Becoming cloud-powered: How to stay competitive in the next decade and beyond

Reinvent operations through app rationalization, modernization and migration strategies on Microsoft Azure to grow your business at scale with automation, intelligence, resilience and efficiency.

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What's preventing organizations from realizing ROI in the cloud?

Companies are spending more on cloud services, but few are seeing the expected payback

As the world continues to digitally transform, cloud technology plays an increasingly vital role.

With 78% of US executives confirming their companies have adopted the cloud, it's clear that businesses recognize its potential.[1] Despite its widespread adoption, only a mere 10% of executives have been able to unlock the true business value of the cloud.[1]

Can you relate?

Adopting cloud is different than being cloud-powered

As the new frontier in technology, businesses are eager to tap into the benefits of cloud computing that promise scalability, cost-savings, resilience, intelligence and productivity. But moving to the cloud or running parts of your business in the cloud is not the same as being cloud-powered.

As PwC's 2023 Cloud Business Survey identifies, the companies that report fewer barriers in realizing cloud value are the ones that have taken the time to reinvent their cloud strategy – making IT a competitive advantage through application rationalization, cloud modernization and migration at scale. They've realized that moving their workloads to the cloud as-is will likely not result in the enterprise-wide transformation that today's competitive environment requires. It's going to take a shift in mindset to reach the payback they desire.

Defining value in the cloud

Forward-thinking executives are driving their cloud migration initiatives with clear, impactful goals in mind

Though ROI remains elusive, most organizations are adopting cloud with a firm grasp on what they'd like to see as an outcome of their investment. Many want to stop overspending on IT – 78% of organizations say cost savings is the top metric for assessing progress against cloud goals.[2] This comes as no surprise as executives estimate that at least 30% of their cloud spend is wasted.[3] Beyond cost, though, organizations also want to decrease risks that threaten the business they've fought hard to sustain. Security remains a big concern with 85% of enterprises saying it is the number one cloud challenge.[3] Companies are also beginning to realize and prioritize cloud innovation with the goal of reducing the time it takes to get new products and services to customers. And they're putting a lot of stock in digital transformation in the hopes of remaining economically viable in a future that remains uncertain. Nearly 40% of CEOs don't believe their organizations will be economically viable in 10 years if they do not transform.[4] That makes the cloud a beacon of hope for executives intent on keeping pace and leading in an ever-evolving market.

But to reach the desired outcomes, it's important to embrace change and reinvent yourself in the cloud

Simply lifting and shifting applications to the cloud as-is without rethinking business operations has time and time again proven to lead to missed opportunities. To turn your aspirations into measurable ROI, PwC can equip you with the people, technology and process you'll need to determine an effective blend of rationalization, migration and modernization initiatives. Begin that journey now by first undergoing a shift in mindset and taking three essential steps to better position yourself as an outcome-driven, cloud-powered organization.

1

To decrease risk and drive operational resilience in the cloud, first increase your visibility into your IT ecosystem with greater IT transparency and data-driven insights.

2

To stop overspending on cloud resources and remain viable in an increasingly volatile economy, rethink the balance between productivity and security and then ready your business for the future with automated governance controls.

3

To innovate faster and accelerate the time it takes to get new products and services to market, implement a more agile, flexible cloud platform that empowers your development teams to help build continuously at scale.

These steps might seem daunting to activate. But they are more accessible if you harness Microsoft Azure's capabilities, including automation, AI and security, alongside modernization strategies, proven cloud migration frameworks and analytics. Here's a look at how you can bring these powerful assets to navigate each step, moving you farther along your transformation journey.

Utilizing Microsoft Azure to increase visibility and enable data-driven, confident decision making

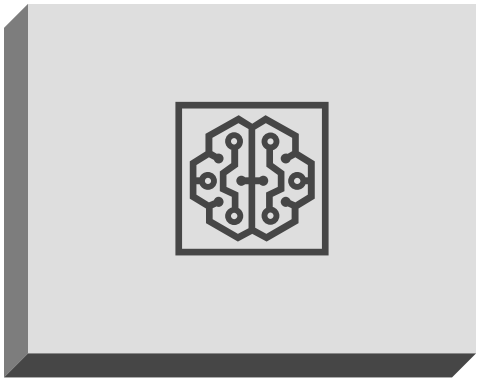
Access an always-current view of critical business services and underlying IT assets

Dependency mapping became a top cloud migration challenge in 2022.[3] Mapping the relationships across enterprise applications, hardware and networking devices for each IT-delivered service in your organization is notoriously difficult to do, especially in a rapidly evolving environment. However, it is a necessary step as you determine which of your applications should move to the cloud. If you can't see the big picture of your IT ecosystem including the hidden layers, dependencies and inefficiencies, you often lose the ability to make informed transformation decisions – such as determining what is and isn't cloud-ready and identifying what should be retired instead of migrated. Growing pools of siloed, ungoverned data can also make the decision-making process harder. The matrix of your sprawling infrastructure can at times be blindsiding, taking away your ability to stay nimble, increasing licensing costs and creating new security gaps from a lack of integration.

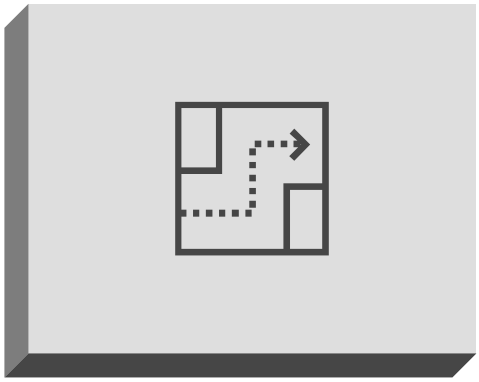
Moving to Microsoft Azure is appealing because it can help you retire the technical debt associated with maintaining and operating traditional datacenters. SaaS solutions can reduce the resources required to manage equivalent on-premises software packages. And the ability to connect assets, streamlining the flow of information and consolidating data-driven insights, will only make you that much more competitive with the ability to accelerate critical decisions. But to reach these benefits, you'll need to know how to navigate the web of your IT and migrate securely to this desired state.

Improve decisions with a holistic view of critical business services to help accelerate cloud readiness

Improving your visibility first can make a significant difference in how you decide to go about modernizing or migrating company resources. That's why we designed Terrain Insights, a PwC product and digital risk management platform that brings together automation, analytics and visualization to help enterprises reduce risk associated with manual, out-of-date and incomplete views of critical business services. This Azure-powered analytics platform makes it easier to automate portfolio review processes and can assist long term with protecting your assets through each stage of transformation. That way, you can:



Use AI and automation capabilities inherent in Azure to inform your cloud transformation strategy, identifying opportunities to integrate data sources, streamline business processes and conserve resources.



Discern where to invest in modernization with a clear understanding of how changes impact risk, customers, talent and more.

Identify what should not be modernized or migrated to the cloud and reduce unnecessary and unused resources and expenses in Azure, such as unused storage, underutilized instances and over-provisioned capacity.

Disentangle the web of IT

Deepen your understanding of how automation, analytics and visualization combine to help you make more informed decisions about transformation in the cloud. Plan a Modernization Opportunity Workshop and start identifying opportunities to refactor, re-platform, re-architect, re-engineer, containerize and/or adopt microservices.

See if you qualify for the workshop.

Use case: Increasing visibility

Leading Fortune 500 retailer leverages Azure analytics to increase visibility into critical IT services

Challenge

As a result of NotPetya ransomware and a lack of broader resilience, a Fortune 500 retailer suffered significant global supply chain disruptions. Furthermore, one of the company's major vendors shut down due to a data breach. Consequently, the company had to take a more proactive approach to mitigate risk while enhancing enterprise resilience to protect service delivery.

Solution

Leveraging Terrain Insights, a PwC product, and Microsoft Azure-powered IT asset analytics platform, the company gained a holistic understanding of current interrelationships between critical business services. PwC helped the customer enhance their visibility into every critical business service, allowing them to improve operations while significantly reducing business disruption.

Results

The company increased business service visibility by over 300% by successfully mapping Tier 0 and Tier 1 critical business services and related applications. By using powerful analytics and automation, the company can better manage their 3.5M+ assets and the 500M connections their network makes daily.

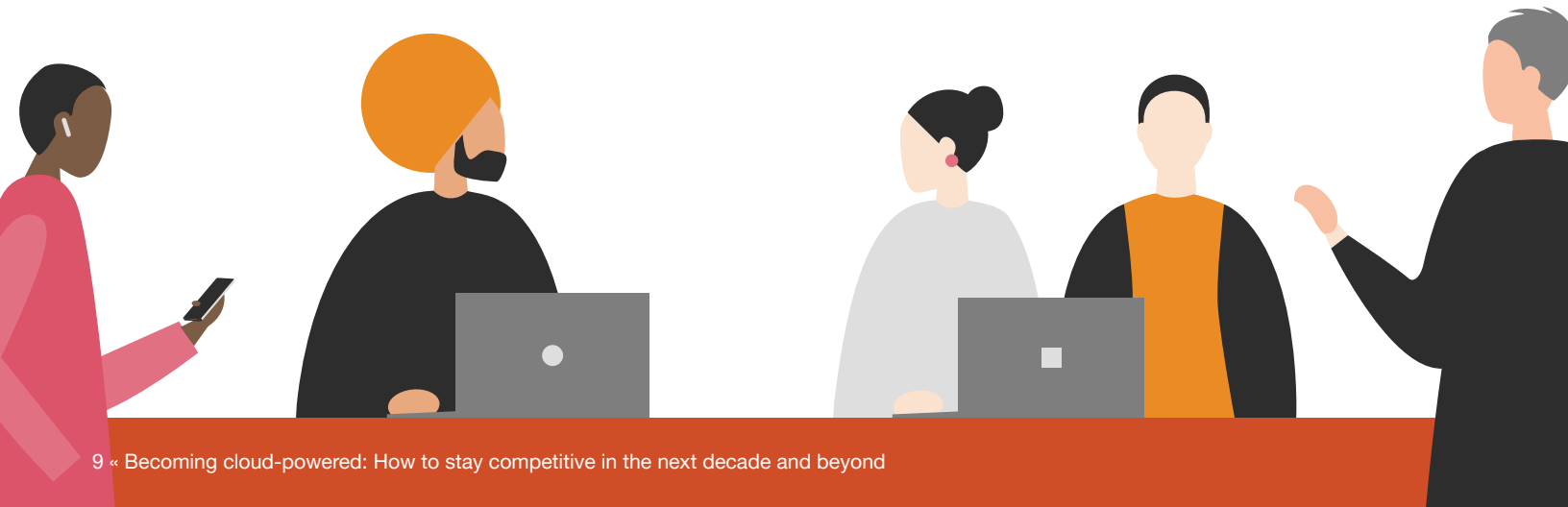
Learn more about Terrain Insights

Automating governance in Azure to reduce risk and boost efficiency

Mitigate cloud risk and optimize resources to increase the impact of your cloud spend

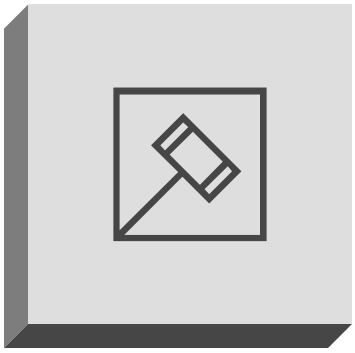
As cloud estates expand, companies should have better governance controls to maintain visibility into how their company is utilizing cloud resources. Enterprises are consistently going over budget with their cloud spend. And what's more concerning is that a big portion of that payment is going to waste, taking money away from new innovations. Organizations on average are wasting up to 32% of their cloud spend with some of the biggest contributors being ungoverned costs, unanticipated usage, lack of autoscaling abilities, wrong-sizing production environments, and suboptimal design and implementation of cloud solutions among others.[5] And beyond the overspill in expenses, ungoverned cloud resources are also a big security concern, contributing to an ever-widening attack vector and leaving your business more vulnerable to a breach.

Looking at our 2023 Cloud Business Survey as a reference point, we can see that cloud-powered companies – those businesses that are finding greater success at realizing value in the cloud – are 2x more mature when it comes to cloud governance.[2] Through trial and error, these companies have learned that to succeed as a cloud-powered business, they will need to focus on the potential risks cloud poses throughout the stages of a transformation project, taking into consideration the impact to cybersecurity, data privacy and compliance. Gartner's research supports this understanding by demonstrating there is a connection between strong cloud governance controls and the reduction of waste in IT. According to one of their recent surveys, over 40% of companies are using automated policies to shut down workloads after hours and to right size underutilized instances.[5] These findings demonstrate why it is important to implement governance as a core part of an enterprise cloud strategy. By automating governance policies, companies can further enhance their visibility and control over applications at every stage of the modernization and migration process.

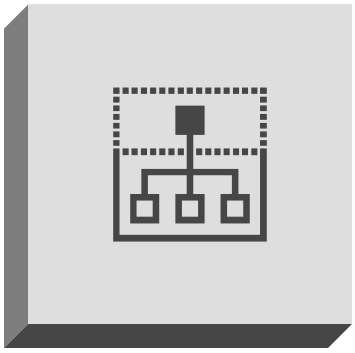


Build a modern Azure platform rooted in automated governance to enhance security and optimize cloud resources

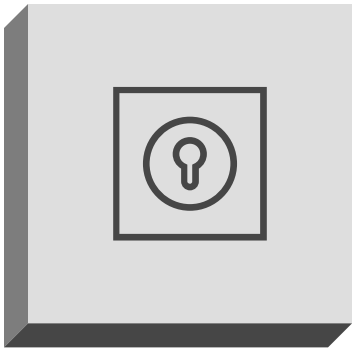
To assist companies with establishing mature cloud governance capabilities, PwC has developed a holistic Azure Foundation and Governance Framework that uses automated and IT modernization to build a scalable Azure platform with end-to-end governance and security controls. This helps you:



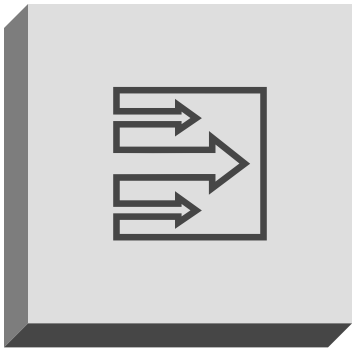
Stop stressing about compliance requirements by automating audit, reporting and enforcement of controls in your Azure environment.



Take the complexity of monitoring, controlling and enforcing access policies off IT administrators and delegate governance to Azure for a stronger, automated defense system.



Better manage risk in the cloud with the right guardrails in place and empower your development teams to build and deploy at their own pace, trusting that infrastructure and operations remain secure and always optimized.



Go bigger, scale faster by introducing new advanced Azure capabilities without introducing disruption or disaster to your business.

Optimize cloud resources

Reevaluate how you're utilizing your cloud resources. Plan a Cloud Spend Analysis Workshop to discover how you can extend Azure's innate capabilities to help streamline efficiencies with the right guardrails in place to establish compliance and protect against a possible security breach.

See if you qualify for the workshop.

Use case: Enforcing governance

Fortune 500 retailer implements Microsoft Azure policies to govern thousands of business-critical applications

Challenge

With hundreds of brick-and-mortar stores and a vast online marketplace, a Fortune 500 retailer undergoing a massive Azure migration project knew that resource management and security would be instrumental to their digital transformation.

Solution

To enable the highest levels of security, PwC helped the retailer standardize and operationalize Azure policies to govern thousands of business-critical applications. Cloud experts were deployed to create automated rules inside Azure to enforce greater infrastructure controls that would help automate the audit and remediation of compliance gaps.

Results

The Fortune 500 retailer was able to free up innovation as the Azure-embedded policies automatically monitor and enforce security controls across all provisioning methods. Application teams are now able to build and launch code at their own pace, using approved infrastructure-as-code templates to provision resources directly into Azure. This has enhanced their development team's productivity with the added benefits of greater security, improved compliance, enhanced agility and better resource management.

Increasing agility on Azure to accelerate innovation through DevOps

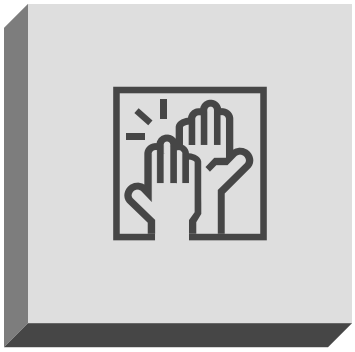
Become a nimble, digital business that is prepared to operate at scale and seize new opportunities

Now that you have addressed your visibility issues and implemented automated governance to support your modernization and migration strategy, it's time to operate at scale. But this begs a new question: How? How are you going to finally reach your cloud goals and spend less on maintaining resources long term? How are you going to use your budget to invest in your future by constantly delivering innovation that is integral to your success 10 years down the line? In what ways can you empower development processes, making them more fluid to allow for faster product releases with the right quality assurances built-in?

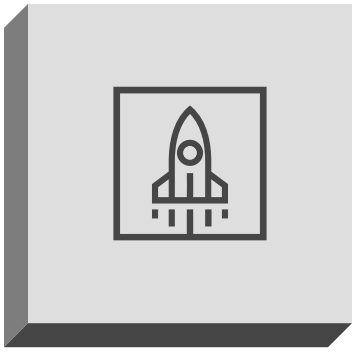
To get to that point, companies can benefit from rethinking how the cloud will impact developer productivity. Many DevOps professionals find themselves spending too much time addressing urgent issues and putting out fires, rather than focusing on proactive innovation. In transitioning operations to the cloud, companies may want to pivot how they go about building and launching new code, paying closer attention to how they are enabling DevOps frameworks to help improve velocity, quality and security within their products and services.

Standardize on application architecture with native cloud resilience, containers and auto-scaling capabilities

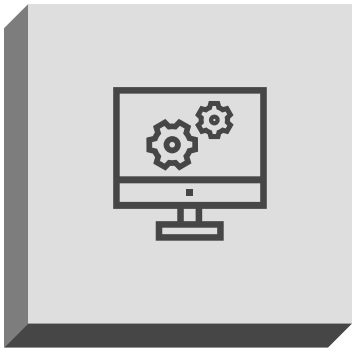
To empower developer productivity and enable automated deployment of applications, PwC Build Studio offers an on-demand pool of resources that can help you execute your transformation goals. This multilayered service delivery model applies the insights you've gathered in the previous steps to help accelerate your business in the cloud at scale. Enterprises can access a wide range of skillsets to integrate infrastructure-as-code automation that can be essential for standardizing on consistent and secure migration strategies. And by enhancing agility on Azure with powerful capabilities like AI, companies can find the freedom to continue growing as a business with greater opportunities to innovate securely across departments. This helps you:



Free up innovation and accelerate time to market by making DevOps workstreams more fluid in the cloud.



Grant app developers access to Azure, enabling them to build and launch code without having to go through Azure operators. This accelerates innovation by removing barriers that would otherwise introduce delays.



Natively integrate with tools like Azure DevOps and GitHub Actions to drive continuous CI and CD.

Rationalize and standardize on how you deliver cloud apps to establish that you are reaping the benefits Azure has to offer, including enhanced resilience, intelligence and security with auto-scaling capabilities.

Empower – don't hinder – developer productivity

Before leveraging the Build Studio to deliver on your digital transformation initiatives, start redefining how you currently use the cloud with PwC's Cloud Speed and Maturity Workshop. Explore opportunities to redefine operations with greater consistency and standardization around DevOps processes.

See if you qualify for the workshop.

Use case: Driving app standardization

Fortune 500 retailer accelerates migration of unmanaged applications to Microsoft Azure

Challenge

Over five years, a leading Fortune 500 retailer was undergoing rapid organic growth and found over 50,000 unmanaged cloud resources that needed to be migrated as part of their cloud transformation.

Solution

The company utilized PwC Azure Migration Factory to help create a standard process, controls and automation workflow to migrate their unmanaged resources to a new Azure Managed Platform. The Azure Migration Factory, part of the PwC Build Studio, introduced the skills required to standardize, modernize and migrate applications that included code refactoring, automation, telemetry and other cloud services (including Docker, Kubernetes, Azure Logic Apps, Azure Key Vault, Azure SQL and Azure Compute / Storage / Networking).

Results

The Fortune 500 retailer was able to accelerate their migration across 600+ Azure Resource Groups, cutting end-to-end migration times down to one third of the typical duration, all while driving app standardization.

Migrate to new ways of working with Azure

PwC's approach to business transformation on Microsoft Azure is outcome-oriented, blending app rationalization, modernization and migration in alignment with client goals to help them achieve the cloud payback they desire. Together, we can help you identify opportunities to make Azure a competitive business driver with tangible ROI. This leaves you with a far more flexible, secure and modern cloud platform that can be measured so that your executive board can understand the direct impact to revenue.

Become cloud-powered and stop contributing to cloud waste by reinventing your business on Azure with one of PwC's 3-week discovery workshops.

See if you qualify for a workshop ›

[1] PwC's 2023 Cloud Business Survey | PwC
[2] State of the Cloud Report 2022 | Flexera
[3] One-Third Of Cloud Spending Wasted, But Still Accelerates | Forbes
[4] PwC's 26th Annual Global CEO Survey | PwC
[5] Why Cloud Budgets Don't Stay in Check – And How to Make Sure Yours Do | Gartner