Top Mistakes in Implementing a Cloud Strategy
(And How the Right Consultant Can Help You Avoid Them)

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INTRODUCTION

IT leaders have learned a critical truth in recent years: it's easy to deploy a cloud workload, but difficult to implement an effective cloud strategy. The cloud model, once touted as an easy, low-barrier way to reduce IT costs and minimize maintenance, is now recognized as an important building block for digitization. In a recent Frost & Sullivan survey, 49% of IT decision-makers say the cloud is the foundation of their Digital Transformation strategy. Sixty-four percent say their cloud strategy is essential to remaining competitive in their industry.

With so much on the line, businesses are relying on IT leaders to implement a flexible cloud-based infrastructure foundation that can support urgent business imperatives—e.g., agility, market responsiveness, innovation, compliance and security, around the clock operations—efficiently and cost-effectively. But implementing a cloud environment that can meet the needs of varied workloads, users, and technologies brings challenges that threaten the overall initiative. In fact, half of IT leaders report they have lost the confidence of their senior leadership team at some point during their cloud strategy implementation.

To mitigate the challenges, and get the digital transformation project moving in the right direction, many businesses are engaging third party consultants. But not all who hang out a shingle are right for your business. The right consultant has experience and expertise across a range of deployment options, enabling you to implement your hybrid and multi-cloud strategy. Equally important, the right consultant looks beyond the cloud infrastructure to new software-based networking technologies, such as SD-WAN, to help you ensure your applications are always available, cost-effectively, to the users and applications that need them.

In this report, we look at top mistakes made by businesses during their digital transformation efforts, and how the right cloud and SD-WAN strategies can address them. Finally, we show how a provider like AT&T can set your business up for success.

UTILIZING THE CLOUD FOR DIGITAL TRANSFORMATION

In the digital economy, stakes are high: businesses must effectively utilize new technologies and business models to survive and thrive, or conversely, risk competitive loss and disruption. In undergoing digital transformation, businesses are not simply adding new systems or applications, but fundamentally changing the way they operate, interact with customers, create and deliver products.

In placing the cloud at the center of their digital transformation efforts, IT leaders are relying on the cloud to support strategic business goals. According to the Frost & Sullivan survey, top drivers to the cloud include the following strategic goals:

- Deliver services and applications faster (cited as "important" by 69% of IT decision-makers)

- Free up IT staff to focus on innovative solutions (cited by 67%)

- Position the company to take advantage of new technologies (cited by 61%)

- Support business agility/market responsiveness (cited by 58%)

At the same time, IT organizations look to their cloud strategy to minimize ongoing challenges associated with managing the company data center, including:

- Reduce costs (cited as "important" to the cloud decision by 76% of IT decision-makers)

- Manage data/storage growth (cited by 71%)

- Reduce hardware/software maintenance burden (cited by 64%)

- Shift costs from capital to operating budget (cited by 60%)

MORE THAN CLOUD INFRASTRUCTURE: UTILIZING SD-WAN NETWORK VIRTUALIZATION

Of course, your data and applications aren't really running in a cloud, but in a distant data center. And with your users—human and machine—located anywhere and everywhere, the network connecting them is a critical component of your cloud strategy, one that impacts application performance (in terms of network-induced latency, jitter, and data loss), as well as cost.

Businesses surveyed by Frost & Sullivan use an average of 2.1 network technologies to access cloud apps, including:

- Dedicated Internet Access (used by 50% of respondents)

- Ethernet (used by 39%)

- Private Line (used by 31%)

- Broadband (used by 31%)

- MPLS (used by 13%)

Despite the range of network types, only 16% of survey respondents say their cloud strategy includes a relatively new technology for optimizing network utilization, Software-Defined WAN (SD-WAN).

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With SD-WAN, the physical network infrastructure is abstracted to create a virtual overlay, and the control is shifted to a centralized controller. The controller makes application-aware decisions to route traffic over the optimal network technology, based on your business policies. The SD-WAN functionality is delivered via a physical or virtual appliance deployed on the company premises or in a cloud center. By automatically selecting the optimal network link to route traffic, SD-WAN enables efficient use of hybrid networks, and simplifies network management tasks.

According to the Frost & Sullivan SD-WAN End User Survey, 43% of SD-WAN users cite "optimized cloud connectivity" as the top reason they deploy the technology. In a cloud environment, SD-WAN supports resource scalability, flexibility, and resiliency—allowing users to utilize network resources similarly to the way they utilize cloud server and storage resources, for an end-to-end integrated cloud solution.

By integrating SD-WAN into the overall cloud strategy, businesses benefit in several ways, including:

- **Improved application performance**: SD-WAN solutions utilize virtually real-time performance monitoring of the transport network to make policy-based network selections for each application. By monitoring traffic paths, SD-WAN solutions can sense problems related to availability (sufficient bandwidth) and reliability (latency, jitter, and packet loss) before they affect users, and the application transport is moved to a different path.

- **Greater business agility**: With SD-WAN solutions, transport routing changes can easily be made in virtually real-time, from a remote location, on a per-application basis. This allows the network to keep pace with changing business needs.

- **Cost reduction**: SD-WAN lowers network costs by maximizing network utilization and efficiency, and eliminating the need for costly high-speed private (MPLS/Ethernet) circuits. For example, a cost-conscious business may choose to deploy a combination of low-cost, high-speed internet links and pricier, low speed MPLS links to route cloud traffic cost-effectively. User traffic to Software as a Service applications can be routed directly via a public internet link (instead of being "hair-pinned" back to the corporate data center and then to the cloud); while traffic going to the company's private cloud can be routed via MPLS.

TOP SIX MISTAKES ENTERPRISES MAKE IN IMPLEMENTING A CLOUD STRATEGY

Thanks to the complexity and continuing evolution of the digital world, it is common for IT leaders to face challenges in implementing their cloud strategies. Here are the most common mistakes:

1. **Failing to create a cloud roadmap for the business.** Anyone with a credit card can deploy a workload in the cloud—no purchase order or term commitments required. As a result of the ease of access, many IT and even business users neglected standard due-diligence, and deployed apps without much thought about availability, performance, compliance, or costs. Now, 10 years into the cloud era, businesses are struggling to identify and rationalize a myriad of cloud apps, as part of a holistic strategy. 56% of IT decision-makers say they're unsure how to assess the optimal deployment option for each application. And without a clear cloud policy, 46% continue to be plagued by unauthorized cloud purchases by employees, which can leave the business vulnerable to security problems and high costs.

2. **Taking a "set-it-and-forget-it" approach.** 47% of IT decision-makers cite the lack of vendor lock-in as part of the appeal of cloud. But even without the sticky contract commitments associated with traditional infrastructure purchases, the vast majority of businesses don't move cloud workloads once deployed, or even assess other options. As a result, many are overpaying for their cloud services: 53% of IT leaders say they struggle to manage costs to run cloud applications.

3. **Neglecting the network.** 59% of IT leaders say their cloud deployments have been stymied by "unreliability

of networks connecting cloud centers to users." But few add network expertise to the digital transformation team. A successful cloud strategy requires integration of next-generation connectivity and efficiency options, such as SD-WAN.

4. **Disrupting business during migration.** 57% of IT decision-makers delay moving critical workloads to the cloud because they are concerned about the impact of the migration on business. And their fears appear to be well-founded: among those who have already migrated premises-based workloads or data to the cloud, 58% say they faced significant challenges, including application downtime, data loss, and non-compliance.

5. **Failing to assess security risks adequately.** A flexible IT environment may include data and applications residing in multiple clouds and on-premises data centers, each of which may require separately-configured security components and solutions. That can be a problem to manage when workloads are split or share data among environments. 51% of IT leaders say they struggle to maintain security profiles for cloud and hybrid workloads.

6. **Not surrounding your business with experts.** The pace of new technology introductions is outpacing the number of qualified IT technicians, leaving many businesses unprepared for digital transformation. 55% of IT executives say they do not have sufficient cloud expertise on staff to implement their strategy effectively. The business is paying the price: 50% of IT decision-makers say their cloud strategy implementation has failed to meet expectations of Line of Business colleagues.

HOW THE RIGHT THIRD-PARTY EXPERT CAN HELP

Recognizing they are unprepared for the task ahead, the majority of IT leaders are willing to look outside the business for help. According to the Frost & Sullivan survey, 93% of businesses engage some sort of third-party assistance as they design, implement, and manage their clouds.

But who are they turning to? Businesses' choice of an expert reflects the wide range of market participants who offer their services, including:

- Cloud service provider – used by 25% of IT decision-makers

- Cloud platform provider – used by 21%

- Managed Services Provider – used by 13%

- IT vendor – used by 10%

- Security service provider – used by 9%

And yet, despite their high utilization of partners, IT leaders continue to experience dissatisfaction and loss of confidence in their cloud journey. It appears that the consultants they're engaging are not delivering the high degree of expert assistance they require. Most service providers have expertise in just one or two of the many areas that comprise a "digital transformation." Many of those offering assistance have a vested interest in their own solutions; for example, cloud service providers will likely focus recommendations on their own clouds rather than a multi-cloud or hybrid strategy. Many providers understand the technical aspects of cloud deployments, but are not equipped to address the organizational or "people" impacts that are key to a successful transformation. Still other providers are adept at creating textbook "greenfield" solutions—but have little appreciation for the very real constraints and priorities faced by large enterprises.

The right expert will bring a breadth and depth of experience, backed by market-tested methodologies. Specifically, you should look for:

- Expertise across the range of cloud infrastructure deployment models (private, public, hybrid, multi-cloud) and vendors

- "Big picture" expertise in critical disciplines beyond IT infrastructure; for example, SD-WAN, security, compliance, and migration

- Experience working with enterprises like yours; for example, companies in your industry or market segment, or with your distribution model

- Proven track record of success in professional services engagements, to complement your own team's skillset

WHY AT&T CONSULTING SERVICES?

Whether businesses are looking to accelerate their digital transformation or get their cloud journey back on track, they would do well to consider AT&T Consulting Services. The company has successfully driven the digital transformation of some of the largest and most visible technology market leaders in the world, starting with itself. In fact, cloud and SD-WAN consultants within the AT&T Consulting Services unit continue to work with their internal colleagues, sharing information and results across organizations to continually improve the processes and outcomes.

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Among the value AT&T can bring to your cloud journey is:

- **Unique, first-hand knowledge** of the challenges of digital transformation. Because they are involved with AT&T's own internal transformation, AT&T's consultants understand not just technical challenges facing businesses but also challenges related to organization, culture, IT staff and end-user perceptions, embedded processes, business processes, and more. AT&T's team helps you understand and navigate such challenges without derailing the initiative.

- **Broad and deep expertise.** Given the pace at which new technologies are being introduced into the market, it's not surprising to find "consultants" who are barely one step ahead of the companies they're advising. In contrast, AT&T consultants have an average of 12 years of industry experience in the range of disciplines that feed into a digital transformation strategy, including cloud, legacy data center modernization, SD-WAN, security, and governance.

- **Proven methodology** that can be customized to your unique business needs. Consulting firms that

start with a blank sheet of paper generally have inconsistent approaches and outcomes for each engagement—and your company bears the cost of an ad-hoc methodology. In contrast, AT&T consultants draw on a well-honed process and toolkit to facilitate your transformation journey. You can select which steps you need, depending on where you are in your transformation journey: beginning with a solutions roadmap, and extending through design and engineering; test; pilot and proof of concept; validation. Furthermore, AT&T does not require a leap of faith: you can see actual sample deliverables before you begin your engagement.

- **Solution-agnostic approach.** Your optimal cloud environment will likely include a range of public and private cloud services; management and integration software; and premises-based equipment. You can trust AT&T to recommend the optimal end-to-end solution, whether offered by AT&T or other industry leaders.

- **Recognition of organizational challenges** facing enterprises. Silo'd departments and cloud-resistant technicians can derail a cloud project before it gets off the ground. AT&T will help you forestall such challenges by working with you to gain support across all stakeholders.

- **Market leadership in strategic technology.** Technology is evolving fast—too fast for many IT organizations to absorb it. In the Frost & Sullivan survey, "keeping up with new technology" has ranked as the top challenge facing IT leaders for the past 6 years. While many consultants follow the market, simply helping you implement technologies, AT&T is often ahead of the market—identifying the most promising technologies, applications, and use cases for your business. In addition, AT&T helps you focus your journey not on implementing the latest technology, but on building a foundation that is adaptable to change, to better leverage tomorrow's technologies as well as today's.

THE LAST WORD

In the digital era, technology is no longer simply a tool for performing the same old tasks and processes. Instead, companies that survive and thrive understand that technology can be leveraged to create disruptive business models, innovative products, new ways of interacting with customers, and greater insights. That's what digital transformation is all about. But it's not easy to implement such dramatic change into an established business, in any industry. And the stakes are high: a company that delays its transformation or takes baby steps will likely find itself losing share to competitors.

That's why companies are overwhelmingly turning to external consultants to assist with their digitization efforts. However, many consultants lack the expertise, tools, and track record to deliver the value you need. The answer for many businesses can be found with AT&T Consulting Services. AT&T consultants offer the experience and knowledge to help you successfully transform your business.

Don't let competitors grab your customers and shareholders. Find the right consultant today.

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For more information about AT&T Consulting Services, visit att.com/cloud.

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