



Introduction.

Enterprises around the world have discovered how to use cloud to increase revenue and build their business. For organizations with the most-successful implementations, which go beyond cloud migration, cloud helps them achieve far more than lower costs: it empowers them to transform their business and fuel their future.

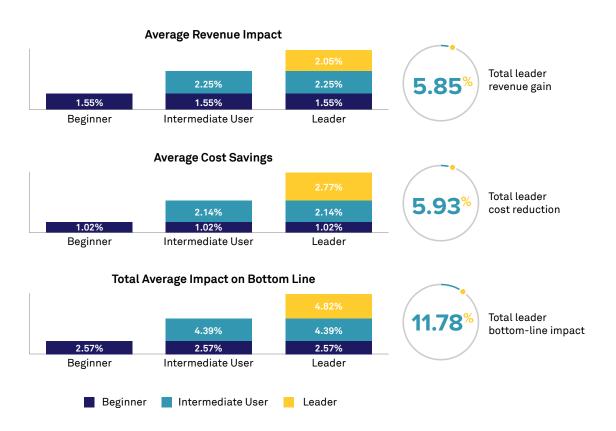
Companies of every size need to capitalize on their business and IT investments, including their investments in cloud. Enterprises beginning their cloud journey or seeking to accelerate it can maximize results by following the model of leaders, whose cloud use drives a 12% bottom-line increase compared with just 2.6% for cloud beginners (see Figure 1).

That's just one of the benefits cloud leaders realize, according to a recent Wipro survey of 1,300 global executives regarding their current and future cloud plans (see "Methodology" section on page 13). Cloud leaders the top 20% of companies we polled – achieve a return on investment 10 times higher than beginners. They do it by embracing the important role cloud plays across their enterprise, from streamlining operations and accelerating product development to combining cloud with other technologies to amplify revenue generation.

Companies encounter unique challenges at every stage of their cloud journey and must anticipate and address them, whether through developing a comprehensive cloud strategy, establishing clear success metrics, or ensuring the involvement of C-suite executives and business leaders. Cloud success is as much about people as it is about technology.

By following the best practices of cloud leaders and overcoming key obstacles, companies can maximize their investments to make their cloud adoption smart, interconnected, efficient – and a growth driver for their entire enterprise.

Figure 1: Cloud Leaders See Growth, Revenue, and Cost Benefits



Wipro defined Leaders as the top 19% of companies based on cloud maturity. Cloud maturity was based on a company's progress in implementing cloud, its percentage of cloud-based applications, and the number of advanced technologies it used in conjunction with cloud. See Methodology for more details.





Best Practices:

What Cloud Leaders Get Right

Cloud leaders span a cross-section of industries and countries, and they represent enterprises of all sizes. Despite their differences, they're united by characteristics and actions that have bolstered their success. According to Wipro's global survey, the companies deriving the greatest benefits from their cloud initiatives:

- 1. Use cloud for growth—not just operational efficiencies
- 2. Invest beyond the data center in areas that set the stage for better returns
- Engage senior executives to lead cloud initiatives
- Develop capabilities and align metrics for success
- 5. Make full use of the resources that cloud hyperscalers* offer
- 6. Amplify outcomes by combining cloud adoption with advanced technologies
- 7. Anticipate and proactively address key challenges

As enterprises either begin their cloud journey or strive to accelerate results, they can follow these seven best practices to position themselves to achieve tangible business benefits.

*Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, IBM and Others

1. Use Cloud for Growth–Not Just Operational Efficiencies

All global enterprises realize cost-saving and operational benefits with the cloud. Leaders achieve results more often than non-leaders in many such areas (see Figure 2), but even more meaningful is how they truly distinguish themselves from beginners: leaders use cloud investments to drive growth across the business.

Figure 2: How the Cloud Is used for Growth

	Leaders	Non-Leaders
Achieve decreased costs	55 %	48%
Use cloud to improve planning and decision-making	52 %	42%
Use cloud to bolster risk management and compliance	41%	37 %
Use cloud to streamline operations	30%	29%

Leaders look beyond efficiencies. They're twice as likely as non-leaders to drive revenue by using the cloud to improve their market and brand positioning, 30% more likely to use cloud to reduce their time to market, and they're 33% more likely to use cloud to create new products and services. Additionally, leaders leverage cloud services to improve customer loyalty, drive new business models, make inroads into new customer segments, and deliver greater shareholder value. During the next two years, leaders also are more likely to increase their use of cloud services to improve sustainability (29% of leaders vs 13% of non-leaders).

Because of their successes, leaders are more likely than other companies to see cloud as a way to develop new business. However, the companies that have benefited most from the cloud recognize that it isn't a one-size-fits-all proposition. They have focused their efforts on the use cases that are most effective for the dynamics and needs of their industry (see "All Industries Use and Benefit from Cloud, But Differently" sidebar).

Cloud and Sustainability

It's difficult to overstate sustainability's importance to global enterprises, Wipro included. As their use of cloud increases, companies are understandably interested in exploring how cloud investments can positively impact their sustainability and ESG efforts in addition to their bottom line.

Cloud services are often delivered through multiple data centers, which in turn are spread across multiple locations and have varying levels of resource intensity. Although partnering with hyperscalers offers greater energy efficiency than maintaining on-premises data centers, tying cloud to specific carbon-footprint reductions can be a complicated task. But it's not insurmountable.

Companies understand this, and they're increasingly looking for connections between sustainability and cloud. Businesses in every stage of cloud maturity noted modest sustainability benefits: 4% each for beginners and intermediates, and 5% for leaders. In two years, as sustainability and climatechange issues become even more prominent on corporate agendas, far more companies expect sustainability improvements from cloud. And as in other areas, leaders expect the greatest gains: 29% of leaders predict cloud-related sustainability benefits, compared to 15% of intermediates and 11% of beginners.

In some instances, sustainability gains will be tied to cloud services themselves. The majority will be related to how companies apply cloud and other technologies to improve their sustainability performance. "Using AI (with cloud) opens up completely new possibilities to achieve greater sustainability with improved resource utilization," said the CTO of a German manufacturer.



Leaders know cloud isn't a one-size fits all proposition, and choose use cases that are the most effective for the dynamics and needs of their industry.

All Industries Use and Benefit from Cloud, But Differently

Every industry is familiar with the cloud. In all 11 sectors we surveyed, the largest portion (49%) of companies are midway through their cloud journey and considered "intermediate users." The differences lie in how each industry taps cloud to address its unique business needs.

Close to one-third (32%) of manufacturers are considered cloud leaders. This is the highest percentage of cloud leaders in any industry Wipro surveyed, and it's more than twice the percentage from the utility or banking sectors, which at 13% were tied for the lowest.

Industries' specific cloud usage varies depending on the unique needs of the market. Leaders in the banking, healthcare, life sciences, and transportation sectors derive the greatest value from cloud for product development and R&D. Leaders in consumer goods, oil and gas, and utilities find cloud to be most effective at galvanizing middle- and back-office processes.

Cloud leaders plan to increase their investments in areas that are already improving their effectiveness and adding business value. For example, cloud services have accelerated how quickly banks can deliver data and insights to clients, which explains why 70% of the institutions will invest more in cloud-based client-advisory services during the next two years. Meanwhile, healthcare, insurance, and life sciences companies expect to invest more during the next two years in processes that improve the customer experience: care coordination (71%), claims administration (61%), and healthcare professional and patient communications (63%), respectively.

To learn more about cloud leadership in specific industries, see Wipro's upcoming reports on individual vertical markets.

2. Invest Beyond the Data Center in Areas That Set the Stage for Better Returns

As companies rush to cloud services, their first initiative is often migrating to cloud-based infrastructure. This is an effective foundation for any enterprise, as shown by leaders' early investments: in two years, more than 75% of leaders – and 94% of the highest-performing companies – plan to have advanced or fully implemented cloud infrastructure. For leaders, though, that is just one of several areas for accelerated investment. By devoting resources across the cloud-services spectrum, leaders position themselves to maximize business and revenue benefits.

With their cloud infrastructure mostly in place, leaders have made more progress modernizing core processes than non-leaders (24% vs 5%). They've also done better than non-leaders in migrating core business processes and pursuing cloud-native app development (28% vs 4% each). In fact, in two years, 78% of leaders expect to offer their apps through the cloud, compared with just 31% of non-leaders.

Investments outside the cloud infrastructure empower cloud leaders to capitalize on their increased agility and explore new areas for growth.

As cloud activity picks up, all companies use it to power more applications. However, leaders whose cloud-based data centers provide a backbone for other core business areas have made the most significant progress in adopting cloud for IT management, data analysis, customer management, and cybersecurity. As a result, leaders have 22% more business-unit cloud initiatives underway than the average, and 25% more central IT cloud initiatives.



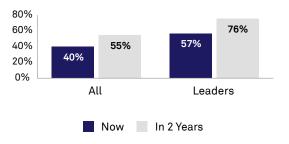
Leaders also follow a "cloud everywhere" strategy, working with a wide range of architectures and providers depending on the particular need. Today, they rely most heavily on software as a service (SaaS). However, services such as platform as a service (PaaS) and infrastructure as a service (IaaS) will increase as organizations' cloud use becomes more sophisticated and as companies host more business functions in the cloud. Likewise, leaders today are most likely to use a combination of public and private cloud, but in two years expect to shift more toward a hybrid cloud approach, with approximately one-third adopting a multicloud strategy.

By applying cloud services to these diverse foundational areas, leaders achieve a greater cumulative revenue increase than nonleaders. Among those firms registering a revenue increase, four out of 10 leaders report a 4%-5% increase in revenue as a result of their cloud implementation, and two out of 10 report a 6%-10% increase. By comparison, six out of 10 beginners report a revenue increase of 2% or less, and six of 10 intermediate users report a 1%-4% increase from their cloud endeavors.

Figure 3: **Average Number of Cloud Initiatives Now**



Average % of Applications in the Cloud



Where in the World Are the Cloud Leaders?

Of the six countries surveyed (Australia, France, Germany, Switzerland, the United Kingdom and the United States), the US has the highest percentage of cloud leaders (33%), followed by Germany (18%) and the UK (17%). However, more than half of the companies in Europe are at the intermediate stage of their implementation, an indication that cloud use is accelerating on the continent.

This acceleration is driven from the top down, particularly at European companies, which cite greater C-suite involvement in cloud initiatives. CEOs are responsible for their company's cloud strategy in 22% of European and UK businesses, compared to 21% in Australia and 18% in the US. The COOs of European and Australian firms are even more involved: they're responsible for cloud strategy at 40% of their respective businesses, compared with 39% in the US and 38% in the UK.

To learn more about cloud leadership in specific geographies, see Wipro's upcoming reports on individual countries and regions.



3. Engage Senior Executives to Lead Cloud Initiatives

Global enterprises widely recognize cloud's strategic importance. At cloud leaders, the C-suite embraces cloud's value not just as a change agent for resilience and agility, but as a growth strategy. As a result, senior executives play a vital and active role in ensuring successful cloud implementation.

While Chief Information Officers (CIOs) and Chief Technology Officers (CTOs) often oversee or influence cloud implementation, 78% of cloud leaders indicate that the Chief Executive Officer (CEO) either leads the cloud effort or plays a key role. Among cloud leaders, 80% of Chief Operating Officers (COOs) play a dominant or key role in cloud implementation.

C-suite executives are even more engaged at leaders that report the highest cloud ROI. At those firms, the COO and Chief Strategy Officer nearly always play a leading or supporting role in cloud development, and most Chief Revenue Officers and Chief Product Officers are involved as well, underscoring the broad strategic and business value those companies place on cloud adoption and utilization.

4. Develop Capabilities and Align Metrics for Success

Technology is only part of a winning cloud formula. Success is as much about people as it is about tools and apps. Cloud leaders understand this, and they take steps to develop the organizational muscle and metrics that drive outcomes and build the capabilities necessary to deliver results.

With more of their business taking place in the cloud, leaders recognize the need for a workforce with the relevant skills and training to understand, embrace and drive new ways of working. Developing cybersecurity teams and skills is critical, particularly as cloud interfaces with more business functions and digital technologies. Leaders also provide training to IT and business-unit staff to ensure cloud implementations are successful. To complement this training, 43% of leaders also rollout a change-management strategy to support their cloud journey.

In addition to training, leaders realize the importance of setting and tracking benchmarks. Half of all leaders use metrics to measure the effectiveness of their cloud efforts, and 38% calculate and monitor the ROI of their cloud initiatives. To stay on track, they also perform regular audits and create appropriate governance policies, adoption strategies, and implementation plans.

Cybersecurity is a Priority

All enterprises have prioritized cybersecurity, though cloud leaders have had more success. While 28% of non-leaders say they've made significant cybersecurity progress via the cloud, 40% cloud leaders say the same. What's more, 50% of leaders plan to increase their investment in cloud for cybersecurity during the next two years as data breaches and ransomware attacks become more ubiquitous.

Concerns about cybersecurity and data privacy are the top technological concern among all leaders (34%), with security concerns highest among leader companies in transportation (60%), oil and gas (44%), consumer goods (43%) and life sciences (42%). The largest share of leaders planning to make large cloud investments in cybersecurity are in transportation (71%), oil and gas (67%), capital markets (60%) and consumer goods (57%).

"The cloud has revolutionized our cybersecurity program to prevent legacy threats," said the COO at a UK manufacturer. With 78% of their apps projected to be cloud-based in two years, leaders are embracing cybersecurity as part of their cloud journey rather than letting it sidetrack their efforts to leverage cloud services across more critical areas of their business.





Access to better and more flexible technologies improves asset effectiveness and uptime, but it also boosts employee productivity. This automatically leads to reduced costs, greater efficiency and better agility.

—Business Unit Head, UK transportation company



5. Make Full Use of the Resources That Hyperscalers Offer

Almost all modern enterprises use hyperscalers* — companies that offer large-scale cloud, networking, and internet services — for a variety of high-value services. Cloud leaders stand apart by viewing hyperscalers not merely as a vendor, but as a cloud partner to help them enable their digital transformation — be it via improved customer experience, new product development or gleaning new insights from their data.

Cloud leaders derive greater value from their hyperscaler partnerships than non-leaders. For example, leaders spend 71% of their upfront capital costs with hyperscalers compared with 77% of non-leaders, and 59% of their implementation costs compared to 68% for non-leaders. By consuming more services and leveraging more advanced offerings, cloud leaders also receive far greater investments in their programs than non-leaders (70% vs 56%).

Leaders tap into a wider range of hyperscaler expertise to use cloud to grow their business. For example, the Chief Digital Officer of a French consumer goods manufacturer uses its hyperscaler's cloud-based commerce solution "to transform the supply process and management of vendors," while the COO of a German bank taps its hyperscaler "to implement cloud strategies in market analysis."

*Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, IBM and Others

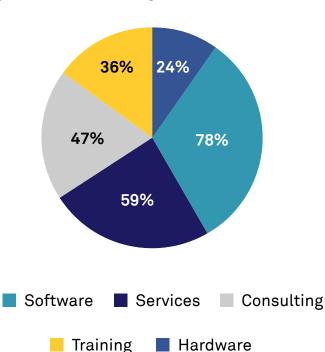


Figure 4: Hyperscalers' program investments for leaders

6. Amplify Outcomes by **Combining Cloud Adoption with Advanced Technologies**

Cloud leaders achieve far greater returns on their cloud investment than non-leaders. Among leaders, 21% report an ROI "significantly above expectations" compared with 10% of non-leaders, and 34% of leaders report an ROI "slightly above expectations" compared with 16% of non-leaders. Although several factors contribute to this outcome, one driver is leaders' decision to combine cloud with other advanced technologies to make it more intelligent, hyperconnected, and pervasive.

Artificial intelligence is by far the leading complementary technology, used by 78% of cloud leaders compared with 49% of non-leaders. Half of all cloud leaders also say AI is the most effective advanced technology they pair with cloud, compared with 29% of non-leaders.

Leaders incorporate cloud-based AI into a variety of operations, from customer service to logistics. A UK insurer uses AI-based chatbots to offer a "unified customer experience from store to online," according to a business-unit head at the company. And a German transportation provider combines cloud and AI to enhance operational efficiency and reduce the impact of flight delays, says the company's Chief Digital Officer.

Aside from AI, leaders are most likely to pair cloud with data management warehouses or lakes (68%), digital enterprise platforms such as ERP software (66%), internet of things (IoT) and workforce automation (63% each), and robotic process automation (52%). In each of these areas, leaders currently combine these technologies with cloud at a higher rate than non-leaders.

During the next two years, cloud leaders expect their biggest investment increases in complementary technologies to come from new and emerging areas: 5G (53% increase), edge computing (31% increase) and grid computing (29% increase).





Combining AI and IoT with cloud has yielded enormous benefits

-CTO, Australian oil and gas company

7. Anticipate and Proactively Address Key Challenges

Adopting cloud isn't a panacea. The lack of a cohesive cloud strategy and roadmap is a major stumbling block: 44% of all companies say it's their largest obstacle, including 36% of leaders. Even more leaders - 40% say uncertain ROI and use cases are the biggest hurdles they must overcome to achieve cloud excellence.

Leaders find a way around these shortcomings, offering a roadmap for other companies to follow. But even cloud leaders stumble, be it due to internal or external/market dynamics. By anticipating the challenges that will arise throughout their journey, and proactively developing strategies to address each of them, all companies can accelerate their success.

Build a roadmap early. Cloud's benefits can be sizable, but they aren't guaranteed. Companies must begin by creating a well-considered implementation roadmap that starts with the basics. Following the model set by leaders, beginners and intermediates should embrace the cloud for data centers and fundamental functions to build the foundation for other applications and use cases. Doing so will position organizations to place themselves among the 50% of companies that realize a positive cost or revenue impact from their cloud implementation.

Establish an enterprise-wide strategy for implementing cloud. Rolling out cloud successfully requires devoting the internal resources needed to make initiatives thrive, including the appropriate upskilling, teams and training. Because leaders view cloud as an enterprise-wide growth strategy, they're more inclined to involve C-suite executives in the process. Other companies can follow their lead and bring on top executives to help develop the strategy, communicate it across the enterprise, and track how it's implemented. Companies can also incorporate their cloud initiatives into an enterprisewide digital transformation change management program, which typically includes techniques and incentives that encourage lasting changes in workplace culture.



Develop a plan to codify ROI metrics and use cases.

Leaders track quantitative metrics such as cloud's impact on revenue, cost savings, profitability, and market share, and monitor qualitative metrics such as improved risk management, customer satisfaction and retention. To understand the true extent of their cloud costs, they can also measure internal and external IT spending on modernization costs, data-storage and cloud-services fees, as well as organizational costs related to cloud such as training and recruiting costs.

Identify the best technologies to add over time.

Choosing between available technologies becomes more challenging as a company's cloud use matures and as more essential business functions migrate to the cloud. That could be why leaders say deciding on the best technology options is one of their top four cloud challenges. Leaders and non-leaders alike can make decisions easier by staying abreast of the latest digital innovations, evaluating common cloud use cases in their industry, and studying best practices for the technology options that have developed around them. They also can take advantage of the proliferation of cloud architectures and services to pick the best foundation for their business. Finally, as companies combine cloud with advanced technologies, they can consider what makes the most sense for their industry and business goals while noting the technologies that leaders combine with cloud (e.g., AI, IoT, and RPA) to take their results to the next level.



AI, big data analytics, and IoT are some of the cloud technologies we've implemented, and they've all resulted in greater returns, which we intend to continue.



Conclusion.

Companies have great expectations for cloud. During the next two years, approximately 80% of those surveyed expect their cloud implementations to be at least partially finished, if not completely optimized. But getting there will take work and inspiration.

The best practices of cloud leaders offer a roadmap for success. Cloud leaders drive results by building out their basic cloud infrastructure, then using it to launch applications that boost their bottom line. They develop the necessary internal resources to maximize their cloud use, draw on hyperscalers' resources and expertise, and achieve a multiplier effect by coupling cloud with advanced technologies. As a result, leaders achieve far greater ROI and leverage cloud to grow their business. These best practices can serve as a beacon for others to follow as they strive to use cloud services to fuel the future.

Methodology.

Insights shared in this report are based on a survey conducted for Wipro in June and July 2021 by ThoughtLab to analyze current and future patterns of enterprise-level cloud adoption. Respondents included 1,300 executives at organizations with annual revenue from \$500 million to \$20 billion or more. They are located in six countries (Australia, France, Germany, Switzerland, UK and US), and come from 11 industries (banking, capital markets, consumer packaged goods, healthcare providers, insurance, life sciences, manufacturing, oil and gas, retail, transportation, and utilities). All respondents are responsible for or play a key role in their organization's cloud computing strategy and implementation. Additional insights come from responses to open-ended questions.

To calculate cloud maturity, we analyzed three criteria: (1) a company's progress implementing cloud-based data centers, migrating and modernizing core processes, and adopting cloud-native applications; (2) the percentage of total applications operating in the cloud; and (3) the number of advanced technologies used in conjunction with the cloud. Based on those criteria, we classified the top 19% of respondents as cloud "leaders," the middle 49% as "intermediate users," and the other 32% as "beginners."

Please visit wipro.com/cloud to learn more about Wipro FullStride Cloud Services



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