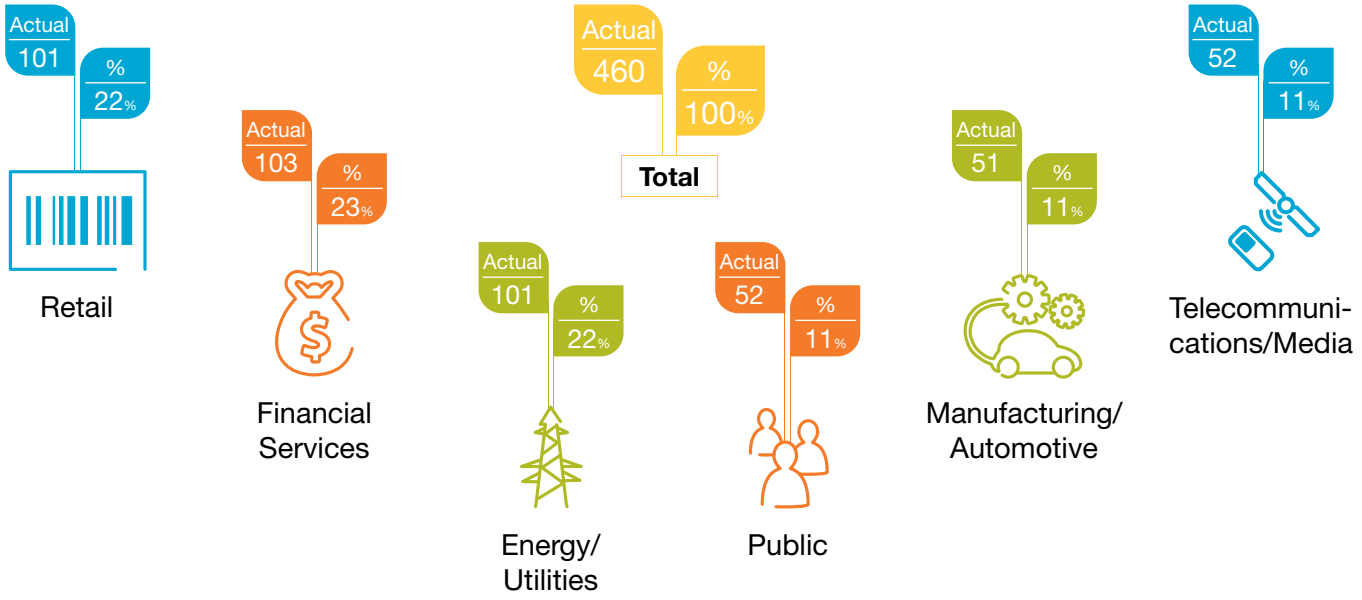


Figure A2: Sector breakdown of responses



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