Closing the cloud strategy, technology, and innovation gap

Deloitte US Future of Cloud Survey Report

A report by the Deloitte Center for Integrated Research
As business and cloud decision-makers map out their future cloud strategies, what should they be doing to ensure their organizations are harnessing the technology’s full potential?
Increased adoption of cloud platforms and services is underway with upwards of 45% year-over-year growth. Organizations are increasingly using cloud investments to boost business performance, drive strategic outcomes, and enable breakthrough innovation—not just to deliver IT services in a more flexible and efficient way. Many organizations have come to realize that while moving to the cloud can double their speed and efficiency, leveraging and building on the cloud can also give them enhanced capabilities that can reach 10x multiples.

Although most organizations have come to recognize cloud adds value beyond agility and efficiency goals, many don’t know where and to what extent cloud platforms and services can contribute to broader enterprise goals such as product and service development, market expansion, cybersecurity, revenue generation, competitive differentiation, customer experience enhancement, and business/regulatory risk mitigation—just to name a few. And the contribution cloud plays to enabling business strategy can be significant. Cloud, in fact, can drive value in ways organizations may not know or realize.

Cloud is now the default platform for many business and technology innovations—enabling everything from artificial intelligence and machine learning to advanced cybersecurity, IoT, and edge computing. Yet many organizations are not getting nearly as much value from their cloud investments as they could be and are lagging behind in terms of managing cloud capabilities in a way that drives business performance—strategic outcomes and innovation success.

As business and cloud decision-makers map out their future cloud strategies, what should they be doing to ensure their organizations are harnessing the technology’s full potential?
We analyzed survey responses from US cloud strategy and innovation leaders versus others and found tangible actions that organizations can take right now to potentially improve their current and future cloud strategies and get more out of cloud.

In this report, we’ll share information about cloud investments and leading practices, including what sets cloud strategy and innovation leaders apart, how cloud investments can help your organization achieve its strategic and innovation priorities, and specific leading practices, challenges, and opportunities.

We hope this report helps your organization generate more strategic value from its cloud investments, and that you find these insights useful as you move forward on your cloud journey.
To help understand how cloud investment relates to strategic enterprise outcomes and innovation goals, Deloitte surveyed 500 senior cloud decision-makers in the US across a wide range of industries—asking detailed questions about their companies’ current cloud maturity and how they view the future of cloud. We also conducted in-depth discussions with some executive-level cloud decision-makers. Our goal was to understand the extent to which cloud maturity is an indicator of business performance and innovation, and how organizations can best use cloud technology investments as a “force multiplier” for their digital strategy and overall business performance.

As part of our analysis, we looked at nine outcomes where cloud can contribute to enterprise priorities.

### Cloud strategy and innovation index

- Building net new product or service revenue
- Expanding existing products or revenue
- Reducing and optimizing costs
- Increasing efficiency and agility
- Expanding into new markets
- Providing better sustainability in support of environmental issues
- Creating new operational processes or workflows
- Developing new ideas, approaches, or methodologies
- Mitigating business and regulatory risk
Respondent organizations were ranked and segmented based on the extent to which they view these nine outcomes as strategic priorities and the extent to which they reported a high level of success at driving innovation in these areas.

Organizations that widely view these outcomes as strategically important and have also achieved high levels of innovation in their top-priority areas are classified as Leaders, whereas organizations that view these outcomes as strategically important but have not been successful at driving innovation in their priority areas are classified as Hopefuls. In between are Drivers and Moderates, with rankings determined by their level of success at driving innovation in the outcome areas they consider strategically important.

Source: Deloitte analysis.
Executive summary
Executive summary

Businesses that leverage the cloud know some things that others may not. They know that investing in cloud platforms and services can drive positive outcomes beyond efficiency and agility. In fact, our research has found that the vast majority of surveyed US cloud-decision-makers agree that integrated cloud technologies can serve as a “force multiplier” of their digital strategy and that their investment in cloud technologies are to a moderate or large extent driving positive outcomes across nine strategic business measures including, 83% for mitigating business and regulatory risk, 80% for building net new product/service revenue, 74% for expanding into new markets, and 72% for providing better sustainability in support of environmental issues, to name a few.

Cloud investment driving positive outcomes

Extent to which cloud investment is driving positive outcomes in these areas
(Percentage of total respondents; n=500 for each response)

Source: Deloitte analysis. Throughout this report, percentages may not always sum to 100 due to rounding.
And while the value being seen from cloud investments is pervasive across all of these measures, our analysis reveals that some organizations are more successful at capturing it than others.

Part of this goes to how well these organizations are able to tie together strategic business priorities with innovation success to hypercharge their leadership positions—and this is where there can be a significant gap and opportunity for organizations overall. Our research found an on average 14.5 percentage point gap in organizations’ stated business priorities and how well they say they’re doing at achieving innovation success in those areas. According to our survey, respondents’ top three most important business strategy objectives are *increasing efficiency and agility; developing new ideas, approaches, or methodologies; and reducing/optimizing costs.* Yet those areas are not necessarily where they are innovating.

In contrast, Leaders are capturing much greater value across all nine strategic value measures. And it’s because they are operating in distinctly different ways.

Source: Deloitte analysis.
Leaders seeing the most value from cloud based on strategy and innovation outcomes uniquely:

Don’t spend significantly more on cloud platforms and services.
Based on our study, Leaders tend to spend only slightly more on cloud as a normalized percentage of their revenues, indicating that it is not just spend but action that matters.

Have greater cloud maturity in terms of multi-cloud and on-premise approaches.
Their focus on multi-cloud strategy is generally more advanced with the majority of respondents working with three or four providers as opposed to others working with only one or two. Most have also progressed further to minimize their on-premises use. Across all respondents, the top benefits viewed as somewhat to very important from a multi-cloud approach are access to more choice in cloud services, application and data processing scalability, and increased flexibility/negotiating leverage.

Are embracing advanced cloud services like artificial intelligence and machine learning (AI/ML), cloud native, and edge computing.
While data analytics, software engineering, and cloud cyber services are table stakes across all respondents, Leaders say they are using more advanced cloud services such as: AI and ML, cloud native development, and edge computing/IoT.

Are getting much higher value from cloud services.
For example, with AI and ML, for those that participated in the study, the percentage of Leaders who say they are getting very high value from cloud is 1.7x higher than for Hopefuls. The value multiples between Leaders vs. Hopefuls are even higher for cloud cyber (2.3x), cloud native development (2.9x), containers (3.5x), augmented reality (AR)/virtual reality (VR) (~5x), and blockchain (10x).

Overwhelmingly view industry clouds—a set of cloud native applications, code, and services—as an enabler and catalyst.
74% of surveyed Leaders “completely” agree industry clouds will be the enabler/catalyst for transformation and automation of industry-specific business processes versus 60% of Drivers, 39% of Moderates, and 35% of Hopefuls.
Executive summary

**Have a much greater focus on software engineering culture.**
The vast majority of surveyed organizations are focusing attention on building a strong software engineering culture. However, there are some stark differences between Leaders and Hopefuls. Leaders were more likely to completely agree they were focused on building “a strong software engineering” capability. This type of culture can drive problem-solving, product velocity and continuous improvement.

**Overwhelmingly feel positive about the future of cloud.**
While most emotional terms used to describe the future of cloud were positive, Leaders tended to express confidence while Hopefuls tended to express enthusiasm.
Executive summary

Cloud platforms and services can enable strategic value overall, even if you’re not a leader

Cloud can be a “force multiplier” and cornerstone of digital strategy

Overall, 90% of respondents agree or completely agree with the statement that cloud combined with other technologies, such as AI, IoT, and analytics serve as “force multipliers” for their digital strategy. Similarly, 88% of respondents view cloud as a cornerstone of their digital strategy and believe it is vital to driving revenue and maintaining a strong position in the marketplace.

Cloud native services are increasingly important for customer-facing processes.

While our research shows that many companies are still unclear what cloud native even means, they do recognize that cloud native should be an important part of their cloud strategy. When asked to rank their top two priorities for cloud native solutions, the greatest number of respondents (50%) identified the customer domain, including processes such as customer engagement and customer segmentation, above all other options.

Cloud cybersecurity is an opportunity, not a challenge.

Regulatory and risk concerns can affect cloud adoption, particularly for risk-related cloud solutions such as cloud cybersecurity. However, according to our survey, many organizations—especially Leaders—appear to be overcoming those concerns and achieving highly-positive outcomes for risk-related cloud use cases. The vast majority of organizations surveyed say they have updated their business and operational strategies to address cloud security, risk, and controls and most organizations are seeing positive outcomes related to business and regulatory risk mitigation and value from cloud cyber services.
Learning from the Leaders

Most organizations are not innovating as effectively as they could be, which could limit their ability to achieve their future strategic goals. Lessons from Leaders can be very powerful in guiding your future cloud strategies and benchmarking progress on your cloud journey—helping you get the greatest possible value from your cloud investments.
Detailed study findings
Leaders are better at driving positive strategic outcomes from cloud

Our survey results show that cloud investments are driving positive outcomes in most areas for most companies.

Figure 1: Cloud investments are driving positive outcomes across strategic business objectives
(Percentage of total respondents; n=500 for each response)

However, Leaders substantially outperform other organizations when it comes to harnessing the power of cloud—both in terms of success rate and scope—with Leaders achieving superior rates of success across all nine outcome areas.

This contrast becomes even more stark when looking not just at the average organization as a benchmark but how other organizations are doing in terms of achieving these strategic outcomes compared with the Leaders in terms of cloud strategy and innovation success.

Source: Deloitte analysis.
Increasing efficiency and agility
Creating new operational processes or workflows
Reducing / optimizing costs
Mitigating business and regulatory risk
Developing new ideas, approaches, or methodologies
Expanding existing product / service revenue
Building net new product / service revenue
Expanding into new markets
Providing better sustainability in support of environmental issues

The index shows that “increasing efficiency and reducing costs” is the top strategic priority for the overall pool of respondents, and the survey data shows highly positive outcomes in this area—even for Hopefuls (80%) and Moderates (86%). “Creating new operational processes or workflows” is the next highest area of positive outcomes, with increasing success rates as organizations move up the innovation scale (73% for Hopefuls, 81% for Moderates, 92% for Drivers, and 97% for Leaders). What most distinguishes Leaders appears to be their performance in areas beyond efficiency and operations, such as “developing new ideas, approaches, or methodologies” and “building net new product / service revenue.”

Source: Deloitte analysis.
How do cloud investments relate to strategic priorities and innovation?
Cloud investments have the potential to drive organizational strategies forward in every major outcome area. Yet our analysis shows most organizations are missing out because their innovation capabilities are not aligned with their strategic priorities.

The gap between strategic priorities and successful innovation
There is a significant gap that should be closed between organizations’ strategic priorities and their ability to drive innovation in those priority areas. According to our survey, respondents’ top three most important business strategy objectives are “increasing efficiency and agility” (89% of respondents); “developing new ideas, approaches, or methodologies” (84% of respondents); and “reducing/optimizing costs” (84% of respondents).”

Source: Deloitte analysis.
Yet those top three priority areas are not necessarily where most organizations are innovating. Instead, our overall pool of respondents reported the most success driving innovation in “mitigating business and regulatory risk” (73%); “expanding existing product/service revenue” (71%); and “developing new ideas, approaches, or methodologies” (70%). (Only the latter aligns with the top three business priorities noted above.)

Also, for all nine outcome areas there is a significant gap between the level of strategic priority and innovation success. For example, only 65% of respondents agree or strongly agree their organizations have been successful driving innovation to increase efficiency and agility. Only 62% agree or strongly agree their organizations have been successful driving innovation to reduce/optimize costs—a gap of 24 percentage points and 22 percentage points respectively.

Source: Deloitte analysis.
This suggests cloud decision-makers might not be focusing on the right strategic priorities and that their cloud strategies should be realigned with where innovation is actually occurring. Another possibility is that organizations simply lack the ability to innovate in their priority areas and need to figure out how to close the gap. The gap is even more apparent when comparing Leaders with other segments.

Source: Deloitte analysis.
Positive performance impacts might be easier to achieve than innovation
Most organizations are better at using cloud to create incremental value in their priority areas than they are at driving breakthrough innovation in those areas. Across all nine areas, the overall range of success at driving positive outcomes from cloud investments was 72%-88%, much higher than the range of success at driving innovation across those same areas, which was 61%-73%.

Overall, cloud investments have an extremely high success rate (88%) at increasing efficiency and agility which is the top strategic business objective overall. However, there is clearly much room for improvement when it comes to innovation. In particular, there should be greater alignment between strategic priorities and innovation, more success at innovating in priority areas, and greater use of cloud to enable innovation.

Cloud is emerging as a key enabler for digital transformation and customer-facing processes
Cloud is increasingly being used to support digital transformation—especially for front-office, customer-facing applications—making the technology a key enabler for mission-critical strategy and high-stakes change.

As noted earlier, cloud investments are already successfully driving positive outcomes related to efficiency and agility in core operations such as supply chain and the back office. However, when asked to rank their top two priorities for cloud native solutions, half of those surveyed highlighted the customer domain as most important, including a strategic focus on customer engagement and customer segmentation. This is perhaps even more important for the ‘Hopefuls’ segment which has a significantly higher need for native cloud solutions in the customer domain, (69%) compared to the other segments, for example Leaders at 49%. Even for Leaders this remains the top ranked area of need for cloud native solution.

This emerging use of cloud technology to enable digital transformation and customer-facing processes—not just back-office systems—is a fundamental shift that can greatly boost cloud’s potential impact.
What role does cloud technology play in digital strategy, growth, and competitiveness?

Cloud is the foundation of a modern IT environment and serves as an essential enabler for other powerful technologies such as artificial intelligence (AI), machine learning (ML), Internet of Things (IoT), and quantum computing. Without cloud, those technologies are difficult or impossible to implement. Conversely, those technologies in combination with cloud have the potential to supercharge growth and boost a company’s performance and competitiveness.

Cloud is a “force multiplier” and cornerstone of digital strategy

Overall, 90% of respondents agree or completely agree with the statement that cloud combined with other technologies, such as AI, IoT, and analytics serve as “force multipliers” for their digital strategy. This could mean that cloud investments bring with them additional value related to other technology strategies, business goals, and innovation priorities. Similarly, 88% of respondents view cloud as a cornerstone of their digital strategy and believe it is vital to driving revenue and maintaining a strong position in the marketplace.
Integrated Technology

We view cloud as a combination of other technologies (AI, IoT, Analytics) that serve as ‘force multipliers’ to their digital strategy.

Strategy

We view cloud as the cornerstone of our digital strategy and believe it is vital to driving revenue and maintaining a strong position in our marketplace.

Figure 6: The role and impact of cloud
(Percentage selecting ‘Agree/completely agree with the following statements’)

Leaders hold those beliefs even more strongly, with 99% agreeing or completely agreeing with each of those statements.
**Leaders may spend more on cloud, but that’s not what makes them leaders**

We looked at the top spenders, defined as those respondents falling in the 70th percentile or higher based on their cloud investments normalized for organization revenue. We found 34% of Leaders are top spenders vs. 22% for Drivers, 28% for Moderates, and 28% for Hopefuls. The differences in cloud spending across the four segments is not dramatic, indicating that spending alone does not make you a Leader.

Over the past year, only 9% of the surveyed organizations invested more than $100 million in cloud solutions, while another 21% invested between $20 million and $100 million. Most organizations (67%) invested less than $20 million.

Looking ahead, the vast majority of surveyed organizations (87%) plan to increase their cloud investment by at least six percent over the next one to two years and many by more than 20 percent. Over the same timeframe, 12% plan to keep their investments flat, and only one percent expect to decrease their investments.

It’s interesting to note that 93% of Hopefuls plan to increase their cloud investments by at least six percent over the next one to two years, which is a larger percentage of respondents than the Leader (89%), Driver (83%), and Moderates segments (85%). This likely reflects Hopefuls’ realization that they are behind and need to catch up.
Where are some of the biggest opportunities to get more value from cloud?
Leaders are using many of the same cloud technologies and approaches as companies in other segments. However, Leaders are reporting much higher usage rates in areas such as cloud cybersecurity, AI/ML, cloud native development, industry cloud, multi-cloud, and software engineering culture.

Leaders are embracing more advanced cloud technologies
Which integrated technology approaches (i.e., combinations of cloud services) can provide a “magic” mix of cloud services and capabilities that enables Leaders to reap greater value from their cloud investments?

Across all respondents, the technology area where a cloud-based approach is most common is data analytics (86%), followed by software engineering (83%), and cloud cyber (82%). In those three areas, Leaders are using cloud-based approaches at similar levels to the overall respondent pool. However, Leaders are using cloud-based approaches at much higher levels in emerging technology areas, such as AI/ML (84% vs. 74% overall), cloud native development (87% vs. 73% overall), and edge/IoT (85% vs. 64% overall).
Figure 8: Use of cloud services in various technology areas (Percentage)

Hopefuls are furthest behind in using cloud-based approaches for blockchain (28% vs. 76% for Leaders) and quantum computing (14% vs. 56% for Leaders).

Source: Deloitte analysis.
Cloud cybersecurity: busting the myths and concerns

Regulatory and risk concerns can affect cloud adoption—especially for risk-related cloud solutions such as cloud cybersecurity. However, our findings suggest many organizations appear to be overcoming those concerns and achieving highly positive outcomes for risk-related cloud use cases. This is encouraging given the critical importance of security-by-design strategies for cloud implementations.4

Overall, 91% of the organizations surveyed have updated their business and operational strategies to address cloud security, risk, and controls through processes such as DevSecOps, and 83% say their cloud investments are driving positive outcomes in terms of mitigating business and regulatory risk. This is a dramatic departure from the conventional wisdom and shows that cloud cyber capabilities can be an important enabler of strategic outcomes.

Use of cloud cyber services is pervasive, with 82% of the surveyed organizations using cloud cyber services (e.g., application security; data privacy; threat detection, monitoring, and response)—and 78% responding that they are receiving high to very high value from these services.

Cloud cyber adoption is even more pervasive among Leaders, with nearly all (99%) saying they have updated their business and operational strategies to address cloud security, risk, and controls through processes such as DevSecOps. A similar proportion of Leaders (97%) have derived positive outcomes around mitigating business risk through cloud investments. Also, most are seeing high to very high value from cloud cyber services (90% for Leaders vs. 58% for Hopefuls, 71% for Moderates, and 84% for Drivers.)

Overall, the top potential benefits/outcomes that respondents want to achieve with cloud cyber are: (1) improving their ability to detect and address security risks/threats (64%), and (2) improving customer digital trust (59%). Either of these focus areas could provide a strong entry point for cloud strategies. However, detecting risks/threats seems to be table stakes, with Leaders focusing more on digital trust (66%).

Detailed study findings
Leaders are furthest ahead of Hopefuls in focusing on “adopting Zero Trust methods” (58% for Leaders vs. 31% for Hopefuls), whereas Hopefuls are much more focused on “driving business agility and technology resiliency” (49% for Hopefuls vs. 12% for Leaders).
Leaders are getting much higher value from cloud services

We asked respondents to what degree their organizations are seeing value from the cloud services they are using. Compared to Hopefuls, a much higher percentage of Leaders say they’re getting very high value from their cloud services. For example, with AI/ML the percentage of Leaders who say they are getting very high value from cloud is 1.7x higher than for Hopefuls. The value multiples for Leaders vs. Hopefuls are even higher for cyber (2.3x) and cloud-oriented approaches such as cloud native development (2.9x) and containers (3.5x) and are especially high for emerging technologies such as AR/VR (~5x) and blockchain (10x).

Figure 10: Leaders and the cloud as a “Value Multiplier”
(Percentage based on respondents who say ‘yes’ to using cloud based approaches and achieving ‘very high value’ from them)

Source: Deloitte analysis.
**Industry clouds**

Industry clouds—which bring together digital blueprints, integrated high-tech capabilities, and an ecosystem development model—are rapidly gaining adoption, and according to Deloitte’s analysis could have a $640 billion market potential by 2024. In our survey, 95% of respondents agree or completely agree that industry clouds will be the enabler/catalyst for transformation and automation of industry-specific business processes. However, the level of confidence and enthusiasm for industry clouds varies substantially across segments, with 74% of Leaders “completely” agreeing, versus 60% of Drivers, 39% of Moderates, and 35% of Hopefuls.

**Figure 11: Confidence in industry clouds as a catalyst for transformation**

*Percentage of respondents who ‘completely agree’*

Overall, the top three benefits of industry clouds cited by respondents are faster innovation/time to market for business capabilities and use cases (56%), accelerating the capacity to change (agility) (49%), and easing the way for migration of industry-specific legacy solutions to the cloud (38%).

Source: Deloitte analysis.
Hopefuls rated industry clouds higher than average (58% vs. 49%) for agility (i.e., the ability to accelerate change). This might reflect the fact that Hopefuls are lagging behind and hope that industry clouds will help them quickly catch up. It might also reflect that Hopefuls tend to be larger companies (75% of Hopefuls have revenue of more than $5 billion vs. only 35% of Leaders, and 55% of Hopefuls have more than 20,000 employees vs. only 19% of Leaders). As such, Hopefuls are more likely to be struggling with legacy systems and organizational inertia and might view industry clouds as a means to achieve rapid change and become more agile.

Overall, respondents’ top three concerns about industry clouds are “control over data and insights” (35%), “vendor lock-in” (33%), and “data protection” (31%). This makes constructing the right operating model when implementing industry clouds important in order to create the necessary control over data ownership and the flow of information across the solution, platform, or ecosystem. A strategy-first approach to deciding where, when, and how to use industry clouds and how to balance buy and build architectures, can help address these challenges.
Figure 13: Top concerns about using an industry cloud
(Percentage, ranked top 3)

Source: Deloitte analysis.
Detailed study findings

Multi-cloud
A multi-cloud approach, which brings together more than one cloud service provider, is common across all surveyed segments (79%) but is highest among Leaders (86%).

Figure 14: Use of multiple clouds/providers
(Percentage)

According to our analysis, Leaders’ use of service providers varies in a multi-cloud strategy, with 48% using three or four providers (the most common number of cloud providers for Leaders). In contrast, one or two cloud service providers was the most common number for Hopefuls (52%), Moderates (50%), and Drivers (51%).

The most important benefits cited from a multi-cloud approach are access to more choice in cloud services (85%), application and data processing scalability (84%), and increased flexibility/negotiating leverage (83%).

Source: Deloitte analysis.
Across the board, Leaders seem ahead of other segments in recognizing the benefits of a multi-cloud approach. However, the biggest differences for respondents are in “building full stack capabilities” (95% for Leaders vs. 76% overall) and “resiliency and reliability” (98% for Leaders vs. 81% overall).

Source: Deloitte analysis.
Detailed study findings

Software engineering culture

The vast majority of surveyed organizations (85%) are focusing attention on building a strong software engineering culture, including agile pods, continuous learning, and business/technology product teams. Consistent with that focus, 83% say they are already using software engineering processes/services (and 75% are seeing value). However, there is still significant room for improvement.

Looking at software engineering maturity survey results, there are some stark differences between Leaders and Hopefuls. Nearly half of Hopefuls (49%) are just starting to think about the issue (vs. 12% for Leaders). Overall, only 23% of respondents say they have a mature software engineering culture, but many more Leaders have plans to further invest in this area (39% vs. 20% of Hopefuls).

Source: Deloitte analysis.
## Cloud native

While our research interviews show that many companies are still unclear what cloud native even means, survey respondents do recognize that cloud native should be an important part of their cloud strategy. Across the total pool of respondents, the top-ranked need for cloud native solutions is in the customer domain (50%) which includes customer engagement, customer segmentation, and other related areas. This ranks ahead of respondents’ other possible needs for cloud native services, including the supply chain, finance, core operations, and risk/regulatory domains. Interestingly, Hopefuls cited the highest level of need in the customer domain (69%), far higher than any other segment.

![Figure 17: Business domains with the greatest need for cloud native solutions](image)

Clearly, there is a strong imperative to apply cloud native concepts to designing and developing new cloud-enabled capabilities for front-office and customer-facing applications. This is especially true for Hopefuls; however, those companies could encounter extra challenges in their pursuit, given their less mature ability to innovate and their relative lack of experience achieving strategic outcomes (beyond agility and efficiency) and moving solutions to the cloud and off premises.
What are the current sentiments about cloud’s future?

When asked to describe the future of cloud in their organizations, emotional sentiment was mostly positive (86%) with confidence, enthusiasm, and excitement as the top emotions. Leaders tended to be the most positive (91%), followed by Hopefuls (85%), Moderates (84%), and Drivers (84%).

As organizations progress along the continuum, confidence tends to supplant enthusiasm. For example, the top cloud sentiment among surveyed Hopefuls is enthusiasm (31%), whereas the top sentiment among Leaders is confidence (29%)—presumably due to Leaders’ superior capabilities and proven track record. One caveat to these highly positive feelings about cloud is that Hopefuls, Moderates, and Drivers might be underestimating the extent to which they are lagging behind the Leaders (and the challenges they might face due to their lack of proven ability to innovate).
### Figure 18: Cloud sentiment analysis by index segment
Respondents were asked to rank 20 emotions from most to least based on how they felt about their organization's future use of cloud. *(Percentage based on total share of preference for each attribute)*

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<td><strong>Drivers</strong> (n=108)</td>
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<td>Joy</td>
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<td>1%</td>
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<tr>
<td>Disappointment</td>
<td>1%</td>
<td>Fear</td>
<td>2%</td>
<td>Anger</td>
<td>1%</td>
<td>Fear</td>
<td>1%</td>
</tr>
<tr>
<td>Surprise</td>
<td>1%</td>
<td>Disappointment</td>
<td>1%</td>
<td>Disappointment</td>
<td>1%</td>
<td>Uncertainty</td>
<td>1%</td>
</tr>
<tr>
<td>Sadness</td>
<td>1%</td>
<td>Panic</td>
<td>1%</td>
<td>Fear</td>
<td>1%</td>
<td>Remorse</td>
<td>1%</td>
</tr>
<tr>
<td>Anger</td>
<td>1%</td>
<td>Remorse</td>
<td>1%</td>
<td>Remorse</td>
<td>1%</td>
<td>Anger</td>
<td>1%</td>
</tr>
<tr>
<td>Panic</td>
<td>1%</td>
<td>Sadness</td>
<td>1%</td>
<td>Sadness</td>
<td>1%</td>
<td>Panic</td>
<td>1%</td>
</tr>
<tr>
<td>Remorse</td>
<td>1%</td>
<td>Anger</td>
<td>1%</td>
<td>Panic</td>
<td>1%</td>
<td>Sadness</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Deloitte analysis.
Learning from the Leaders

Most organizations are not harnessing the full power of cloud and are not innovating as effectively as they could be. This may limit their ability to achieve their future strategic goals. In particular, digital transformation is now inextricably linked to cloud strategy and technology, so it’s important to understand how cloud can enable business innovation—and where you stand in relation to your peers.

Sentiments about cloud’s future are overwhelmingly positive and enthusiastic across all four index segments: Leaders, Drivers, Moderates, and Hopefuls. What appears to set Leaders apart in this area is that their enthusiasm seems combined with confidence. We want your organization to be confident too. Achieving the cloud capabilities necessary to instill that confidence will likely require new ways of thinking and working.

Leaders can serve as a powerful example of what a future cloud strategy looks like as you benchmark progress on your cloud journey—helping your organization get the greatest possible value from its cloud investments.

To find out more, please visit www.deloitte.com/us/cloudsurvey.
Appendix
Appendix

Firmographics

S1: Industry
(Percentage)

- Consumer: 20%
- Energy, Resources & Industrials: 20%
- Financial Services: 20%
- Life Sciences & Health Care: 20%
- Technology, Media & Telecom: 20%

S2: Organization size
(Percentage)

- 1,000 to 4,999: 44%
- 5,000 to 9,999: 23%
- 10,000+: 33%
- 3,000 to 5,000: 20%

S3: Organization revenue
(Percentage)

- $500 million to less than $1 billion: 24%
- $1 billion to less than $5 billion: 16%
- $5 billion to less than $10 billion: 25%
- $10 billion or more: 35%

Source: Deloitte analysis.
Appendix

Respondent profile

**S4: Position/Role**
(Percentage)
- C-Suite (e.g., CEO, CFO, CTO, CXO, President): 43%
- Director/VP: 38%
- Other: 19%

**S5: Function**
(Percentage)
- IT: 50%
- Business: 47%
- Other: 16%

**S6.1: Level of cloud responsibility**
(Percentage)
- I develop the cloud strategies for my organization: 47%
- I determine cloud technology spending and/or approve cloud investments: 37%
- I implement the cloud technologies within my organization: 16%

Source: Deloitte analysis.
Appendix

Cloud adoption

S8.1: Years of cloud adoption
(Percentage)

Investment in cloud solutions

S6.3: Level of investment in cloud solutions
(Percentage)

Level of innovation focus

S7: Level of innovation focus
(Percentage)

Source: Deloitte analysis.
### Workloads and application in cloud

**S8.2: Percentage of workloads/application in the cloud**

*(Percentage)*

<table>
<thead>
<tr>
<th></th>
<th>Has migrated already/ has developed cloud native</th>
<th>Will migrate in the next 1–2 years</th>
<th>Will develop cloud native in the next 1–2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0%</td>
<td>2%</td>
<td>6%</td>
</tr>
<tr>
<td>1–20%</td>
<td>21%</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>21–40%</td>
<td>36%</td>
<td>38%</td>
<td>26%</td>
</tr>
<tr>
<td>41–60%</td>
<td>21%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>61–80%</td>
<td>11%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>Above 80%</td>
<td>11%</td>
<td>3%</td>
<td>9%</td>
</tr>
</tbody>
</table>

*Source: Deloitte analysis.*

### Workloads and application in cloud vs. traditional on-premise solutions

**S8.3: Percentage of workloads/applications in the cloud vs. traditional solutions**

*(Percentage)*

- **Current workload**
  - Traditional, on-premise solutions
  - Public cloud (not SaaS – applications hosted by your public cloud providers)
  - Public cloud (with SaaS – applications hosted by third-party vendor)
  - Private cloud

- **Workload in three years**
  - Traditional, on-premise solutions
  - Public cloud (not SaaS – applications hosted by your public cloud providers)
  - Public cloud (with SaaS – applications hosted by third-party vendor)
  - Private cloud

Source: Deloitte analysis.
Endnotes

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Cathleen Domes  
Chief Operating Officer  
Cloud Services  
Deloitte Consulting LLP  
cdomes@deloitte.com

As chief operating officer of Deloitte’s Cloud business—and previously as the managing director who was instrumental in standing up Deloitte’s Analytics offerings—Cathleen has cemented her position at the forefront of Deloitte’s largest and most important investments. She executes on some of Deloitte’s most strategic initiatives and is at her best when creating new businesses for Deloitte, which affect large-scale change in the world of business. Name one of Deloitte’s largest transformation and modernization efforts, and you’re apt to find Cathleen’s footprints. Her experience with Deloitte spans more than 25 years. Cathleen loves to serve clients across industries and her expertise includes cloud, digital transformation, and analytics, to name a few. Cathleen is a leading woman in technology and with three children is helping pave a path for other women in the industry to be felt for decades to come.

David Linthicum  
Chief Strategy Officer  
Cloud Services  
Deloitte Consulting LLP  
dlinthicum@deloitte.com

As the chief cloud strategy officer for Deloitte Consulting LLP, David is responsible for building innovative technologies that help clients operate more efficiently while delivering strategies that enable them to disrupt their markets. David is widely respected as a visionary in cloud computing—he was recently named the number one cloud influencer in a report by Apollo Research. For more than 20 years, he has inspired corporations and start-ups to innovate and use resources more productively. As the author of more than 13 books and 5,000 articles, David’s thought leadership has appeared in InfoWorld, Wall Street Journal, Forbes, NPR, Gigaom, and Lynda.com. Prior to joining Deloitte, David served as senior vice president at Cloud Technology Partners, where he grew the practice into a major force in the cloud computing market. Previously, he led Blue Mountain Labs, helping organizations find value in cloud and other emerging technologies. He is a graduate of George Mason University.

Diana Kearns-Manolatos  
Senior Manager  
Center for Integrated Research  
Deloitte Services LP  
dikearnsmanolatos@deloitte.com

Diana is a senior manager in the Deloitte Center for Integrated Research where she analyzes market shifts and emerging trends across industries. She leads Deloitte’s global digital transformation research and focuses on topics including digital strategy, cloud, AI, cyber, blockchain, IoT, experiential technologies, and the future of workforce. Additionally, she draws on more than 15 years of award-winning marketing communications expertise to align insights with business strategy. She speaks on technology and women in leadership and holds a bachelor’s degree in engineering and a master’s degree from Fordham University.

Jay Parekh  
Assistant Manager  
Center for Integrated Research  
Deloitte Services LP  
japarekh@deloitte.com

Jay is an assistant manager with the Deloitte Center for Integrated Research. He has over seven years of experience in research and analysis focused on emerging technologies and digital innovations related to cloud, AI, cyber, blockchain, augmented & virtual reality, and other advanced technologies. He specializes in applying quantitative and qualitative research techniques to enable data-driven insights. He holds a bachelor’s degree in engineering and a master’s degree in management from Mumbai University.

Chris Thomas  
US Banking Sector Leader  
Cloud Services  
Deloitte Consulting LLP  
chrthomas@deloitte.com

Chris is a principal in Deloitte Consulting LLP’s global technology practice and is the US banking sector leader for Cloud. He brings 20 years of strategy consulting and hands-on transformation experience in the cloud and core technology infrastructure domain, specializing in financial services. Chris has extensive experience partnering with senior executives to develop and implement large scale technology transformations, cloud-centric operating models, strategic cost optimizations, global outsourcing programs, and workforce of the future initiatives. He brings a perspective that humans and machines must develop a symbiotic relationship, each with specialized skills and abilities, in a unified workforce that delivers multifaceted benefits to the business. Chris writes frequently about emerging technologies and banking, and his observations appear in Wall Street Journal’s CIO Journal and Deloitte Tech Trends, as well as in financial services industry forums and technology journals. He holds a B.S. from Miami University (Ohio) and a M.S. from Northwestern University.