NAVIGATE YOUR DIGITAL TRANSFORMATION WITH CLOUD

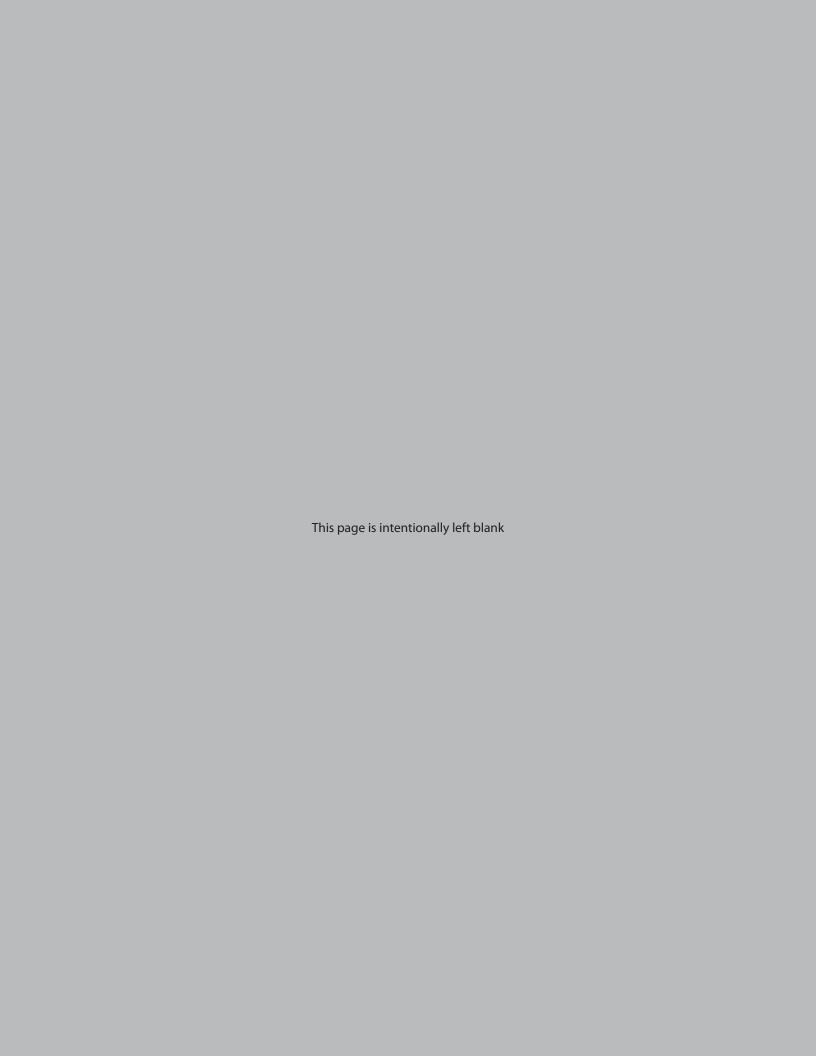
Infosys

Navigate your next

FINANCIAL SERVICES AND INSURANCE INDUSTRY VIEW









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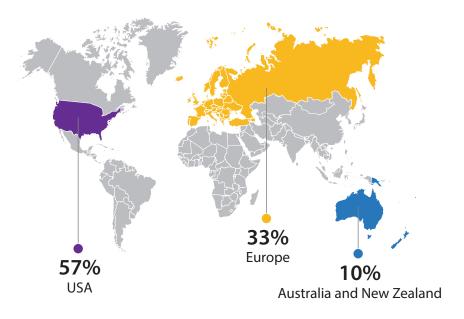
Financial Services and Insurance (FSI) firms globally grapple with unprecedented challenges such as rising expectations from customers, the pressure to enhance top-line and bottom-line, need for differentiated and personalized products, addressing new markets, and increasing regulatory requirements. Like many in other industries, FSI firms realize the future lies in enabling a digital transformation

which inevitably leads the discussion to the cloud. Cloud adoption delivers significant benefits including enhanced agility, scalability, and efficiency allowing the enterprises to innovate to stay ahead in an intensely competitive market. In many ways, the cloud has become an essential part of an enterprise's strategy to ensure business success.

FSI firms have always been quick to adopt new technologies. However,

Infosys' experience shows that apprehensions over data security and regulatory compliance slow down large-scale cloud adoption. The slow adoption rate is particularly true of the public cloud. However, the increasing sophistication of cybersecurity measures is gradually enticing FSI firms to consider the public cloud more willingly.

Figure 1: Respondent geographies



Infosys surveyed 187 executives from FSI organizations with over US\$ 1 billion in revenues across the United States, Europe, Australia and New Zealand (ANZ). The respondents were CXOs and senior executives involved in cloud initiatives representing both technology and business functions.

The study aims for a holistic view of the ongoing and future cloud initiatives, both from strategic and implementation perspectives. This report discusses the insights we gathered from the participants.



## Types of enterprise players

The survey solicited respondents' views on the intensity of cloud adoption as well as plans for more such programs over the next three years. The analysis of the responses yielded an insightful picture of where cloud programs were heading. Based on the direction of the cloud program, we arrived at four distinct types of enterprises.

	Torchbearers 50%	Pathfinders 23%	Defenders 16%	Aspirants 11%
What are the characteristics of this cluster?	Enterprises with high adoption of cloud across functions, and seek to be fully integrated and a cloud-first organization	Enterprises with moderate cloud adoption, and actively seek to derive more business value from the cloud	Enterprises that understand the importance of cloud, but have a siloed approach and unsure about how to derive business value from the cloud	Enterprises with low adoption of cloud across functions, and mostly have a tactical approach towards the cloud
Do they have an enterprise-wide strategy?	Yes, and it strictly adhered to or serves as a guideline	Yes, and it strictly adhered to or serves as a guideline	Yes, and it is strictly adhered to or serves as a guideline	Yes, and it serves as a guideline
What drives them to adopt cloud programs?	<ol> <li>Emerging technologies</li> <li>Competition</li> <li>Data security</li> </ol>	<ol> <li>Emerging technologies</li> <li>Competition</li> <li>Evolving customer needs</li> </ol>	<ol> <li>Emerging technologies</li> <li>System availability and resilience in systems</li> <li>IT cost reduction</li> </ol>	<ol> <li>IT cost reduction</li> <li>Changing partner ecosystem</li> <li>Emerging technologies</li> </ol>
What are the expected outcomes from cloud programs?	<ol> <li>Enhanced customer experience</li> <li>Standardize and integrate technology landscape</li> <li>Capitalize on cloud capabilities</li> </ol>	<ol> <li>Enhanced customer experience</li> <li>Capitalize on cloud capabilities</li> <li>Reduce time to market</li> </ol>	<ol> <li>Standardize         and integrate         technology         landscape</li> <li>Enhanced customer         experience</li> <li>Enhance mobility         and collaboration</li> </ol>	<ol> <li>Standardize         and integrate         technology         landscape</li> <li>Reduce time to         market</li> <li>Drive innovation</li> </ol>

### Understanding the drivers and expectations from cloud initiatives

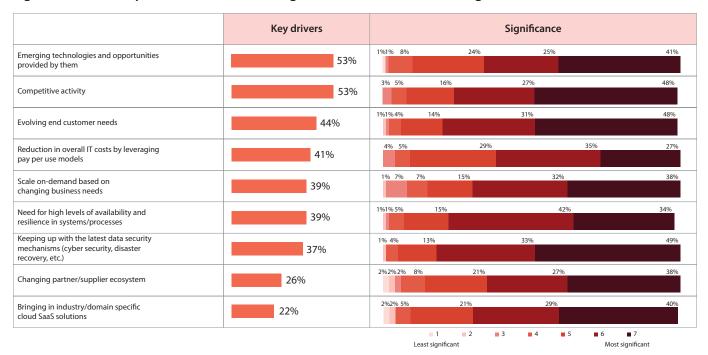
Overall, the top three drivers were emerging technologies and the opportunities they offered, competition, and evolving customer needs. U.S. respondents ranked all three drivers high whereas European respondents ranked keeping pace with data security trends and domain-specific cloud solutions

higher. Cloud computing, an integral part of digital transformation, can help FSI firms address demanding customers, intense competition and newer technologies more nimbly and effectively.

The factors that impact the pace of decision-making the most are data

security, evolving customer needs, and need for high availability and resilience of systems and processes. Data security is always a top priority for FSI firms, and cloud computing offers a robust security infrastructure to ward off cyber-attacks.

Figure 2: Cloud adoption drivers and their significance on decision-making



FSI firms have clear expectations of outcomes and the time required to achieve them. The three most anticipated outcomes are capitalizing on cloud computing capabilities, enhancing customer experience, and standardizing and integrating technology landscape enterprisewide.

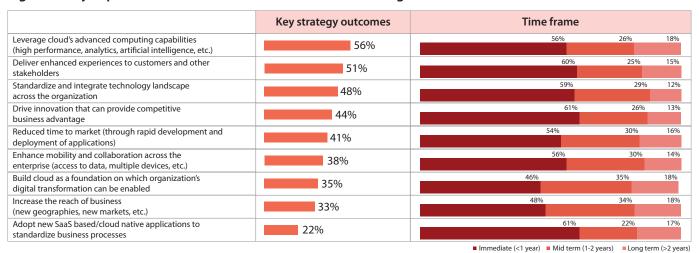
That a robust cloud foundation is essential for digital transformation success is established. Enhanced

customer experience is critical as FSI firms work towards keeping more demanding customers satisfied and loyal. Diverse technologies and systems spread across the enterprise add to an already complex IT landscape, making a standardized and integrated technology landscape important.

Over 50 percent of the respondents aim to accomplish the top three aspired results within a year. The U.S. participants also responded in the same way.

Other outcomes targeted within the next year include adopting new native applications to standardize business processes and driving innovation to derive competitive advantage.

Figure 3: Key expected outcomes and timeframes for achieving them



The top three concerns that participants had before embarking on a cloud program include:

- Zeroing on the right cloud model (49 percent): FSI firms worry over choosing the right cloud model as they balance data security and regulatory concerns with cost and system resilience related gains.
- Stakeholder confidence around Rol (45 percent): the cloud journey involves multiple stakeholders across functions, hence demonstrating results at regular intervals becomes essential.
- Significant reliance on external solution providers (42 percent): enterprises are still learning how to navigate the cloud journey including dealing with vendors.

U.S. respondents were more apprehensive about stakeholder confidence around RoI (50 percent) and over-relying on external solution providers (46 percent) compared to European and Australia and New Zealand respondents.

Figure 4: Concerns before launching cloud programs

	Total		Geography	
	iotai	ANZ	EU	USA
Stakeholder confidence around return on investment	45%	42%	39%	50%
Deciding on the cloud approach to adopt	49%	63%	53%	45%
Significant reliance on external solutions providers	42%	42%	37%	46%
Availability of internal talent/skill sets to manage the transition	38%	37%	34%	40%
Alignment between IT and business on the roadmap	30%	26%	31%	30%
Accountability and need for a dedicated team to drive the transition	28%	47%	23%	28%
Organizational readiness and maturity of existing IT landscape	27%	11%	32%	27%
Building the strategic and operational roadmaps	23%	32%	16%	25%
Overcoming post migration challenges	19%	21%	23%	17%
Concerns about enterprise information security	19%	5%	19%	21%
Need to continuously upgrade to new/emerging technologies	20%	21%	15%	24%



During implementation, respondents said the choice of tools or technologies and maintaining service levels during the transition to the cloud were the most significant challenges. Any form of business disruption can be catastrophic for FSI firms. Again, U.S. firms were more vocal about these two challenges.



The main challenge we had in initiating cloud was the concerns posed around data security. Though this is addressed by encrypting the data, it is not a fast process. This resulted in the additional concern around the timelines which are envisaged.

- Director at a US-based insurance firm



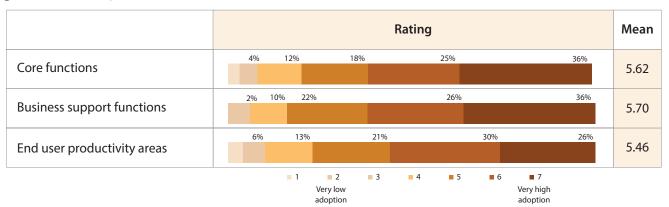
Figure 5: Challenges faced during implementation

	Overall
Application refactoring/tweaking to suit cloud architectures	5.39
Tracking and monitoring systems/processes on cloud	5.24
Aligning existing legacy systems/architectures and technology environments	5.36
Resource skillsets with cloud orientation	5.32
Accurate estimation of time and financial costs involved	5.29
Pace of execution/implementation of the initiative	5.38
Deciding on choice of tools/technologies to pick from	5.44
Maintaining current services levels during transition	5.44
Lack of high levels of clarity in the execution roadmap	5.35
Absence of an internal dedicated cloud team to drive the initiative	5.14
Promoting a culture change within the organization	5.23
Collaboration/integration with external service providers/stakeholders	5.37
Navigating existing agreements	5.35

On the scale of 7

FSI firms have a high degree of cloud adoption across Business Support (84 percent), Core (79 percent), and End User Productivity (78 percent) functions. These firms have a high degree of collaboration across functions and use several third-party applications explaining the higher adoption of cloud initiatives. U.S. respondents led the way in adopting cloud programs whereas European firms displayed low adoption rates across functions.

Figure 6: Cloud adoption across functions



FSI enterprises utilize all three cloud models – private, public, and hybrid. Private clouds bear most of the workload as enterprises in this sector have persistent concerns over data security and regulatory compliance. Further, FSI firms may hesitate to move legacy and mission-critical applications to public clouds to protect business interests as well as avoid any form of disruption.

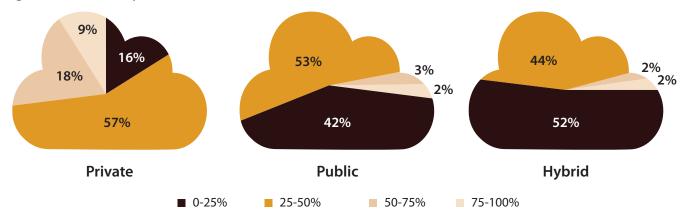
Private cloud allows us to have greater flexibility during the initial stages, when the long term scalability of the program/application

stages, when the long term scalability of the program/application is not clearly envisaged. Post scale is achieved; we will contemplate if a change in model is required. In addition, security in a private cloud is better, considering the nature of the information we work with, an additional layer of safety is always helpful.

- CXO at a financial services firm in the US



Figure 7: Workload spread across the cloud models



However, enterprises recognize the advantages of using hybrid and public clouds and have moved smaller workloads (up to 50 percent) to these models. Australia and New Zealand and European firms are more open to adopting the public cloud for workloads between 25 - 50 percent.

Respondents opt for the public cloud to take advantage of collaboration with external stakeholders (37 percent), and higher availability of systems (36 percent). Firms primarily select private cloud to enjoy better handling of data (48 percent), lower IT costs (46 percent), and better alignment to regulatory changes (43 percent).

FSI firms have ambitious plans related to cloud programs over the next three years. A significant 44 percent desire to tap into the transformational benefits of the cloud by becoming a fully integrated, cloud-first organization. 80 percent of Torchbearers and 49 percent of U.S. respondents voted for this option. Another 30 percent including 47 percent of Australia and New Zealand respondents look to adopt all future applications in the everything-

as-a-service model. The Pathfinders cluster comprised 73 percent of this response.

# The cloud may begin with the boardroom, but it ends with IT leaders

The business executive leadership plays an active role in defining the requirement and taking final decisions on external vendors, whereas the executive IT leadership stays engaged through the cloud

journey. Business heads contribute to the evaluation of vendors the most.

The most common criteria used to evaluate external solution providers include the effectiveness of proposed solution (50 percent), capability in managing large and transformational changes (39 percent), and track record (38 percent).

### New technologies will have a tangible impact on the cloud

Respondents viewed big data (52 percent), artificial intelligence and machine learning (44 percent), the "internet of things" (42 percent), and DevOps (42 percent) duplication technologies as adding the most value to their business when adopted alongside the cloud.

Figure 8: Technologies impacting adoption of the cloud

	Overall		Geography	
	Overall	ANZ	EU	USA
Big data analytics	52%	53%	55%	50%
Artificial Intelligence/Machine Learning	44%	47%	42%	45%
Internet of Things (IoT)	42%	37%	47%	41%
DevOps	42%	47%	47%	38%
Containers and Orchestration	33%	32%	34%	32%
Open-source (microservices, APIs)	30%	32%	26%	33%
Edge computing	29%	16%	31%	30%
Hyperconvergence	28%	37%	19%	31%



Cloud computing presents an excellent opportunity for the FSI industry to navigate the unrelenting pressures they face from market forces.

Torchbearers, the progressive firms constituting 50 percent of respondents, have aggressively adopted cloud initiatives targeting the transformational benefits promised by a cloud-first organization. These firms set a high benchmark, both for strategy and execution, for Pathfinders, Defenders, and Aspirants clusters to emulate.

Adoption of cloud initiatives undoubtedly comes with its set of challenges and tough decisions. For instance, public clouds can provide critical flexibility, speed, and scale cost-effectively. However, security

concerns remain, and enterprises need help to resolve this impasse. Making the right call on such situations requires expert handling backed by a solid understanding of business and technology.

Our experience shows that FSI firms will profit most from partnering with a capable external solution provider in this critical journey. The partner must have the ability to function as a trusted advisor as well as an implementation expert.

The transformational benefits of the cloud are hard to ignore, and enterprises must take all steps necessary to ensure successful cloud transitions.

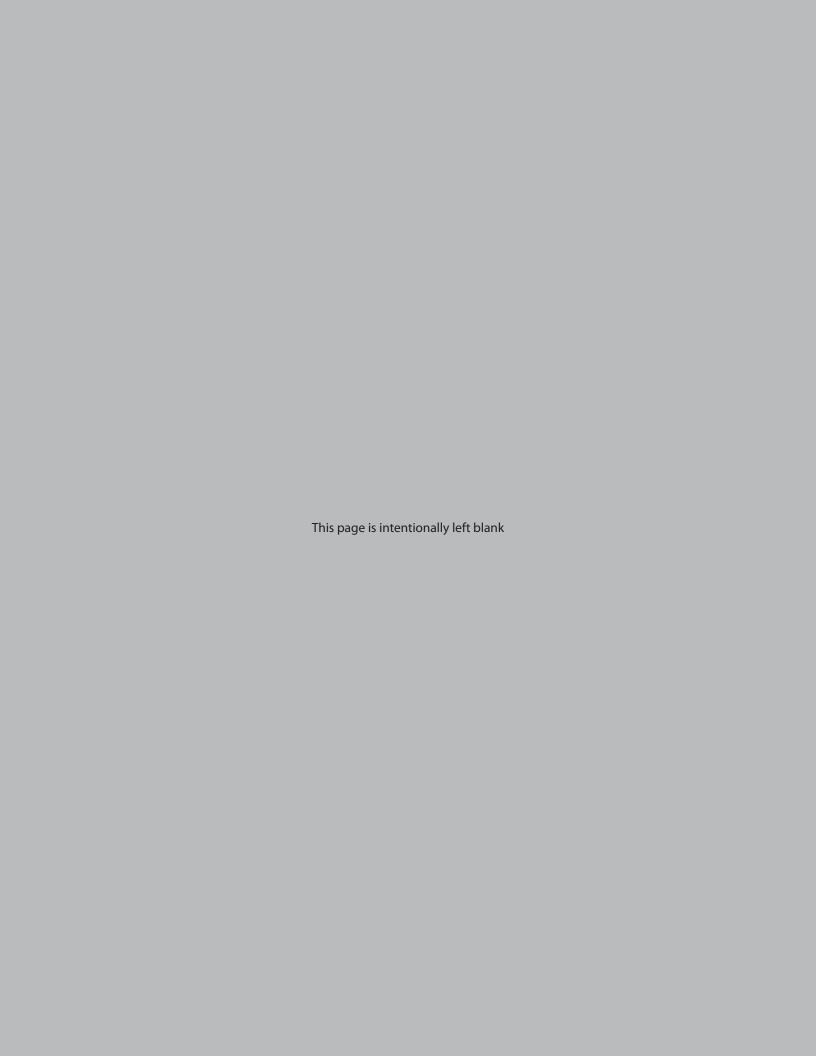
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