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Doomed to Fail?
Avoiding Common and Costly
Cloud Transformation Pitfalls

**How financial services industry leaders
can act today to avoid common pitfalls
in large-scale cloud transformations**

Google Cloud | **Deloitte.**

> Migration to the cloud is not only a technological journey: it's a journey that the entire organization must take together. When it is viewed as solely a technology project, it's doomed to fail

Ulku Rowe
Engineering Director, CTO Office, Google Cloud

Executive Summary

Cloud technology has been a strong pillar in the world of digital transformation. Companies around the world are exploring the unlimited potential of cloud technology to drive innovation, enhance agility, and gain a competitive edge.

At the same time, large-scale migration to the cloud is a challenging task. All too often cloud transformation initiatives fail to meet their objectives even if they don't fail outright.

Overall, organizations commonly underestimate the complexity of the planned transformation, overestimate the scope that can be migrated, neglect prioritizing communications and buy-in from critical stakeholders, fail to establish appropriate ownership and

accountability, allocate inadequate resources and budget, and conduct insufficient testing and training. Finally, organizations frequently find it challenging to adapt their control environments and control mapping processes to dynamic cloud environments compared to traditional IT systems, making risk management and objective realization in the cloud environment a common sticking point for financial services firms.

In this whitepaper, we investigate the most common pitfalls enterprises face as they undertake large-scale migration to the cloud, and offer helpful insights designed to help you successfully deliver cloud migrations in your organization.
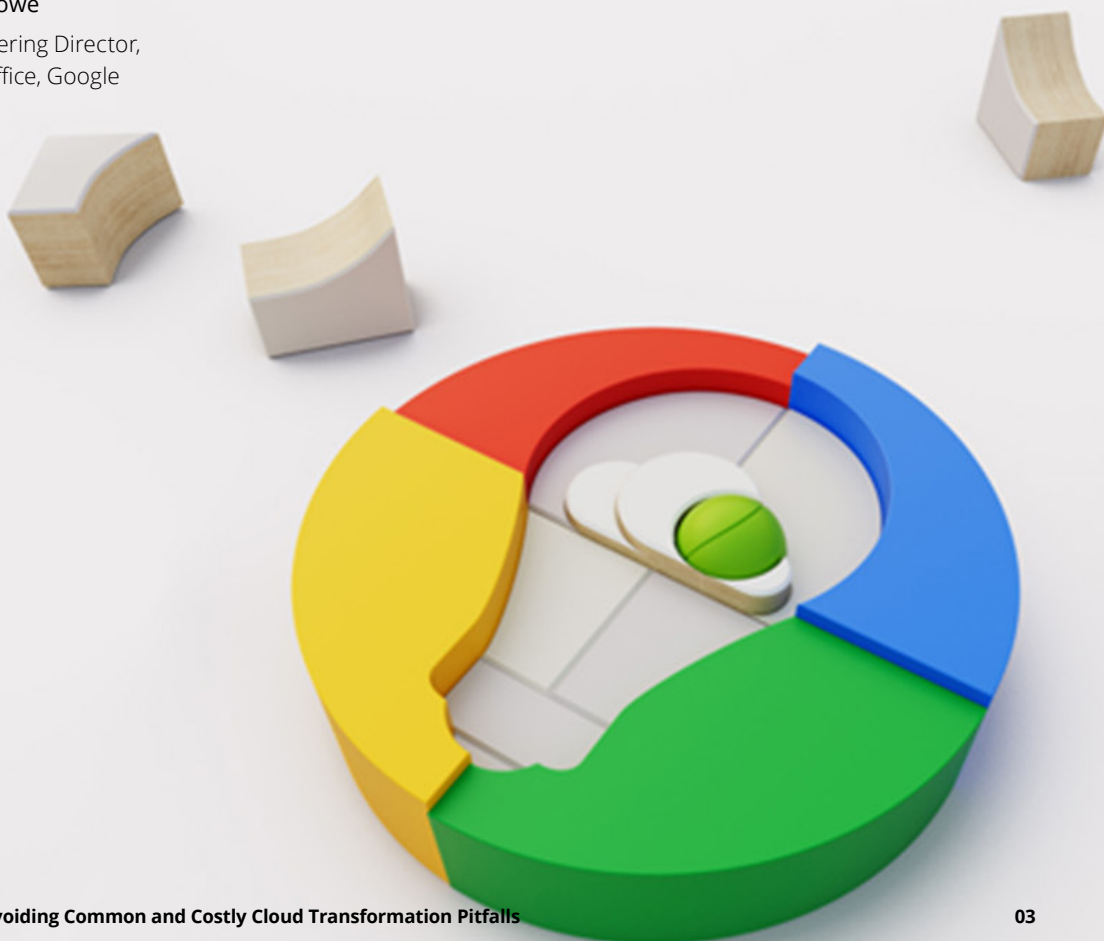
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Aligning Cloud Transformation and Business Strategies for Growth and Performance

Recent research from [Gartner](#) reveals that enterprise information technology (IT) spending on public cloud computing is set to overtake spending on traditional IT for enterprise software, infrastructure software, business process services, and system infrastructure markets in 2025.

Also, research conducted by Corinium Intelligence last year in the United States and Europe found that 89% of data and analytics leaders planned to [invest in cloud-native platforms](#) by the end of 2022, indicating a strong push toward cloud adoption. At the same time, [56% of data leaders](#) were still struggling to determine their cloud strategies.

The findings indicate that while many companies are already investing in and adopting cloud technologies, a substantial proportion of data leaders, pivotal to steering the cloud transformation strategy, are still overcoming challenges in strategy formation.

This gap, if unaddressed, at best could mean the organization is impairing the business case and value proposition, but at worst could lead to poorly planned and executed cloud adoption, setting these initiatives up for failure despite the significant investments being made.

Figure1: Which of the following does your enterprise plan to invest in over the next 12 months?
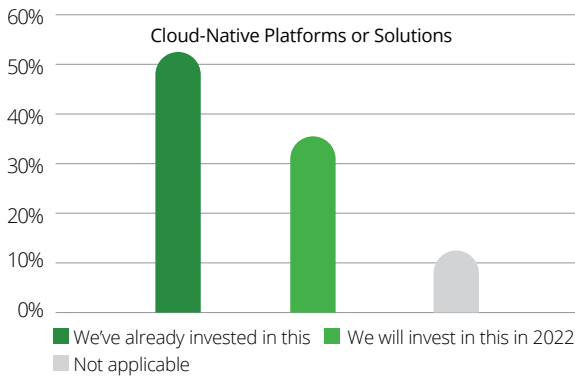
Source: Corinium Global Intelligence, 2022

Figure2: Determining our cloud strategy

Source: Corinium Global Intelligence, 2023

Prioritizing Organizational Change Management for Better Outcomes
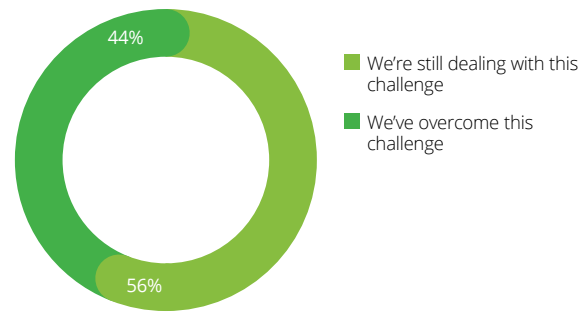
> Engage the business, not only to earn the permission to move forward but also to create an outcome that excites them. Lowering their operational costs, reducing friction in their business processes, and building new workloads can drive both technology and business benefits

Andy Lees
Global Financial Services Google Lead, Partner, Deloitte

The cloud equips organizations with the capacity to expedite development cycles and shift ideas into production swiftly. As a result, the adoption of cloud technology requires a profound shift in processes, systems, attitudes, and behaviors.

Research conducted by Corinium Intelligence revealed that securing executive support for business transformation, bringing cross-functional experts together, and promoting adoption were the top three challenges for data leaders as they drive data cultures.

Considering this, it is critical for data leaders to champion and cultivate a new mindset throughout the organizations – from top to bottom. This includes communicating and promoting fresh perspectives and approaches to business challenges. Fostering a culture that embraces transformation helps to align teams, dismantle silos, and empower staff to generate and test novel ideas.

"Cultural transformation is one of the most critical parts of a cloud migration," says Rowe. "People usually migrate to the cloud because they want faster access to innovation. This does not happen without a cultural change. It requires a different way of thinking across the organization."

In addition, as cloud adoption scales, organizations face a transformative shift, moving beyond the migration process itself towards a new business model centered on innovation, according to Lees.

"Creating different business models through the capabilities acquired from having adopted cloud at scale involves a business change, a level of innovation, and a different cultural mindset," says Lees.

"If organizations don't make these changes, the massive investment they've made into cloud transformation will start to lose value. Cultural transformation is going to be massively important to our clients as they go through that investment period," says Lees.
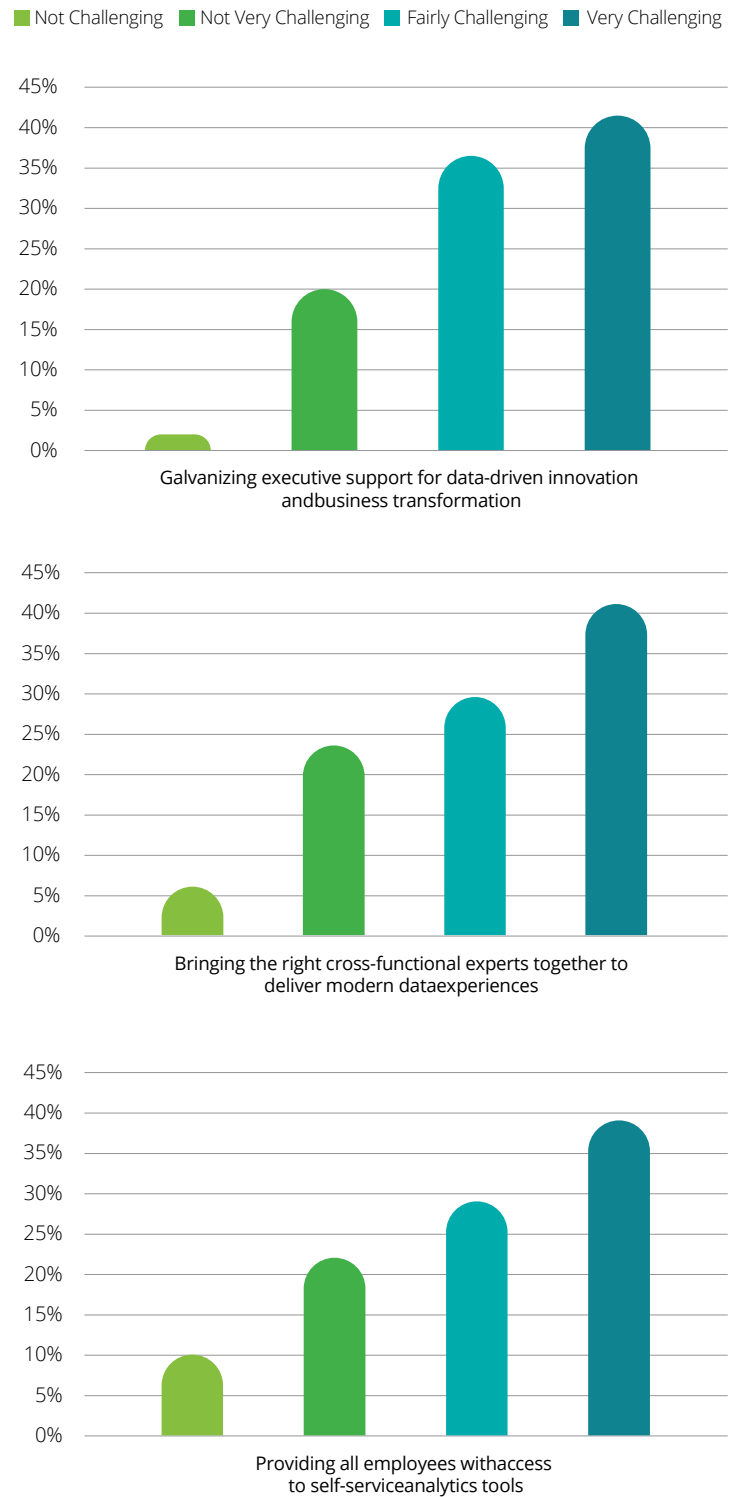
> Too many large-scale cloud programs are 'lift and shift migration' exercises and very tech-centric. This approach often results in missed opportunities. It's too one-dimensional, failing to involve the business and identify potential benefits

Andy Lees
Global Financial Services Google Lead, Partner, Deloitte

Figure3: Please rate the following hurdles on the road to establishing data-driven business cultures as they apply to your enterprise.

Legend: ■ Not Challenging ■ Not Very Challenging ■ Fairly Challenging ■ Very Challenging

Galvanizing executive support for data-driven innovation andbusiness transformation

Bringing the right cross-functional experts together to deliver modern dataexperiences

Providing all employees withaccess to self-serviceanalytics tools

Source: Corinium Global Intelligence, 2022

Engaging Stakeholders Early to Achieve Project Success

It's key to identify all the stakeholders that will be associated with this transformation to make sure they have the right level of education and the right level of participation in the discussions early on

Ulku Rowe
Engineering Director, CTO Office, Google Cloud

Actively involving and collaborating with stakeholders throughout large-scale cloud transformation initiatives can help unlock numerous benefits that drive positive outcomes, yet it is one of the most overlooked aspects when embarking on the journey.

If IT teams begin the migration process with the approval of C-level leaders but without engaging other organizational stakeholders, the result will lead to chaos, misunderstandings, and resistance from those who were not consulted from the outset.

"Sometimes the most important stakeholders are not the first ones that come to mind," Ulku Rowe, Engineering Director, CTO Office, Google Cloud says. "It's key to identify all the stakeholders that will be associated with this transformation to make sure they have the right level of education and the right level of participation in the discussions early on."

When planning the migration process, it is critical to consider various stakeholders like application owners in the technology team, business users who would utilize the services provided by the application workload, innovation and transformation officers from affected business units, technical and operational risk management teams who help determine the organization's risk appetite, cybersecurity teams, and regulatory teams responsible for understanding acceptable jurisdictional patterns and data residency approaches.

"Continuing to invest in stakeholder engagement throughout the program is also essential," adds Andy Lees, Global Financial Services, Google Lead Partner, Deloitte. "Ongoing stakeholder engagement is often overlooked, and teams don't invest enough time dealing with those stakeholders causing roadblocks and delays downstream."

By engaging stakeholders early, providing the necessary knowledge, and fostering a shared understanding of the transformation objectives, businesses can enhance stakeholder engagement and empower teams to make informed decisions throughout the process.

Aligning Cloud Transformation Goals with Business Strategy: Three Tips to Avoid Common Pitfalls

Tip 1
Align the Transformation Strategy with Business Goals

Focusing solely on technology without aligning it with business goals can lead to cloud transformation programs under-delivering. When planning a cloud transformation initiative, it's crucial to first consider organizational goals and then select the most appropriate tools and technology to achieve them.

Tip 2
Involve Business Teams Early

Successful cloud transformations require collaboration across departments. Limited involvement of business teams can lead to misunderstandings and misalignment, ultimately impeding the transformation process. Therefore, identifying and engaging the key stakeholders for cloud transformations in your organization is a critical early step.

Tip 3
Don't Overlook Change Management

Cloud transformation isn't merely a technological shift—it's a cultural change. Failure to foster this change, promoting understanding and acceptance of new workflows, skills, and practices, can significantly hinder a successful transformation. Cloud transformation leaders should focus on cultivating a new mindset in their organizations from top to bottom to promote fresh approaches to solving business challenges.

Plotting a Course for Target and Transition State Architectures

> Consider your starting points. New businesses have an easier path to the cloud compared to legacy institutions with complex infrastructures

Ulku Rowe
Engineering Director, CTO Office, Google Cloud

For new businesses unhampered by legacy infrastructures, the path to the cloud is considered comparatively straightforward. Conversely, established organizations may face a complex journey that demands deliberate and thoughtful planning and strategizing to disentangle the intricacies of legacy infrastructure.

"Consider your starting points. New businesses have an easier path to the cloud compared to legacy institutions with complex infrastructures," advises Rowe. "Prioritize your business needs and determine your parameters for migration. Be sure to focus on the most pressing business issues."

Emphasizing the role of interoperability, Rowe notes, allows smooth operations across multiple environments, enhancing adaptability and sustainability amid evolving business needs.

"It's crucial to focus on interoperability, allowing businesses to operate infrastructures across multiple environments, whether on-premises or in the cloud. The goal is to have tooling that supports a hybrid infrastructure and enables smooth operations for a long time," she says.

> Developing capabilities like DevOps, FinOps, and Agile is crucial during a cloud transformation. Consider the specific use cases and goals of your program. Don't underestimate the importance of the operating model

Andy Lees
Global Financial Services Google Lead, Partner, Deloitte

Avoiding Roadblocks by Leveraging the Operating Model

Shifting to cloud technology can be complicated, especially for mature organizations with entrenched legacy systems. However, these challenges can be navigated with a well-defined strategic blueprint: the operating model.

The operating model is a roadmap that can show how your organization may work in the new cloud-focused environment. It connects cloud architecture, new technologies, and processes, making for a smoother transition to future operations.

Within the operating model, methodologies and practices like DevOps, FinOps, and Agile allow organizations adopt to improve their efficiency, effectiveness, and adaptability in delivering products and services. In addition, they are effective tools to aid successful cloud transformation initiatives.

"Developing capabilities like DevOps, FinOps, and Agile are crucial during a cloud transformation," advises Lees. "These capabilities are more than just buzzwords. They are the keys that unlock the potential of cloud technology, creating a swift, efficient, and cost-effective transition process."

DevOps can ensure a rapid application development and deployment process. It plays an instrumental role in creating a seamless progression toward the defined cloud-based architecture.

FinOps focuses on financial accountability. It helps manage the economics of the transition state and prevents unexpected budgetary surprises, making the journey to the cloud cost-effective.

Agile, with its iterative and flexible approach, allows for a quick response to changes in business requirements, technology advancements, or customer feedback. This helps ensure a steady progression toward the defined cloud target.

"Don't underestimate the importance of the operating model," Lees warns. "Stakeholder engagement, transformation, and different business models must be included."

Target and Transition State Architectures: Three Tips to Avoid Common Pitfalls

Tip 1

Design the Target Architecture with Business Goals in Mind

Organizations should consider factors such as scalability, availability, security, compliance, and cost optimization. Balancing these requirements and designing a target architecture that aligns with business goals is complex but can be essential to ensure that cloud transformations deliver.

Tip 2

Consider How to Integrate Legacy Systems

Many organizations have existing legacy systems that should be integrated with the cloud environment during the transition state. Ensuring seamless integration and compatibility between legacy systems and cloud technologies can be a significant challenge, requiring careful planning and consideration.

Tip 3

Ensure Data Security and Compliance

Protecting highly sensitive customer financial and personal data from unauthorized access, data breaches, and ensuring privacy is of paramount importance. Migrating and securely storing data in the cloud while maintaining the necessary security controls can be a significant challenge.

Governance and Compliance Challenges in Large-Scale Cloud Transformations

Shifting to the cloud is a significant change for many organizations, requiring them to navigate a host of technical and strategic challenges, including challenges relating to data governance and regulatory compliance.

Data governance in the cloud requires an organization to effectively manage and control its data across disparate environments. Given the enormous volumes of data handled by large organizations, ensuring data quality, consistency, privacy, and security can be a considerable challenge. Regulatory compliance adds an additional layer of complexity.

According to Corinium Global Intelligence, 58% of data leaders in the Financial Services sector said that data governance challenges were likely to hinder transformation efforts in meeting compliance obligations.

At the same time, overbearing governance structures can cause cloud transformation initiatives to underdeliver or delay completion. As a result, Lees recommends forming a governance forum containing key governance stakeholders to facilitate accountability and ownership, and to help the organization make timely decisions.

"Having the right stakeholders in a governance forum with the right accountability means that you'll be able to make better decisions," says Lees. "The governance forums have to allow for decision-making at pace. They can't be too overbearing."

What's more, neglecting to update the control environment during large-scale cloud transformations can precipitate a multitude of complications, including security vulnerabilities, non-compliance with regulatory standards, and misallocation of resources.

Furthermore, it can foster operational inefficiencies and hinder the alignment with current business objectives, ultimately impeding the organization's agility and adaptability in a rapidly evolving digital landscape. Consequently, updating the control environment is pivotal in fostering a seamless and secure transition, ensuring compliance, and optimizing performance in cloud-based platforms.

The transition to the cloud requires a well-planned strategy to manage data governance and regulatory compliance effectively. With a governance approach focused on timely, accountable decision-making businesses can leverage the benefits of cloud technology without compromising on governance, compliance and the need to update control environments.

Figure4: Which of the following factors are most likely to negatively impact your ability to access, process, and analyze the data your organization needs to meet its compliance obligations?

81%
Data quality issues

59%
Data siloes

58%
Data governance challenges
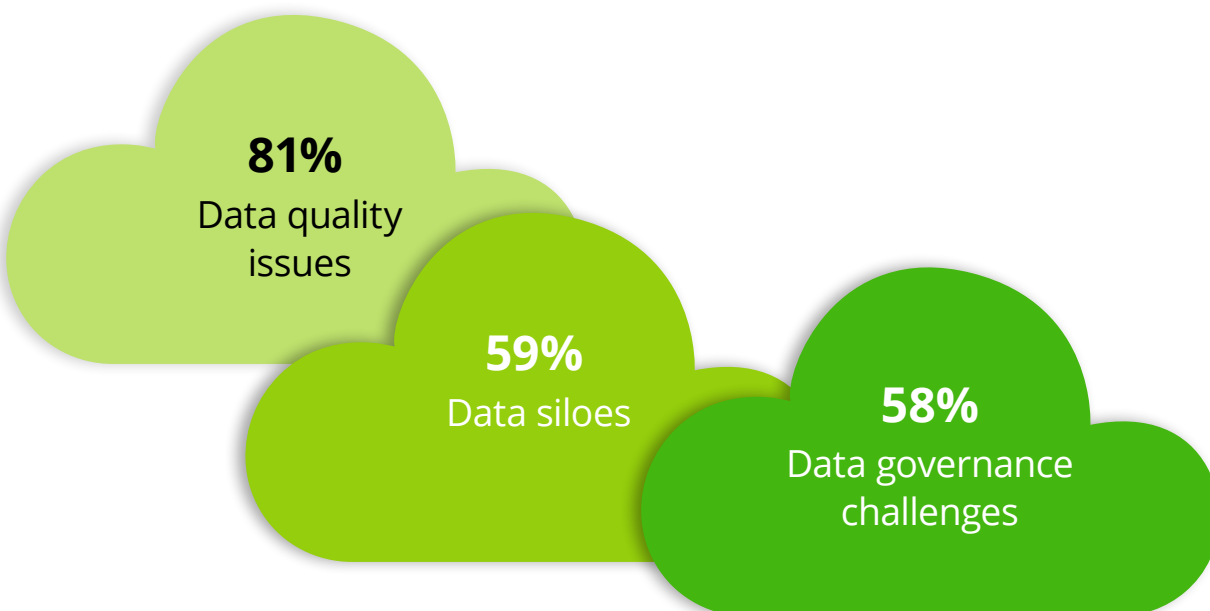
Source: Corinium Global Intelligence, 2023

> Whether you're a financial institution, a cloud provider, or a regulator, the end goal is to have a safe and sound financial system that serves the customer in the most robust, efficient, and safest way possible

Ulku Rowe
Engineering Director, CTO Office,
Google Cloud

Engaging Regulators Early

Leveraging expertise from cloud providers to collaborate more effectively with regulators can help identify risks and determine the best ways to address them.

"Having experience and the right skill set, either within the organization or by working with a partner will support efforts to successfully engage regulators."

"The end goal for all parties is the same," adds Rowe. "Whether you're a financial institution, a cloud provider, or a regulator, the end goal is to have a safe and sound financial system that serves the customer in the most efficient, safest, and robust way possible."

"Of course, how exactly to achieve that will always be a conversation as the whole sector and the regulations that underpin it are evolving rapidly."

"Regulators have been advocating for risk-based policy, making sure that financial institutions understand the risks they face on behalf of their customers," Rowe says. "We're always happy to work with our customers and the regulators to help articulate those risks and address them in the best way possible."

Effective governance structures, early regulator engagement, and maintaining a dialogue between technology and business are vital to the success of cloud transformation initiatives. By understanding and proactively addressing these challenges, organizations can successfully manage risk as they embark on their cloud transformation journey.

Navigating the Complexities of Data Migration in Cloud Transformation

Navigating data migration during a large-scale cloud transformation can be a daunting task for many businesses. This process involves resolving issues related to data compatibility and interoperability, making crucial decisions about which data to move, and addressing changes in business processes and workflows.

Additionally, businesses must consider the scalability of their new cloud infrastructure, manage the financial aspects of the migration, and carefully choose the right cloud provider that suits their specific needs.

"Data migration can be an intense project. First, it is important to understand where the data resides and where it needs to be in terms of the target state, and how it's being used."

"Pick the innovative collaborators and engineering capabilities that align with your organization's goals," Rowe says. "Leveraging the right skills can facilitate a smoother migration process, and help businesses navigate the intricacies of data migration."

"Embrace change and involve everyone in the organization, from junior programmers to finance people, and have the right partners to support the change."

With these insights and a strategic approach to data migration, businesses can manage risks, optimize operations, and fully leverage the potential of cloud technology.

The road to successful cloud transformation may be complex, but with careful planning, the right collaborators, and a comprehensive understanding of the challenges, businesses are better equipped to thrive in the digital age.

Data migration can be an intense project. First, it is important to understand where the data resides and where it needs to be in terms of the target state, and how it's being used

Andy Lees
Global Financial Services Google Lead, Partner, Deloitte

Governance, Regulatory, and Migration: Three Tips to Avoid Common Pitfalls

Tip 1
Manage Data Governance and Regulatory Compliance Proactively

Large organizations should ensure data quality, consistency, privacy, and security across disparate environments, while also maintaining regulatory compliance. Navigating this intricate interplay can be a crucial challenge during cloud transformations.

Tip 2
Avoid Overbearing Governance Structures

Making quick decisions can be essential in competitive environments. However, poorly structured governance can slow cloud transformation initiatives, undermine the business case, and negatively affect the ability to make decisions promptly.

Tip 3
Consider the Complexities of Data Migration

Data migration during cloud transformation involves dealing with data compatibility issues, deciding what data to move, adjusting business processes, and ensuring the scalability of the new cloud infrastructure.

Conclusion

For forward-looking financial services firms today, cloud transformation is not merely an option, but a strategic imperative.

As we have explored within this report, the potential benefits of such initiatives are vast and transformative. However, the pathway to cloud transformation success is beset with challenges that can derail even the most well-intentioned efforts.

Central to a successful cloud transformation is the fusion of technology with business objectives. It is essential to view cloud transformation as an enabler of strategic goals rather than just an IT project. By weaving technology decisions seamlessly into overarching business strategies, organizations can ensure that the journey to the cloud yields tangible and meaningful outcomes.

In the spirit of fostering collaboration, it is crucial to involve business teams from the outset. The transformational journey is a cross-functional endeavor that necessitates the insights and engagement of stakeholders from across the organization. Through effective collaboration, the risks of misalignment and misunderstanding can be averted, cultivating a unified approach that propels the transformation forward.

A consistent theme that resonates throughout this report is that cloud transformation encompasses more than technological shifts—it requires a cultural change and shift in mindset. Navigating this change, and managing resistance to new workflows, skills, and practices, becomes paramount. By cultivating an environment that embraces change, leaders of cloud transformation can stimulate innovation and unveil novel approaches to addressing business challenges.

An important reminder is that governance structures must strike a delicate balance between oversight and agility. The ever-evolving nature of business requires swift decisions, yet an overly rigid governance approach can stifle progress. Achieving this equilibrium empowers organizations to adapt and innovate while maintaining the integrity of their cloud transformation initiatives.

Lastly, the imperative of data security and compliance cannot be overstated. Safeguarding customer data in an online environment awash with sensitive information is not merely a responsibility, but a commitment to building trust.

Cloud transformation journeys are intricate and non-linear. By accounting for the common and costly pitfalls described in this report, organizations can drive large-scale cloud transformations more effectively. As the digital landscape continues to evolve, those who internalize these lessons will be well-prepared to shape their organization's future with tenacity, security, and innovation.
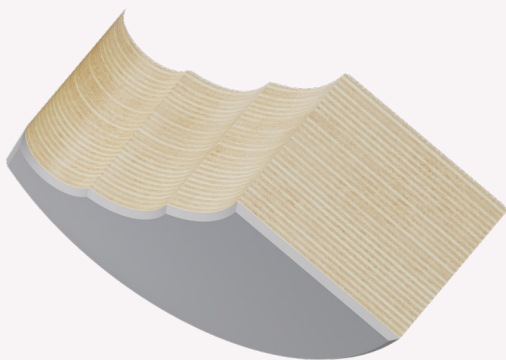
Endnotes

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