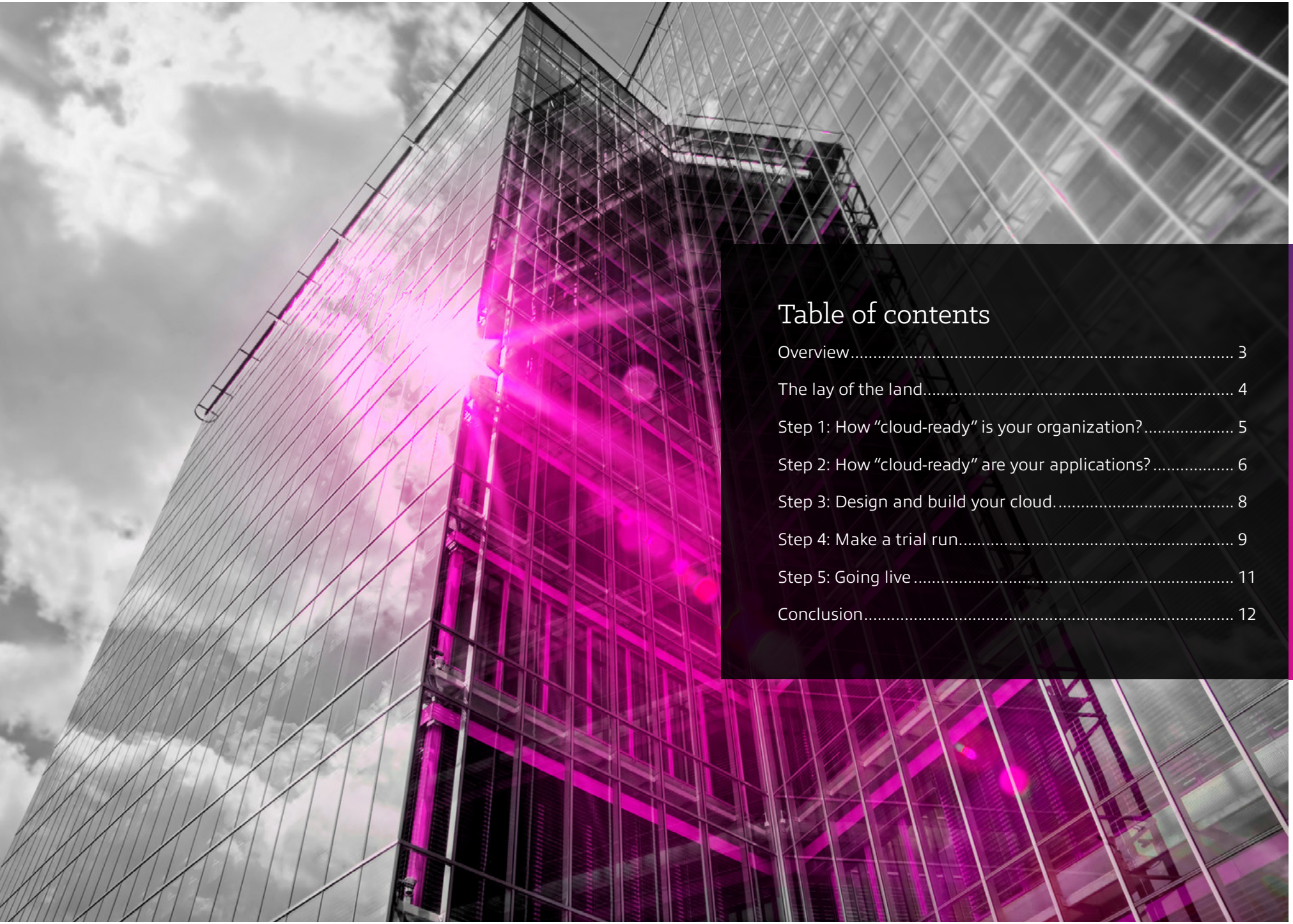

SUCCESS IN THE CLOUD:
5 Steps for Effective Migration
Insight



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Overview

It's safe to say the cloud is no longer "the next big thing" — most organizations are already taking advantage of the many benefits cloud has to offer. In fact, our Insight-commissioned Foundry survey of 400 decision-makers found that more than half of respondents' data resides in public or hybrid cloud.[1]

Cloud may be commonplace, but success in the cloud is not automatic. Cloud migration — whether you're just starting out or expanding your existing cloud footprint — brings with it several questions and considerations: Which applications are better in the cloud versus on-premises? How can you migrate with minimal risk and disruption? What about security and compliance in the cloud?

This guide will help answer these questions and put you on the path to maximizing the benefits of cloud.

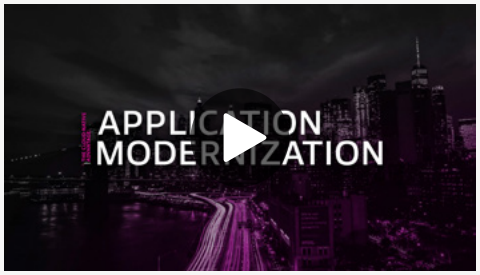
Key cloud benefits

- **Infinite scale and automation to grow applications up or out as needed**
- **Opportunity to innovate and "fail fast" with new applications**
- **Cost savings (with more measurable, monthly OpEx costs)**

The cloud-native advantage

Think of the benefits of cloud: agility, scalability, cost savings. Now multiply those benefits across the business. That's the cloud-native advantage, and it's why so many organizations are either starting a move to the cloud or migrating legacy applications.

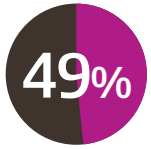
Watch this three-minute video to learn how application modernization enables businesses to take hold of certain cloud efficiencies and functionality that simply can't be replicated with legacy solutions.



The lay of the land...

Before you strike out on a new project, it can be helpful to see how others have executed similar initiatives. These findings from the The Path to Digital Transformation: Where Leaders Stand in 2023 will help you get a feel for where organizations like yours are succeeding with cloud — and where common challenges lie.

of organizations **rely on multiple cloud providers**.[2]



intend to **increase cloud adoption** via hybrid and multicloud models.[3]

plan to repatriate public cloud workloads **to an on-premises model.**[4]

Integration, security and performance management tie for the title of top challenge in public/hybrid cloud deployment.[5]

Security is the top challenge with multicloud strategies.[6]

The data goes to show that, though cloud is a crucial part of digital transformation, a) it's not the right fit for every workload, and b) it can be tough to integrate, manage and secure — especially in a multicloud model.

For making the most of cloud, whether you're looking at wholesale migration, application modernization or preparing your infrastructure for transformation efforts like adopting Artificial Intelligence (AI), the steps outlined in this ebook can help you ensure cloud success.

Note: These steps don't have to be followed sequentially. Some may overlap, while others may be shortened, altered or streamlined to accommodate each organization's unique schedule and priorities.

STEP 1:

How “cloud-ready” is your organization?

Much of cloud success comes from the initial groundwork laid during these first few phases of assessment and planning. This first step involves assessing how ready your organization is for a migration initiative. It takes a very close look at current IT operations, current processes and people. Sample questions here include:

How do you control and manage current IT costs? **How will that translate to cloud?**

What levels of security and compliance do you need in the cloud?

What skills or training are needed to support new cloud roles?

What types of **identity management and access controls** are needed for cloud?

How does the business **currently use its applications?**

How “AI-ready” is your cloud?

AI adoption is skyrocketing as businesses race to stay competitive. Can your cloud platform enable successful AI? Discover what it takes to architect AI-ready infrastructure in this video.

STEP 2:

How “cloud-ready” are your applications?

This second phase looks closely at how ready your applications are for a move to cloud. But it doesn’t just stop at applications. It looks carefully at the needs of application *workloads*. A workload represents an application and any upstream or downstream dependencies an application requires to operate successfully.

A workload may involve certain compute, network or storage needs. It can require one or more databases. It might even involve other, interconnected applications. This is where you start to determine “which workload goes where” regarding cloud. This is not always an easy task.

Insight’s survey found that more than half 

of surveyed organizations with a multicloud strategy **struggle with workload/platform alignment.**[7]

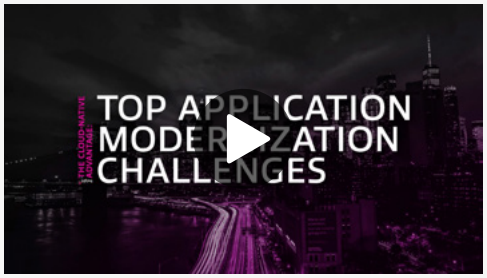
At this second phase, it’s critical to ask questions like:

+ What does this application **depend on to operate**? What **base metrics** can I collect to learn more? How much does this application workload **cost to run** now?
+ If this workload moved to a public cloud, **how often would users need to send data to it** (or, more importantly, receive data from it)? How much data? How does that translate into cloud ingress/egress charges?
+ What **“cloud-to-on-premises” connectivity options and performance levels** are needed for this workload in the cloud?

Answers to these questions help you prioritize which application workloads are more cloud-ready than others. It can also help determine any cost investments toward application modernization or optimization that may be required before certain legacy workloads can succeed in the cloud. You may find some workloads better suited for hybrid cloud or continued, on-premises operations — at least for the short term.

Two major application modernization challenges

In our years of helping clients migrate applications to the cloud, we’ve become acutely aware of some of the obstacles that stand in the way. Watch this two-minute video to learn about the two biggest challenges in application modernization and how to navigate those successfully.



Moving workloads: Who, what, where, when. . .

It's important to ask the right questions when deciding which workloads should go where. A good start is the reporter's fact-finding mantra:

Who?
Who currently uses this application workload?

What?
What upstream/downstream dependencies does the workload have with other hardware or software?

Where?
Where do the workload's components currently reside (physical servers, VMs, etc.)? Where (as in the specific cloud provider and service) do you plan to move it?

When?
When did you hope this workload could be migrated to the cloud?

Why?
Why is this workload a good candidate for the cloud? Conversely, why is it NOT a good candidate? Why does a specific cloud provider offer the best fit for this workload?

How?
How, more specifically, do you plan to move this workload?

Pro tip:

When moving to the cloud, don't just do the bare minimum.

Hasty "lift-and-shift" moves to the cloud lead to unexpected charges if you estimate your resource requirements incorrectly. It can also be quite costly to retrofit later if problems arise. Take time to plan necessary workload resources accordingly before moving them to the cloud. Similarly, plan an extra buffer of cloud resources per workload for unexpected peaks in use.

STEP 3:

Design and build your cloud.

This phase takes all of the data and findings you've amassed and develops a detailed action plan to move forward with the cloud. Take the time to work out the details here. Done properly, these plans will serve as a critical roadmap to guide you smoothly toward success with cloud services. At this stage, you will actively:

+ Architect a **cloud-based design** that aligns with your business objectives.
+ Identify and start to incorporate any needs for **cloud backup or disaster recovery**.
+ Outline a **viable hybrid cloud migration strategy**, where needed.
+ Evaluate and start to select **key cloud providers and services**.
+ Start setting up the **foundation of cloud services**. This may involve starting to build sites or setting up and exploring subscription accounts and how they can be managed.
+ Start implementing appropriate **storage, compute and connectivity options**.
+ Implement **any necessary services** based on Platform as a Service (PaaS) or Software as a Service (SaaS) cloud service models.
+ Start to **document and communicate cloud plans**, in detail, for both current and future workloads.

Cloud Choices: How to Defend Which Workload Goes Where

Learn how to advance from where you are now to where you need to be.

You don’t have to go it alone.

Cloud adoption and migration is complex. Insight partners with clients in a phased approach, with full support from analysis and workload alignment all the way through ongoing management. Watch this 4-minute video to learn more.

STEP 4:

Make a trial run.

By this point, you should have done much of the initial groundwork. Now it’s time to try out your plan and kick some tires. Two core activities are typically involved in this stage: Proof of Concept (PoC) and migration of non-production workloads.

The PoC stage

This is the perfect time to try one or more PoCs. Want to see how one Cloud Management Platform (CMP) compares to another? What about how a few sample virtual machine workloads work in the public cloud? You might want to explore how a cloud-based Database as a Service (DBaaS) platform like Microsoft® Azure® SQL could support workloads in contrast to your on-premises SQL-based environment. This is the perfect time to try things out. At the PoC stage, you can start to:

Build and test processes (prior to building all regions and services).

Validate functionalities.

Deploy representative workloads.

Answer other questions, such as how to integrate logging systems or ways to manage consumption of cloud-based services.

Assess for any added costs or capabilities.

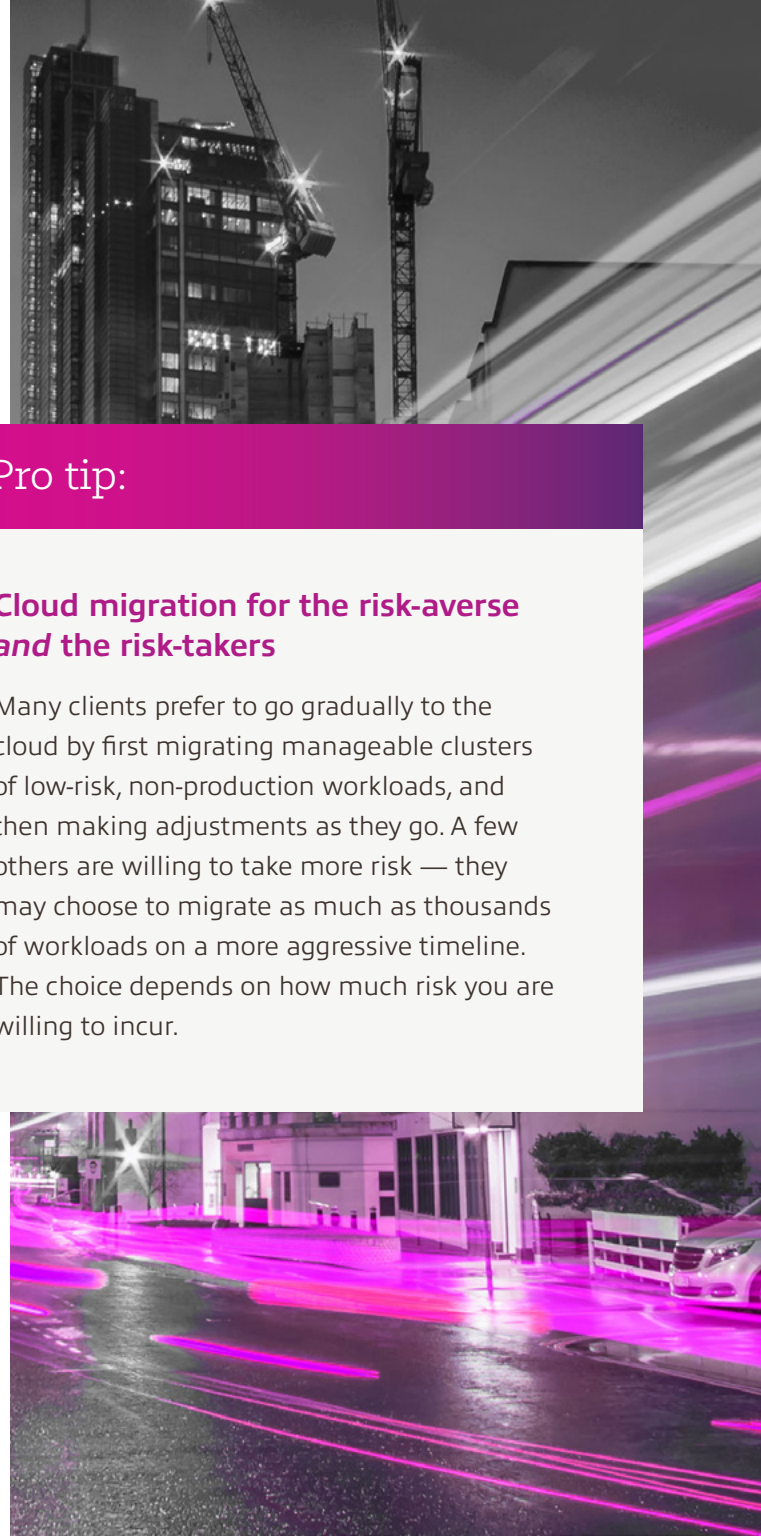
Migrating non-production workloads

This is where you start to actively migrate a good portion of your identified, non-production application workloads to the cloud. This is the chance for a better trial run to see how production workloads might run in the cloud.

For bigger organizations with several hundred (or even several thousand) workloads, this process often occurs in phases. Phase 1, for instance, might involve migrating only certain identified workloads, move groups and processes. This includes migrating or replicating any data needed to support the workloads. Included is also deployment of important backup and disaster recovery processes to support the migration.

More exploratory questions often crop up here as well, such as:

+ **How will all those virtual machines be logged** in my Change Management Database System (CMDB)?
+ **How will my support team manage** these workloads?
+ If something crashes, **how will logs be sent to a centralized logging system**?
+ **How should we update support-related documentation**, service catalogs, runbooks or support contact information to reflect services now running in the cloud?
+ **How should we rethink Service-Level Agreements (SLAs)** when workloads are in the cloud?
+ **How are the workloads performing**? How are cloud resources being used?
+ **What adjustments can we make** to better control, manage, or optimize workloads for security, governance and cost?



Pro tip:

Cloud migration for the risk-averse *and* the risk-takers

Many clients prefer to go gradually to the cloud by first migrating manageable clusters of low-risk, non-production workloads, and then making adjustments as they go. A few others are willing to take more risk — they may choose to migrate as much as thousands of workloads on a more aggressive timeline. The choice depends on how much risk you are willing to incur.

STEP 5:

Going live

All steps leading to this point have prepared you to now go live and migrate targeted production data and workloads to the cloud. By this stage, you should have a good handle on new roles and who has them, and how workloads will be secured, managed and supported. Testing and validation are still required here, just as when migrating non-production workloads.

In case there are challenges or sudden changes in move schedules, established migration runbooks with rollback procedures should also be available for all parties involved in the migration.

Here as well, you will:

- **Establish move groups and processes.**
- **Test and validate.**
- **Migrate or replicate workload data.**
- **Migrate applications** based upon earlier successful migrations with non-production workloads.

By doing the earlier planning and migration groundwork with non-production workloads, you should have higher confidence that this step of going live will go smoothly.

Multicloud migration

If you're moving mission-critical resources to a multicloud platform, your path might look a little different. Watch this video to learn about key considerations when migrating to multicloud.

Conclusion

The cloud has become an essential building block in many organizations' growth strategies. Not only does it deliver on the benefits discussed in the beginning of this guide, but it often serves as the foundation for more advanced transformation, including application modernization, AI adoption and more.

Navigating cloud for success is an ongoing journey requiring strategic preparation, cautious implementation and consistent evaluation at every step.

Explore the resources below to learn more about what it looks like to start your cloud journey with Insight and see the kind of results we can help you achieve.

- Solution brief: Cloud Envisioning Workshop
- Solution brief: Cloud Capabilities and Offerings
- Client story: Software Company Speeds Provisioning From Weeks to Minutes With IT & Cloud Transformation
- Client story: Global Mining Company Taps Into OpEx ROI for Cloud-Native Environment
- Whitepaper: Modern Applications for the New-Era End User: A Framework for Success
- Whitepaper: Migrate to the Cloud Securely: 10 Key Factors
- Infographic: Best Strategies for Building AI Infrastructure

Meaningful solutions driving business outcomes

We help our clients modernize and secure critical platforms to transform IT. We believe data is a key driver, hybrid models are accelerators, and secure networks are well integrated. Our end-to-end services empower companies to effectively leverage technology solutions to overcome challenges, support growth and innovation, reduce risk and transform the business.

Capitalizing on the cloud starts with a simple conversation.
Let's discuss your cloud journey and how we can help you advance.
Contact us today to get started.

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Sources:
[1] MarketPulse Research by Foundry Research Services. (February 2023). The Path to Digital Transformation: Where Leaders Stand in 2023. Slide 11. Commissioned by Insight.
[2] MarketPulse Research by Foundry Research Services. (February 2023). The Path to Digital Transformation: Where Leaders Stand in 2023. Slide 11. Commissioned by Insight.
[3] MarketPulse Research by Foundry Research Services. (February 2023). The Path to Digital Transformation: Where Leaders Stand in 2023. Slide 21. Commissioned by Insight.
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