aptum

THE BUSINESS LEADER'S GUIDE TO
DIGITAL TRANSFORMATION IN THE CLOUD

How to drive business goals with a well-constructed cloud strategy — and avoid common pitfalls.
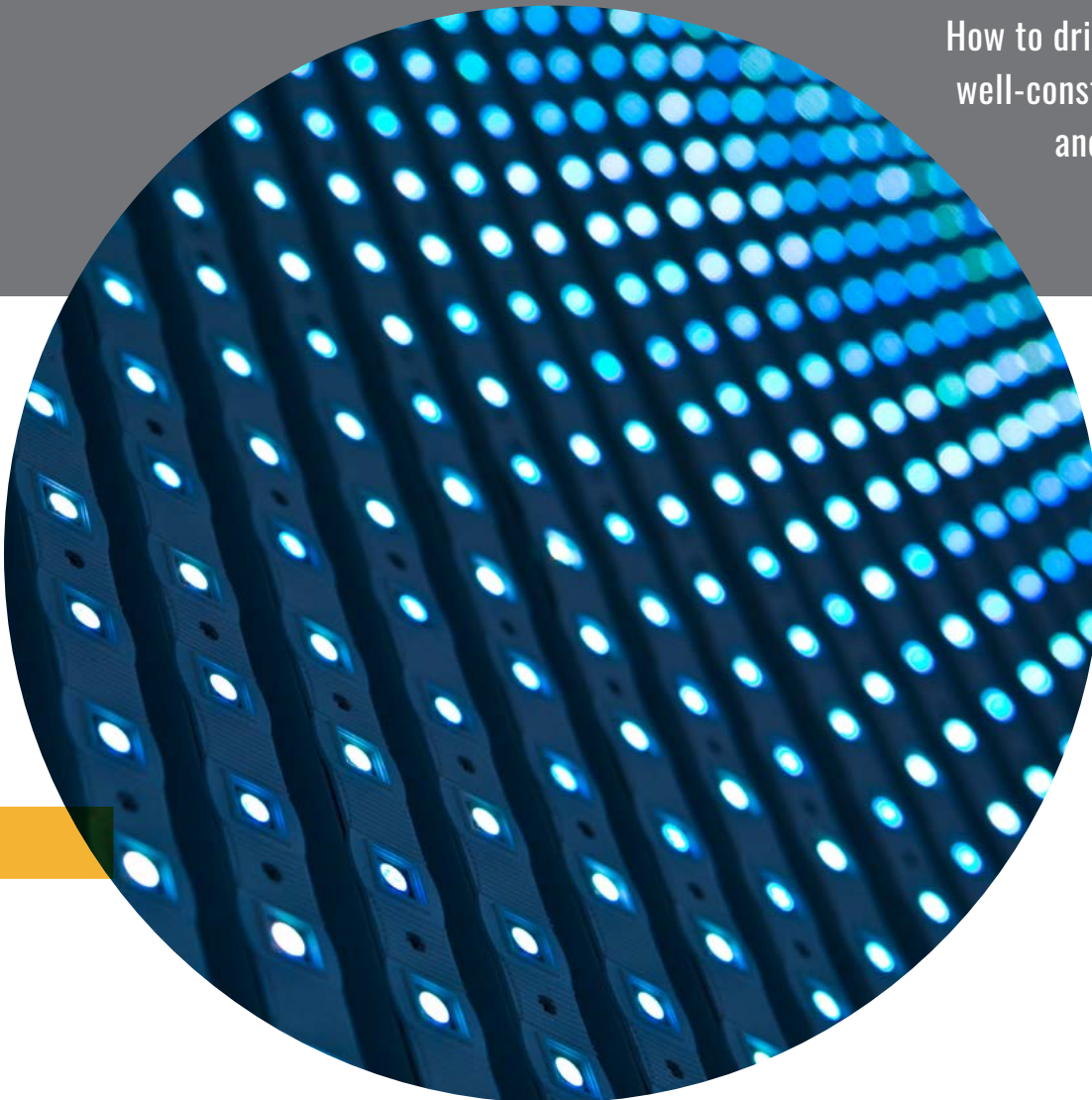
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WHITE PAPER: DIGITAL TRANSFORMATION IN THE CLOUD

INTRODUCTION
FUTURE-PROOFING YOUR BUSINESS

FOR COMPANIES BIG AND SMALL, THE WRITING IS ON THE WALL: INNOVATE OR FALL BEHIND.

Disruptive competitors are chipping away at traditional businesses using technology and innovative business models. To counter the wide-sweeping impacts, traditional businesses must also transform. Just as Airbnb has widely disrupted the hotel industry in several short years, ride-hailing services such as Uber and Lyft are also disrupting the taxi industry. These examples also demonstrate the potential speed of disruptive models, putting additional pressure on the competition.

A 2018 survey of 1,300 CEOs by KPMG showed that 71 percent of them are personally ready to lead a radical organizational transformation.

However, the evolving technology landscape has added complexity to the leadership's plate. Established companies are forced to think and act like start-ups to maintain their competitive edge. CEOs are stepping up to lead digital transformation initiatives across their organizations to ensure the success of their business imperatives such as the ones shown below.

> Leadership, including the C-Suite and Director level, must transform their organizations and teams to drive enterprise-wide change and solidify the future sustainability of their business.

IMPROVE OPERATIONAL EFFICIENCIES

DELIVER A SUPERIOR CUSTOMER EXPERIENCE

REDUCE IT EXPENDITURE

CAPTURE MARKET SHARE

OUTPERFORM THE COMPETITION

REDUCE TIME TO MARKET

Despite the fact that priorities will vary from company to company, industry analysts and business leaders agree that digital transformation is key to delivering an enhanced customer experience, even if that is still a work in progress.

Applications and services have to be highly available, flexible, and scalable. A robust IT infrastructure is a fundamental requirement to meet the demands of connected customers.

CLOUD-BASED SERVICES HAVE EVOLVED AS THE UNDERPINNING OF DIGITAL TRANSFORMATION.

Businesses can run their applications on internal company infrastructure or host them with a cloud service provider. However, the reality for companies not born in the cloud is likely to be a hybrid solution — offloading certain applications to a trusted cloud service provider while the rest of the applications continue to be managed in-house.

"Over half of CEOs (54 percent) are actively disrupting the sector in which they operate, rather than waiting to be disrupted by competitors. To win the digital race, CEOs are taking close personal ownership of driving digital transformation. They recognize the power of data to personalize the customer experience, though only 23 percent claim to be exceeding customer expectations today."
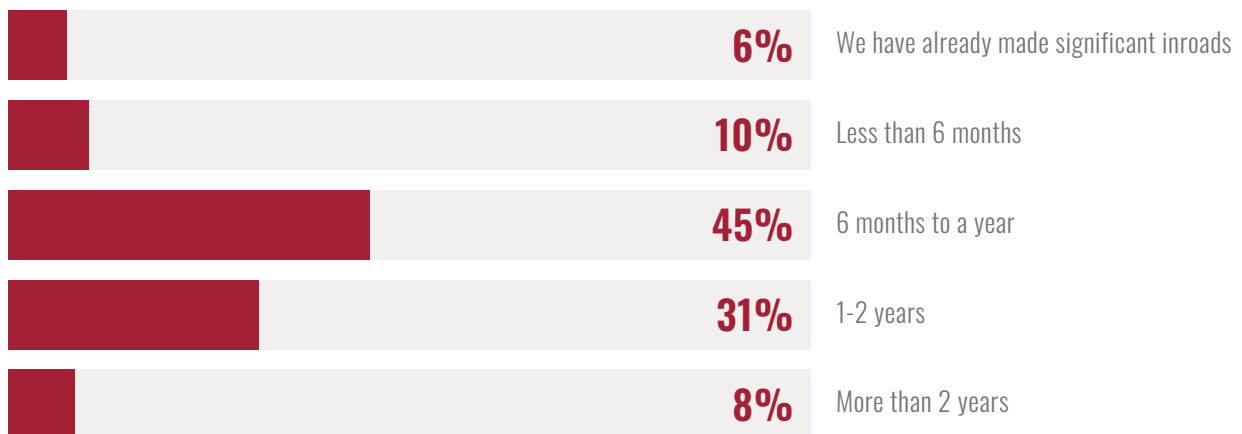
– KPMG, 2018 Global CEO Outlook

HOW ARE OTHER DIGITAL DECISION-MAKERS MANAGING THEIR ORGANIZATION'S DIGITAL TRANSFORMATION?

59% ARE WORRIED THEY MAY BE TOO LATE WITH THEIR DIGITAL TRANSFORMATION EFFORTS AND WILL FALL BEHIND THEIR COMPETITORS.

45% THINK THEIR ORGANIZATION MUST MAKE SIGNIFICANT INROADS WITH DIGITAL TRANSFORMATION BEFORE THEY SUFFER FINANCIALLY OR FROM COMPETITIVE THREATS.

75% ARE TAKING INCREMENTAL STEPS RATHER THAN HAVING A FULLY ROLLED OUT DIGITAL STRATEGY.

96% OF ORGANIZATIONS SEE DIGITAL TRANSFORMATION AS CRITICAL OR IMPORTANT, YET 48% SAY THAT IT IS NOT A TOP PRIORITY.

6%	We have already made significant inroads
10%	Less than 6 months
45%	6 months to a year
31%	1-2 years
8%	More than 2 years

Source: Progress - A Report on the State of Digital Business

SECTION 2
WHAT DOES DIGITAL TRANSFORMATION REALLY MEAN FOR AN ENTERPRISE?

CLOUD IS ABOUT ENSURING BUSINESS OUTCOMES TODAY AND TOMORROW.

Simply put, digital transformation is **how your business will evolve and transform.**

At its core, digital transformation involves the process of leveraging technologies to transform the way a business operates. This requires companies to roll out new digital capabilities holistically to deliver desired business outcomes.

"Digital transformation will depend on the texture of an individual business. What is relevant for one business is different for another one. There are some similarities, but digital transformation initiatives are typically customized to specific businesses and their individual challenges."

– Robert Harley, Aptum Product Manager, Cloud Services

Use cases for digital transformations span the enterprise, mid-market, and small business markets. Here are some everyday examples:
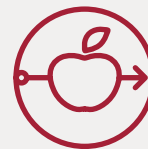
FINANCIAL SERVICES
Digital cheque deposits and online trading portals.

RETAIL
Mobile checkout, online prescription glasses and frame fitting.

FOOD SERVICES
Digital menus in restaurants, online grocery sales and delivery.

UTILITIES
Smart meters and smart factories leveraging IoT.

AGRICULTURE AND FARMING
Digital livestock tracking and autonomous farm vehicles.

ENTERTAINMENT
E-tickets, streaming music and videos.

According to market intelligence firm IDC, "Worldwide spending on digital transformation investment is growing at 17.5% CAGR and will soar to $7.4 trillion over the years 2020 to 2023."

Many businesses have kicked off their digital transformation without realizing it. Subscribing to a CRM application such as Salesforce.com or moving an on-premise company email server to Office 365 can be deemed as first steps into digital transformation, enabling productivity gains and employee mobility.

WHAT'S IN A NAME?

Digital transformation, sometimes abbreviated as DX, focuses on using digital technologies such as cloud computing, big data and artificial intelligence to make foundational changes in the way your organization operates. It is not about turning a traditional process into a digital one, but the goal is to completely **transform the way your organization uses its technology, people and processes to become more efficient and effective.**

LOOK BEFORE YOU JUMP

TECHNOLOGY IS ONLY ONE PIECE OF THE DIGITAL TRANSFORMATION PUZZLE.

Ensuring a sound digital future for any company involves **identifying the right technologies, people, processes, and partners**. The technologies and platforms that a company chooses will depend on the nature of its business, its current state, and the outcomes it expects to drive.

"When it comes to digital transformation, you can't separate the technology from the people and the processes. You have to bring the people along on the journey and have the processes and partners to support that."

– Craig Tavares, Aptum Head of Cloud

Employees with the right skill-set are critical to the success of any digital transformation initiative. Processes need to be tweaked or created to support the technology and people. Organizationally, there is a need for a cultural shift to ensure that the new systems, tools, and processes are utilized to ensure success.

It's important to remember that any good cloud strategy will allow you to capture more of your IT team's strengths and focus them in areas of your business that will help drive growth.

A partner who can help with identifying technology solutions that fit the company's needs and objectives can be an essential element of a digital transformation journey.

While global leaders may face similar challenges, a recent Microsoft study in the UK points to key challenges faced by leadership.

38% OF UK LEADERS BELIEVE THEIR BUSINESS MODELS WILL CEASE TO EXIST WITHIN THE NEXT FIVE YEARS.

23% A CULTURAL SHIFT IS REQUIRED TO DERIVE VALUE FROM DIGITAL TRANSFORMATION, BUT JUST ONE IN FOUR LEADERS SAY THEY HAVE A MAJOR INITIATIVE IN PLACE TO CHANGE THE WORKPLACE CULTURE.

47% OF PUBLIC SECTOR LEADERS SEE BUDGET CONSTRAINTS AS THE BIGGEST POTENTIAL BARRIER TO SUCCESSFULLY TRANSFORMING INTO A DIGITAL ORGANIZATION.

Source: Microsoft's Creating a Culture of Digital Transformation

SECTION 3

HOW CAN AN ORGANIZATION KICKSTART ITS CLOUD JOURNEY?

ALL SOLUTIONS START WITH A PROBLEM.

Business decision makers have to answer many questions before they can kick off a transformation project.

- What are the right investment choices that align with the defined business goals and outcomes?

- What is the primary driver behind the initiative? Is it cost reduction? Productivity improvement? Innovation? Security?

- Are there impending events that need to be factored in such as a data center closure? Is there end of life software that needs to be considered?

- What is the measurement of success?

- Are there skilled internal resources who can handle the transformation?

- Are there services that need to be outsourced to a partner?

Wrong choices can be financially and operationally catastrophic. Understanding the complexity of new and existing environments along with the detailed plan of the migration is key to avoiding costly mistakes.

5 STEPS TO LEAD YOUR DIGITAL TRANSFORMATION JOURNEY:

SET A CLEAR MISSION
Include goals and your reason for this digital change. How will it improve your corporate culture and the customer experience?

1

COMMUNICATE YOUR GOALS
Be open with your teams and reinforce your mission regularly through multiple communication channels.

2

IDENTIFY INNOVATORS
Who else can lead the charge and become a change agent within your organization?

3

PROVIDE THE TOOLS AND TIME
Allow employees the freedom to experiment with new technology as they forge a new path.
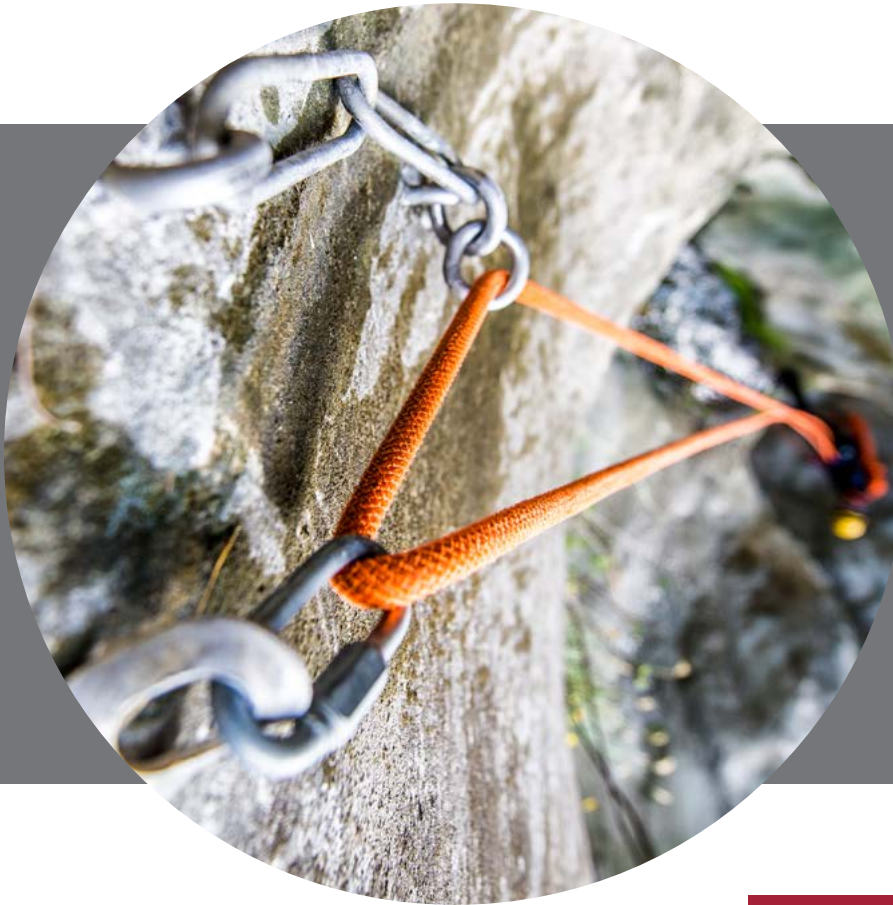Failures should be seen as learning experiences.

4

CREATE A FEEDBACK LOOP
Optimize as you transform by listening to your people's concerns and issues, then resolving conflicts and tension as you work towards the established goals together.

5

Source: Microsoft's Creating a Culture of Digital Transformation

NOT AS SIMPLE AS A TO B

Knowing where to begin can be a problem for many companies planning a digital transformation. While technology, people, and processes are the main pillars of a digital transformation, the technical aspects alone can be daunting.

Choosing the right infrastructure, network, and the applications that run on it are key technical considerations that go into a successful and sustainable transition plan.

The process can be complicated for businesses with older applications and legacy infrastructure. However, this can also be true for modern workloads. For example, native kubernetes in Azure or AWS cannot be easily transitioned between platforms.

Different workloads may require a different strategy to modernize. Decisions on retaining, repurchasing, or retiring workloads have to be made. When moving to the cloud, some workloads may need to be re-platformed and others refactored.

"There is the perception that cloud will automatically reduce the costs of an existing IT environment. You can't just take everything you have, load it up to the cloud and expect it to save you money. You may have to rearchitect or refactor the solution in some way to see the benefits."

– Craig Tavares, Aptum Head of Cloud

HOW TO KICKSTART YOUR DIGITAL TRANSFORMATION.

With digital transformation, it all starts at the top of your organization. Approval and direction from the C-suite will enable cross-functional alignment and buy-in — also crucial to developing and executing a successful strategy.

There must also be a clear understanding of the technology gap that the organization is trying to bridge in order to deliver benefits to the business. Every team involved in the transition must be aligned and supportive. At the outset, measures of success and ROI goals have to be clearly defined, allowing you to evaluate the project's progress and make adjustments as needed.

DIGITAL TRANSFORMATION SHOULD BE VIEWED AS EVOLUTIONARY RATHER THAN A SINGLE LARGE PROJECT.

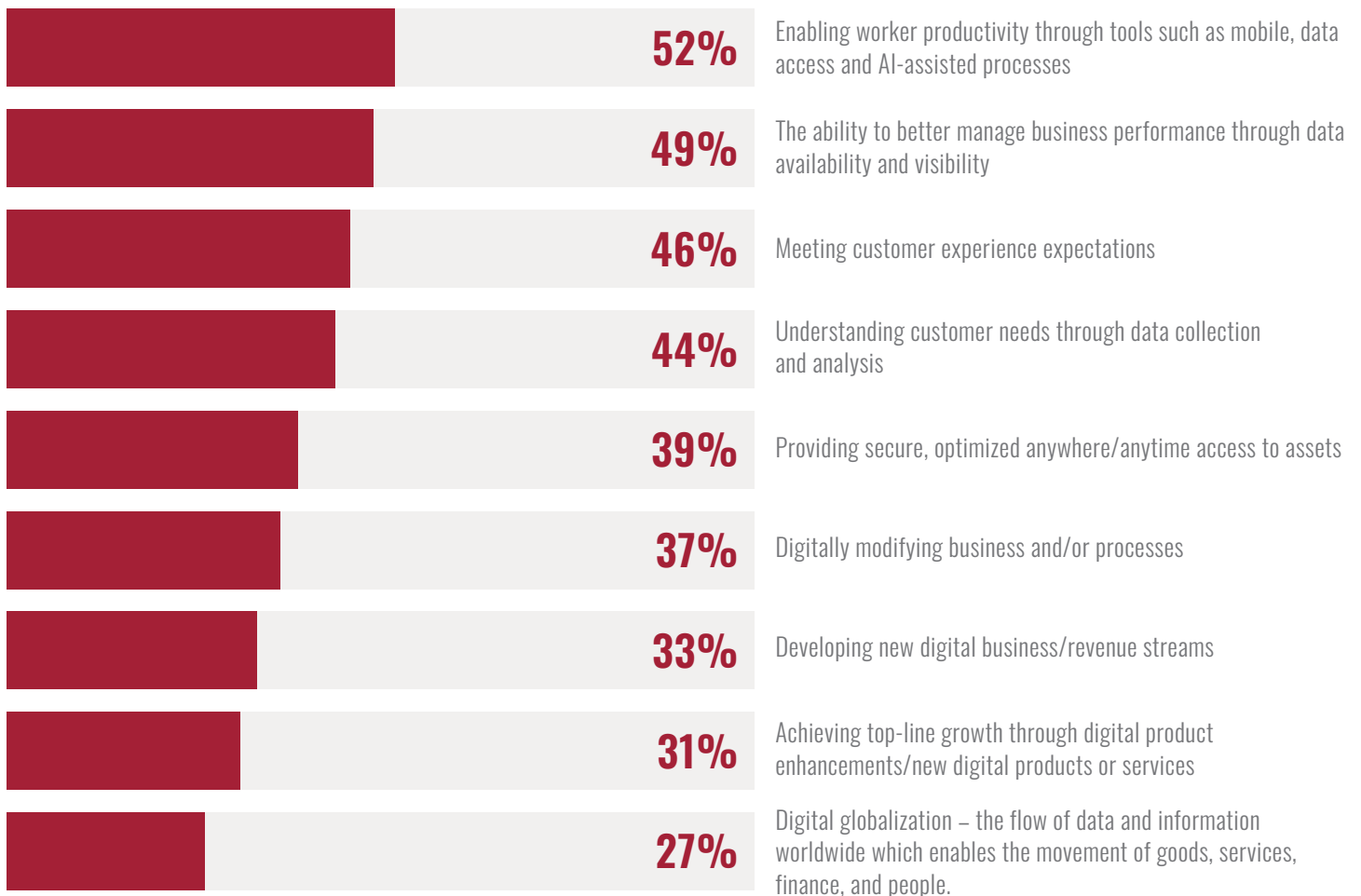"Whether it is minor changes to allow for scalability, or a complete recoding to move to a Continuous Integration/ Continuous Delivery DevOps model, the cloud can deliver efficiencies if solutions are architected correctly. Your application development teams will be able to deliver releases faster and more frequently which in turn benefits customers."

– Robert Harley, Aptum Product Manager, Cloud Services

GETTING ON THE SAME PAGE.

A recent IDG survey showed that becoming a **"digital business"** meant different things to the surveyed organizations.

52% Enabling worker productivity through tools such as mobile, data access and AI-assisted processes

49% The ability to better manage business performance through data availability and visibility

46% Meeting customer experience expectations

44% Understanding customer needs through data collection and analysis

39% Providing secure, optimized anywhere/anytime access to assets

37% Digitally modifying business and/or processes

33% Developing new digital business/revenue streams

31% Achieving top-line growth through digital product enhancements/new digital products or services

27% Digital globalization – the flow of data and information worldwide which enables the movement of goods, services, finance, and people.

Source: IDG - 2018 State of Digital Business Transformation

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IT'S NOT "ONE SIZE FITS ALL."

Naturally, every business and industry has different requirements from the next.

Cloud computing, Internet of Things (IoT), big data analytics, machine learning (ML), artificial intelligence (AI), and other overarching technologies are viewed as crucial elements to digital transformation. And while there is no shortage of technology to enable digital transformation, there is also no requirement that all the options be applicable in every business context. Big data may be essential to an advertising agency, for example, yet they may not see the same relevance in IoT and edge computing.

Where applications and workloads are placed will differ based on business requirements. It is important to work with a partner who understands the complexities and can assist you with the migration to the cloud and its ongoing management.

The impact on applications that do not move to the cloud will need to be considered in terms of networking, connectivity, and latency between environments.
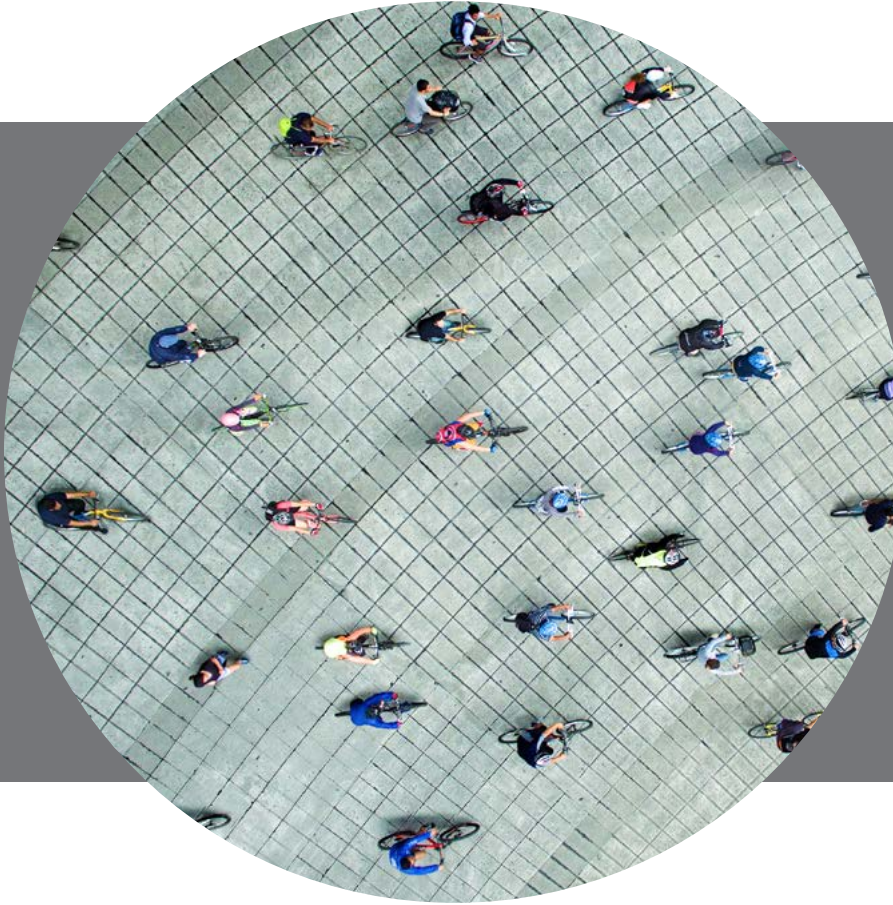
SECTION 4

CLOUD AND DIGITAL TRANSFORMATION GO BEYOND TECHNOLOGY

UNDERSTANDING YOUR OPTIONS AND OUTCOMES.

Companies launching digital transformation initiatives need to have a clear understanding of different cloud services and how to best leverage them.

From IaaS to SaaS, the cloud is complex and there are many variables to consider. When looking at different solutions and comparing cloud products, it is essential to be working from a set of standardized definitions.

PRIVATE CLOUD

Refers to a computing environment running on dedicated hardware serving a single client. Private clouds can be run in a company's data center or outsourced to a Managed Private Cloud service provider. Private clouds are ideal for legacy applications or applications that require special handling or data residency requirements.

PUBLIC CLOUD

A group of computing services offered by a third-party provider over the public internet. Public cloud services offer global scalability and high resiliency for mission-critical applications.

HYPERSCALE CLOUD COMPUTING

Distributed computing environments that can add large numbers of servers and computing resources on demand. Amazon AWS, Microsoft Azure, and Google Cloud Platform are examples.

For most established businesses, a **hybrid IT environment** comprising a blend of on-premise, third-party hosted, and one or more cloud platforms may end up being the reality. Hybrid can also include the network connectivity services that are a fundamental enabler.

While cloud is an essential component of digital transformation, it is necessary to acknowledge that not all applications are optimized for the cloud space.

"There are many divergent paths to a solution in the cloud, which can enable success or cause adverse delay due to the scale of the options. The evolutionary nature of hyperscale clouds can be challenging to keep pace with and requires a commitment to enhancing skills, which can be done through training or leveraging the expertise of cloud partners"

– Craig Tavares, Aptum Head of Cloud

DIGITAL TRANSFORMATION IS NOT AN ALL-OR-NOTHING CHOICE.

Businesses should take a deliberate project-based approach to digital transformation which will allow them to prioritize applications, test, and learn from the initial projects.

By first moving non-critical workloads to the cloud, impacts to ongoing business operations are minimized. Applications and services can then be tweaked and optimized.

DISASTER RECOVERY: USE CASE FOR AN INITIAL CLOUD MOVE.

A mission-critical application that runs in a company's data center would need a disaster recovery (DR) set-up, which can come with a high price tag. A fully paid-up DR instance, deployed on the company's infrastructure, sits idle until it is evoked in a disaster situation.

Moving that DR instance to the cloud can be an excellent first digital transformation move. The cloud-based DR can be set up in parallel without impacting the production infrastructure. While a baseline is still required for storage, network transit costs, and minimal compute, the increased resources in a cloud DR are only billed when the recovery is initiated — which results in lower business continuity costs.

SECTION 5
CONCLUSION

DIGITAL TRANSFORMATION INITIATIVES WILL VARY BY BUSINESS.

A true and effective digital transformation will require a comprehensive approach that breaks up the transition into manageable projects with clear business outcomes and timelines.

Cloud-based services and cloud-native applications are at the forefront of digital transformation and will have to be an integral part of the organizational change.

However, navigating the complexity of options and ultimately making the right investment choices will be the difference between reaping the full benefits of your digital transformation, or encountering pitfalls that may threaten business objectives.

Hybrid environments will be the reality for the majority of businesses as they transform, and partners who understand this complexity and have the services to support it are critical.

FIND OUT HOW APTUM CAN ACCELERATE YOUR CLOUD JOURNEY

Visit www.aptum.com or email info@aptum.com

VISIT THE CLOUD HUB AT INFO.APTUM.COM/CLOUD-HUB FOR MORE RESOURCES RELATED TO YOUR CLOUD JOURNEY.

ABOUT APTUM TECHNOLOGIES

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