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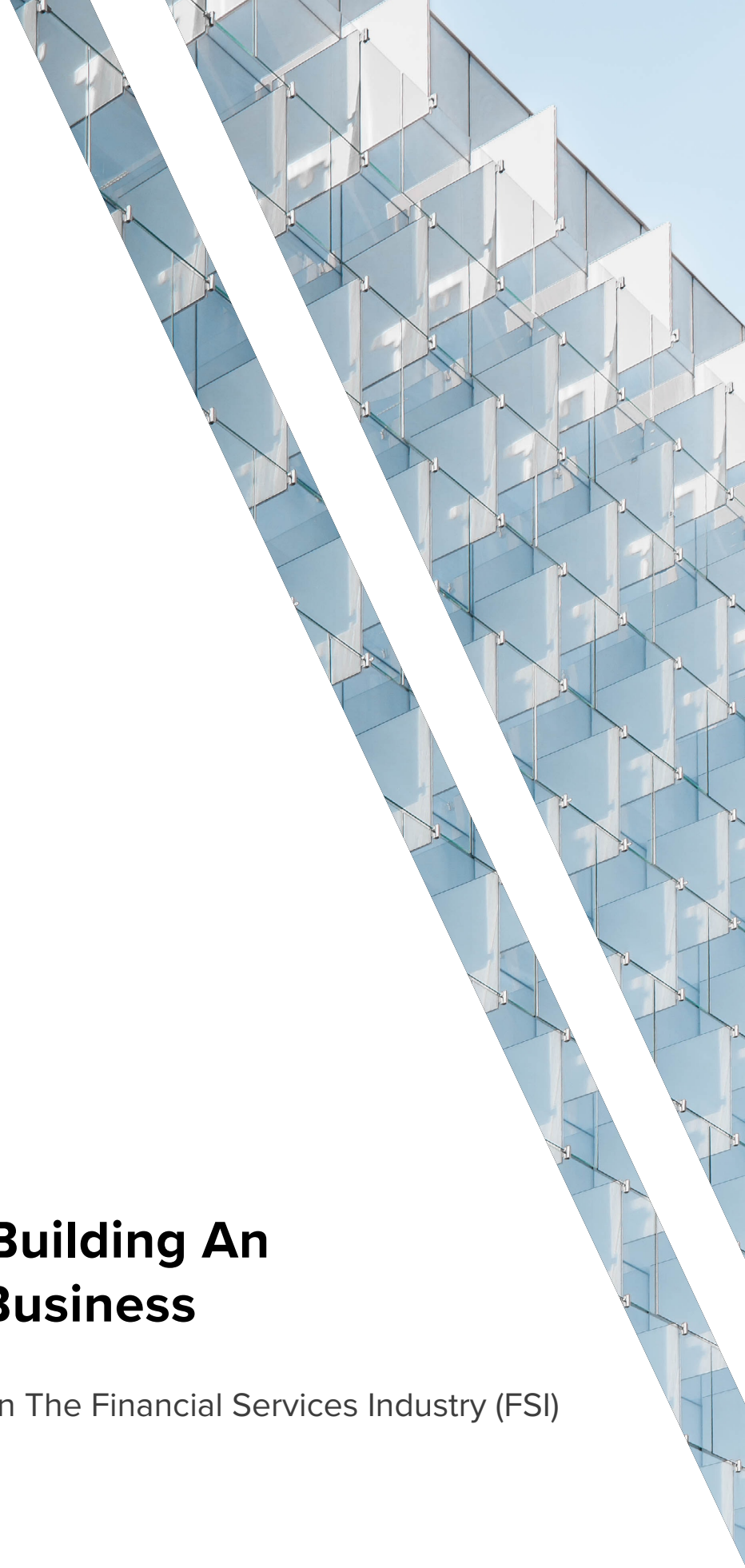


Fuel Growth By Building An Insights-Driven Business

The Future Of Data Agility In The Financial Services Industry (FSI)

A FORRESTER CONSULTING THOUGHT LEADERSHIP PAPER SPOTLIGHT COMMISSIONED BY RED HAT AND INTEL, SEPTEMBER 2022

Executive Summary

Data-driven decisions and the utilization of advanced analytics are rapidly becoming integral to the strategic toolkit of capabilities for leaders in FSI. Data insights fuel success for insights-driven enterprises: Forrester Research suggests that advanced insights-driven firms are almost nine times more likely to report exponential annual revenue growth of at least 20% compared to beginners.[1] Frontrunners recognize the need to actively leverage data for decision-making across all levels in their firms to accelerate innovation, adapt for growth, and fortify resilience to thrive in the face of radical disruption, both now and in the years to come.

In their effort to scale data and intelligence, FSI firms will have to ensure that their data practices and tools are harmonized for agility in data flows and optimized connectivity among large and disparate sets of data. To achieve agility with trusted data, it is imperative for FSI firms to leverage data-centric architecture to activate data flexibly on-premises, on the cloud, and at the edge of their businesses. This will thereby power development and innovation of enterprise data capabilities.

In May 2022, Red Hat commissioned Forrester Consulting to evaluate how pivotal capabilities help address data gravity and infrastructure needs to optimize data management in the FSI sector. Forrester conducted an online survey with 162 decision-makers in enterprises based in Australia, China, Hong Kong, India, Japan, and Southeast Asia to explore this topic.

Key Findings

Use of data, analytics, and insights for decision-making is gaining priority in organizations. The understanding of the relationship between insights-driven maturity and stronger revenue growth continues to develop. Alongside 76% of FSI decision-makers who prioritized revenue growth, 78% of FSI decision makers have also indicated the usage improvement of data and insights as high and critical business priorities.

Distributed and siloed workloads stifle efficiency and agility. Without connected data, 59% of business and IT leaders in APAC reported that they spent more time and effort integrating, orchestrating, and transforming data. More than two in five faced challenges in their infrastructure modernization journey (44%) and believed that data silos caused operational inefficiencies (43%) that constricted their capacity to work strategically and innovate. However, decision-makers still envision long-term efficiency gains and enhanced innovation capabilities upon completion of their modernization journey.

Greater optimization of legacy architecture and data practices for connectivity will be critical to achieve data agility. New data management and governance practices will be necessary to move from analytics to operational use cases. Enterprises should shift practices, roles, responsibilities, and enabling technology to meet data at the edge of business.

Need For Insights-Driven Business Is Driving Accelerated Digital Transformation

Most companies have access to vast pools of data, but the key differentiator for their products and customer experience (CX) lies in their ability to harness data and analytics across the entire customer lifecycle. This push for an insights-driven business is fueled by the need to outperform competitors by improving the organization's decision-making, performance, and accountability processes. These digital insights and what organizations do with them are therefore critical to disrupt and gain market share.

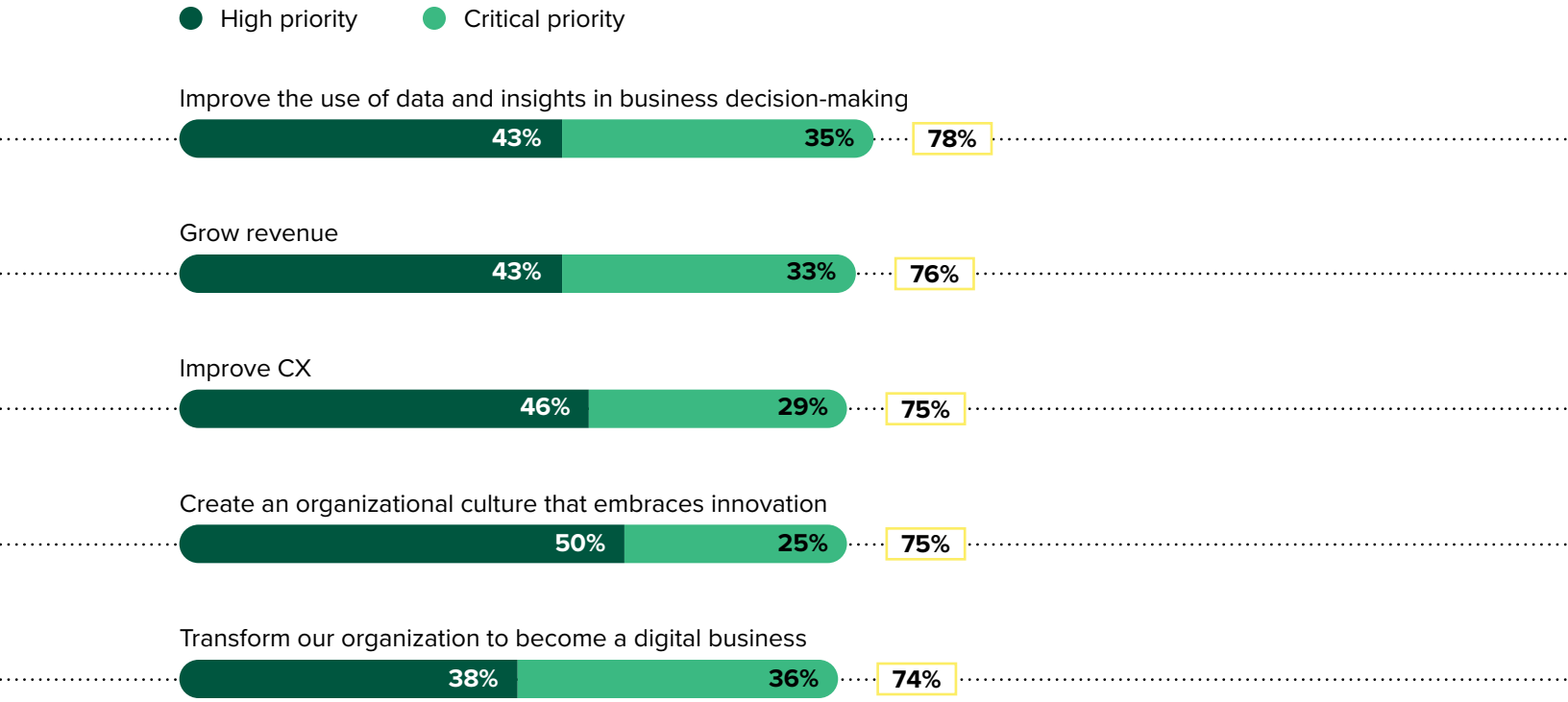
That said, increased acceleration of digital transformation in FSI firms has validated the correlation between insights driven maturity and greater revenue growth:

Use of data, analytics, and insights for business decision-making is gaining priority among organizations. Understanding of the relationship between insights-driven maturity and stronger revenue growth continues to develop. Alongside 76% of FSI decision makers who prioritize revenue growth, 78% of them have also indicated the usage improvement of data and insights as high and critical business priorities. With over 74% of FSI decision-makers in APAC prioritizing digital transformation as a critical and high business priority, this acceleration of digital transformation is further exemplified (see Figure 1).

On top of technology initiatives, creating the right culture across people and processes is imperative for insights-driven decision-making. Nearly 1 in 2 FSI decision-makers (48%) have implemented or were expanding the change in management culture to rely on more decision-making data, and the creation of a center of excellence (COE) for data analytics and insights to encourage the collaboration process. Meanwhile, more than half (57%) have implemented or were expanding their organization's existing technology skills or knowledge. Similarly, more than 50% of FSI decision-makers reported having implemented or were expanding the use of data and analytics at scale for new revenue streams. This mix of initiatives across people, processes, and technology create a culture of insights-driven decision-making baked into every organizational process.

Figure 1

Top Five Business Priorities For Organizations In The Next 12 Months



Base: 162 senior managers and above with responsibility and influence in the organizations' business, technology and data management strategies, of which 114 are from the banking sector, and 44 are from the insurance sector
Source: A commissioned study conducted by Forrester Consulting on behalf of Red Hat and Intel, June 2022

Data, data management strategies, and analytics-driven initiatives are expected to boost tangible business benefits. Some of the key outcomes that FSI decision-makers expected to achieve by adopting these strategies were mainly: an increased revenue growth (46%), an elevated customer experience (44%), greater business efficiency (42%), and better strategic planning (39%). Capturing better and more data while continuously developing and implementing insights about what drives their business is expected to accelerate growth with significant top- and bottom-line benefits (see Figure 2).

Figure 2(a)

Top Five Ranked Organization Visions For Their Data Management Capabilities Facing Distributed Workloads Or Applications

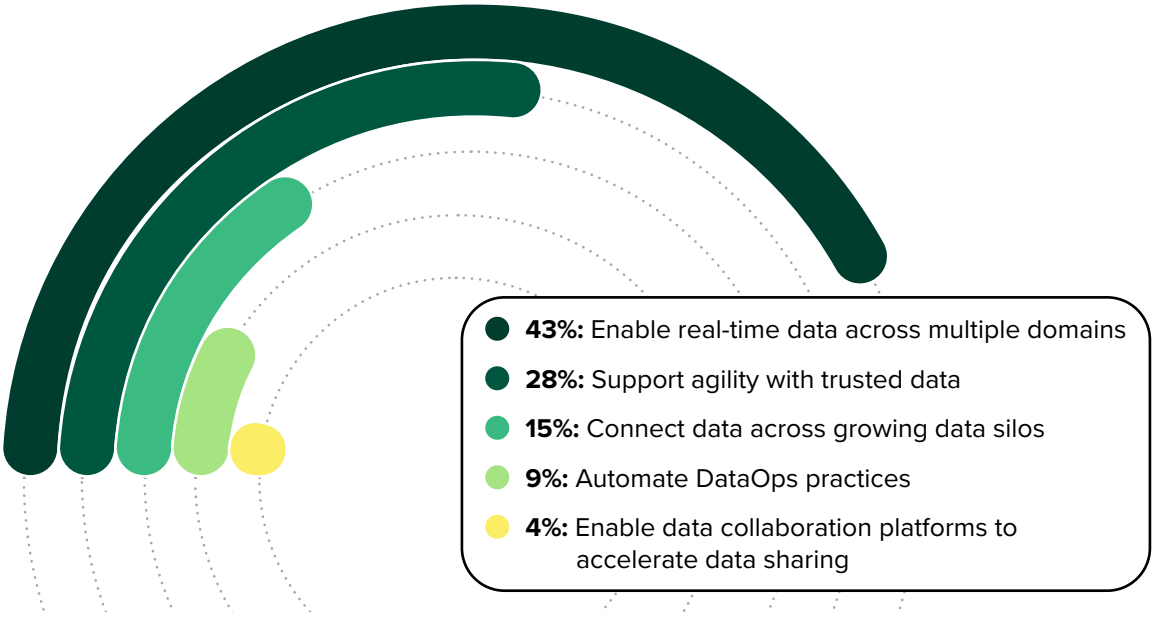


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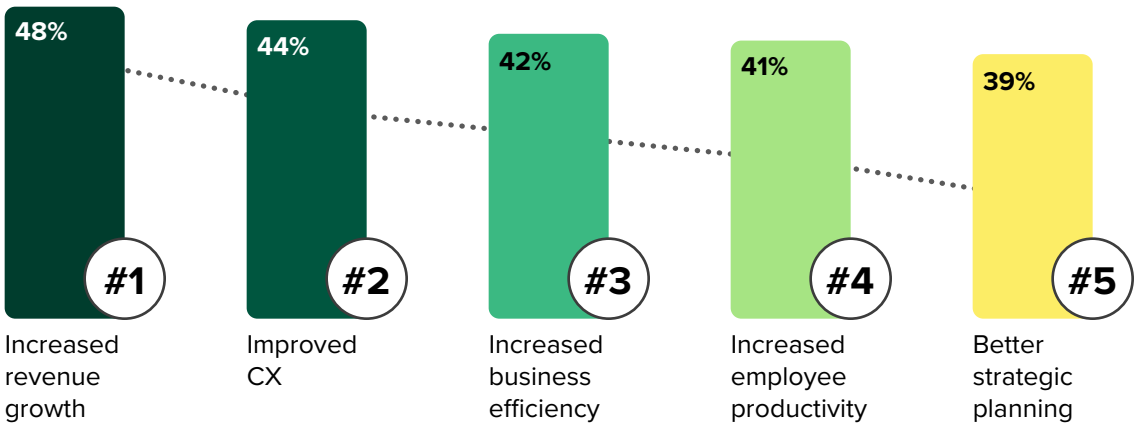
Figure 2(b)

Top Five Outcomes Organizations Plan To Achieve With Data, Data Management, Data Science, And Analytics-Driven Initiatives



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Legacy Of Distributed And Siloed Workloads Stifle Efficiency And Agility For Innovation

Data gravity has introduced a chicken-or-egg problem in data residency and data-processing. Today, many enterprises have data spread across databases, files, data warehouses, cloud, and on-premises. In consideration of latency and throughput requirements, FSI firms have increasingly centered additional services and applications around the precinct of the existing data.[2] However, this has inevitably propagated the mass of data at the original location, cornering FSI firms into a perpetual cycle of distributed and siloed workloads. This gave rise to challenges posed by:

Navigation of increasingly complex hyper-distributed architecture, which dampens efficiency and creates temporary bottlenecks in strategic workflows and innovation. Siloed architecture and the independent data streams they represent constrained the ability of FSI firms to leverage business data for growing and increasingly complex business requirements (see Figure 3). Without connected data, 59% of business and IT leaders in APAC reported that they spent more time and effort integrating, orchestrating, and transforming data (see Figure 4). More than two in five faced roadblocks in their journey towards infrastructure modernization (44%) and believed that data silos resulted in operational inefficiencies (43%) that constricted their capacity to work strategically and innovate in the short-term. That said, decision-makers have their sights set on larger efficiency and innovation payoffs in the future upon conclusion of their infrastructure modernization journey.

Governance and data stewardship. Data management demands structure and order that governance and data stewardship help to plug in the gaps for. Insights-driven businesses that seek to evolve beyond siloed approaches will need to continually develop enterprise-wide insights, stewardship, governance, and best practices, to share data and insight in analytics, and applications at the speed required by businesses and customers. Yet, more than one-third (33%) of FSI decision-makers stated they faced challenges rooted in data stewardship, with nearly half (49%) reporting that their efforts to build governance models around distributed data have been hampered as a result.

Figure 3

Top Five Challenges Experienced By Organizations In Modernizing Their Infrastructure For Data Analytics

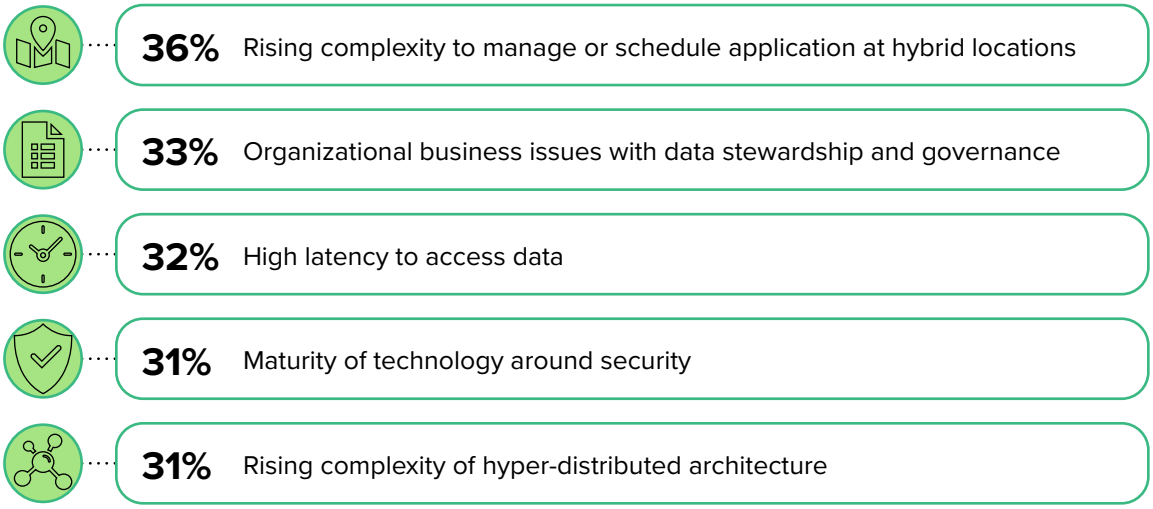

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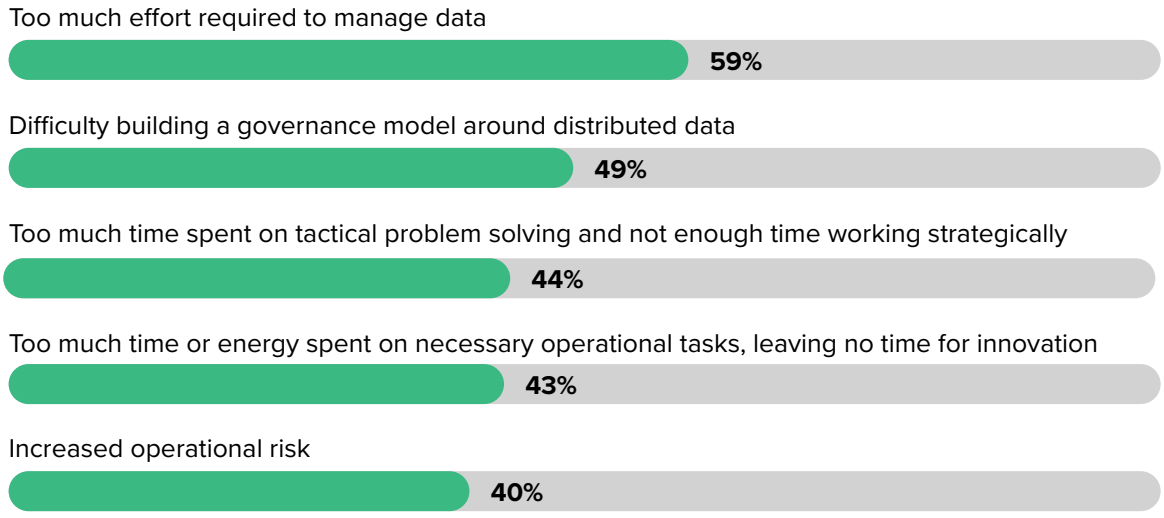
Figure 4

Top Five Consequences Of Challenges Faced In Modernizing Infrastructure For Data Analytics



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Accessing quality data. Although most organizations have the capability to capture massive amounts of data, analytics teams still struggle to gain access to the clean and relevant data they need to do their jobs. Nearly one-third (32%) of APAC FSI decision-makers shared they faced high latency in data access, while 28% reported being stymied by data quality issues.

Existing gaps in traditional data management and governance. While data management architectures stress the importance of a data source, data governance is applied on how the data persists. Today, DataOps extends data management and governance while emphasizing on consumption and use — which is the ability to enable solutions, develop data products, and activate data for business value across all technology tiers ranging from infrastructure to experience. Despite the outsized role that DataOps plays, few business and IT leaders professed high confidence in their firm's ability to establish Data Ops practices successfully, as compared to doing so for other data management and data analytics-driven initiatives. If infrastructure modernization is the first building block, reorienting the framework for DataOps along the lines of enablement, development, governance, and delivery should be the next.

Key Recommendations

Most FSI firms sit on a veritable treasure trove of data but find themselves lacking insights. Even if they possess them, there is an absence of action especially at the velocity demanded by the business and customers. Furthermore, FSI leaders are increasingly realizing that they no longer have the luxury of time to dither.

FSI firms should accelerate their digital transformation now to actualize their vision of an insights-driven business designed to transcend the competitive pressure of the future. Optimizing legacy architecture and data practices for connectivity will be paramount to their effort in trying to achieve data agility and leverage data for analytics and insights. After all, those that do advance through this transformation stand to benefit from the promises of customer obsession at scale and harness the power of insights at every opportunity to fuel innovation, agility, and resilience for growth.

To take pole position in the race to build an insights-driven business, FSI leaders should:

Prioritize the quality and value of data products.

Data products such as APIs, services and pipelines, data marts and views create data experiences and insight solutions. Forty-eight percent of respondents prioritized data quality for data management and analytics. To achieve agility with quality, FSIs should adopt a test-driven development protocol to create tests upfront and maintain repeatable unit tests.

Leverage data-centric architecture to activate data at on-premises, cloud, and edge.

FSIs should work within the data management architectures best suited to manage data lifecycles in sync with data use in applications, web, and devices, regardless of on-premises, cloud, or edge. FSIs have embraced single or multiple public clouds to host their innovation applications and advance their data capabilities, with 76% of respondents having said they will invest in edge computing within the next two years.

Speed up data-to-insight cycles.

Data agility brings the goal post for deliverables from complete platforms and solutions to smaller products defined by quality and value-based milestones.[3] Real-time insights are not the only form, but the speed of obtaining insights is evolving to real time. Forty-three percent of respondents stated they aimed to enable real-time data across multiple domains for data management capabilities. Data engineers should align solutions and continuous delivery methods for modernizing and scaling architecture, with business stakeholders' expectations for return on data investment.

Govern data by design.

With increasing data governance, DataOps addresses data governance policies through the creation of rule-based services and processes. These are specific data governance products and are often created to clean up or meet new policies and regulations. However, in mature stages, DataOps treats data governance policies and rules as requirements to embed into databases, pipelines, services, views, and data sets. Seventy-eight percent of respondents said they will invest in just-in-time data governance in the next two years.

Execute through inclusive teams.

FSIs should achieve data agility via DataOps, which works in a synchronous and asynchronous fashion with DevOps, ModelOps (MLOps), and data governance teams. This ensures that corporate and customer requirements are collected and shared with all responsible parties to set quality and value benchmarks, while effectively coordinating development efforts and product ownership. Forty-eight percent of respondents have either implemented or were expanding on changing their management culture and creating an insights COE.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 162 decision-makers in enterprises based in Australia, China, Hong Kong, India, Japan, and Southeast Asia to evaluate how pivotal capabilities (i.e., cloud and MLOps) can help address data gravity and the infrastructure needs of large and disparate sets of data to optimize data management in the FSI sector. Survey participants included senior managers and higher, with responsibilities and influence over their organizations' business, technology, and data management strategies. The study began in May 2022 and was completed in June 2022.

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Appendix B: Endnotes

[1] Source: "Build An Insights-Driven Business," Forrester Research, Inc., January 27, 2022.
[2] Source: "Data Center And Colocation Market Trends, 2021," Forrester Research, Inc., January 20, 2021.
[3] Source: "DataOps For The Intelligent Edge Of Business," Forrester Research, Inc., December 3, 2020.