

Are you driving your
cloud strategy, or is
it driving you?



The better the question. The better the answer. The better the world works.



Building a better
working world

Market opportunity

An environment for transformation

“Moving to the cloud” is no longer a company aspiration — it is a company directive. Cloud-based optimization is now the new call to arms, as public cloud spending is predicted to exceed 45% of all enterprise IT spending by 2026, up from less than 17% in 2021.¹

Companies are facing disruption on a normal basis without the proper agility and flexibility necessary to minimize the effects of the disruptors. A company's traditional on-premises servers, disparate database systems and unintelligible data are causing glacially paced improvements that acquisitions are only able to bandage.

We have reached a critical moment in technological convergence as the maturity [of the cloud, the internet of things \(IoT\), big data and artificial intelligence](#) intersect in a new, evolved landscape. This is a once-in-a-generation shift in technology capabilities and human behavior as well as a rare business opportunity.

Visionary organizations can invest in the following to capitalize on this technology convergence and boost business outcomes like profit and customer and employee experiences via a new and improved cloud strategy:

- ▶ Edge platforms
- ▶ Multi-cloud management
- ▶ App modernization platforms
- ▶ Big data, analytics and visualization
- ▶ Anywhere workspaces
- ▶ Security and networking
- ▶ High-performance and quantum computing



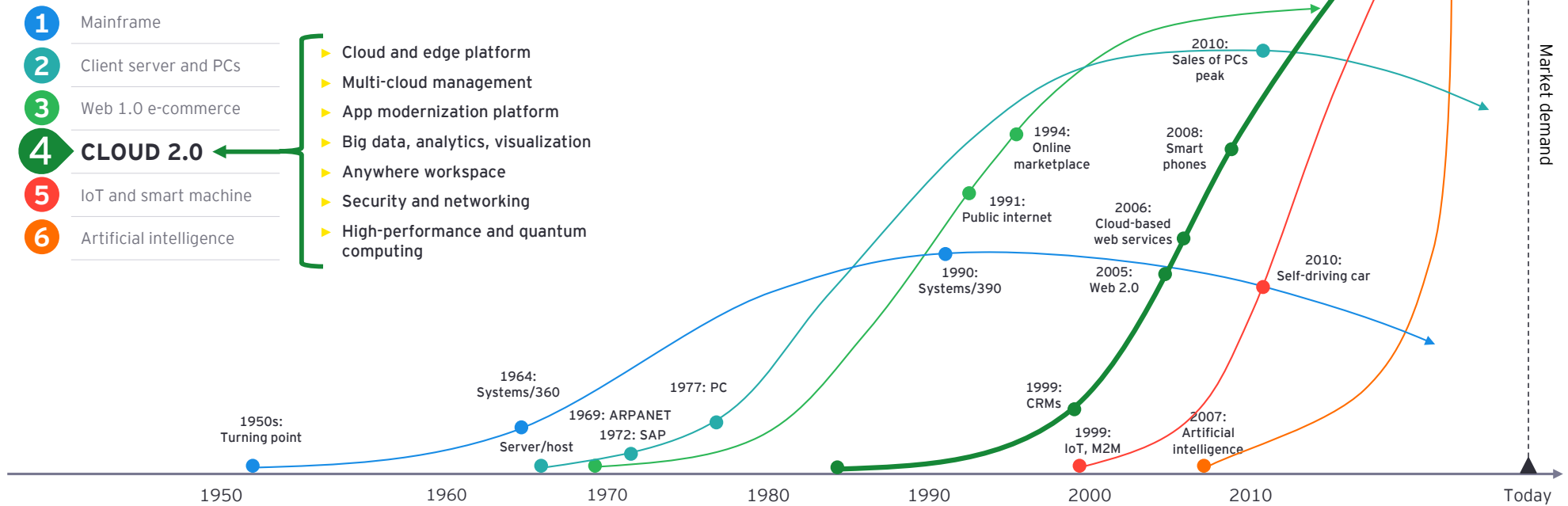
45%

of enterprise IT budgets will be related to cloud by 2026.¹

1. “Gartner Forecasts Worldwide Public Cloud End-User Spending to Reach Nearly \$500 Billion in 2022,” *Gartner website*, <https://www.gartner.com/en/newsroom/press-releases/2022-04-19-gartner-forecasts-worldwide-public-cloud-end-user-spending-to-reach-nearly-500-billion-in-2022>, 19 April 2022.

Market trend: a critical moment in technological convergence

We have reached a critical moment in technological convergence as the maturity of cloud, internet of things, big data, security “in” the cloud and artificial intelligence intersect in a new, evolved landscape. This is a once-in-a-generation shift of technology capabilities, human behavior and business opportunity.



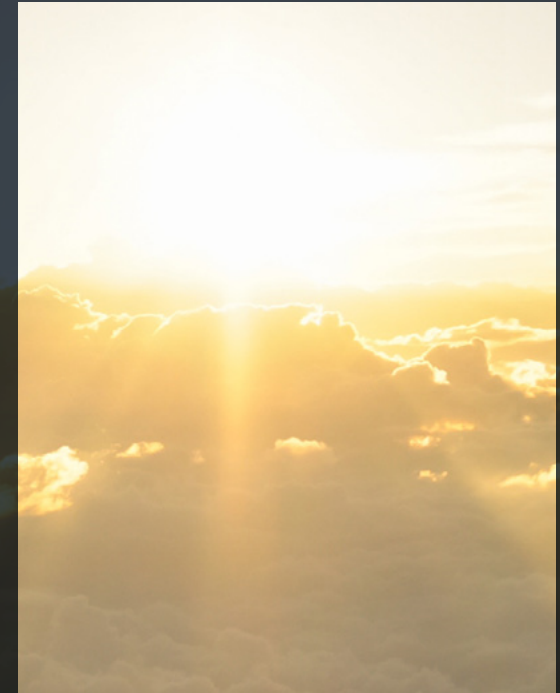
Cloud is not just one technology supporting business transformation; it unlocks value in all the technologies, data and ecosystems that drive transformation and enable businesses to innovate securely at speed.

Cloud is transforming the way businesses interact and grow. Traditional value chains are being replaced by ecosystems; composable architectures are reshaping business models, and innovations are moving more quickly from concept to launch.

People are at the center of business transformation but need to adapt to operating in the cloud. A cloud-first approach requires new capabilities, new skills, new talent strategies, a differentiated approach to customer experience and an ecosystem approach to agile delivery.

Cloud success happens when programs address:

- ▶ Cost
- ▶ Speed
- ▶ End-to-end IT integration



What are the elements of a successful cloud campaign?

[Read the full report.](#)

Cost: Is your cloud strategy evaporating your costs or your profits?

Ask yourself: How do we optimize our cloud strategy and reduce costs without sacrificing, scalability, usability, security and resiliency?



There can be different types of costs; for example:

- ▶ **Human cost reduction:** utilizing the suite of cloud applications, a company can reduce the human cost of many of its primary, labor-intensive workflows, as well as the small day-to-day tasks that consume their time.
- ▶ **Cost of carbon:** reducing costs and power usage goes together with creating more sustainable IT practices.
- ▶ **IT budgets:** cloud data storage can reduce IT operating costs by 20%-40%.

Industry spotlight: consumer products – cloud app migration and modernization

- ▶ EY professionals helped a leading consumer products company build and execute a sustainable enterprise capability to enable cloud-based applications – driving real-time insight to customer behavior patterns and accelerate the modernization and migration of applications to Microsoft Azure.



How to capture value from the industry cloud.

[Learn more about retail and manufacturing cloud use cases.](#)

Industry spotlight: consumer products – cloud app migration and modernization

The EY team helped with the following:

Discovering and
dispositioning

1,200

applications on
13,000 servers

Rehosting/
refactoring/retiring

9,800

workloads over
22 months

Retiring over

15%

of servers and
250 applications

Realizing a

75%

reduction in the
client's data
center footprint

Realizing a

36.3%

internal rate of return
(IRR) for the entire
cloud program

Negating

\$140m

CapEx and \$110m
OpEx over five years



Speed: Is your cloud journey moving fast enough to realize your business ambitions?

Ask yourself: How can we **leverage intelligent automation** to increase consistency, speed and quality while also enabling an **agile implementation** approach?



Your cloud strategy can be designed with speed in mind with composable architectures

- ▶ **Composable architectures:** Businesses are moving from highly customized, monolithic system architectures to composable business architectures. Composable systems support the flexibility demanded by transformation – with each component aligned, responsive, adaptable and replaceable. Cloud enhances key attributes of composable business architectures:
- ▶ **Modularity:** business-led, modern, fit-for-purpose cloud and data platforms to support the development and scaling of digital use cases.
- ▶ **Agility:** with constantly changing business needs, the composable business architecture enables business responsiveness with the flexibility of frequent releases and rapid iterations.
- ▶ **Price:** consumption-based cloud models enable predictable and precise economics.

“

You can't send data back to the cloud when sub-microsecond decisions are required.

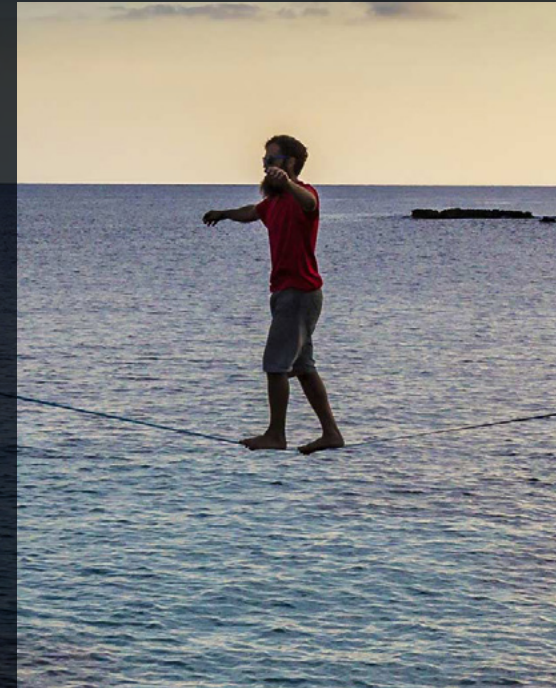
– Amr Ahmed, EY Americas Infrastructure and Service Resiliency Leader

Industry spotlight: manufacturing and mobility – edge computing and extreme disruptions

Accelerate innovation with data-driven insights from the edge. Real-time situational awareness, improving the quality of inference models, and analytics anywhere. Edge computing empowers manufacturing organizations in various ways:

- ▶ Quickly access data at the edge for quick decision-making; this could relate to manufacturing in terms of inventory, production and other supply chain logistics.
- ▶ Benefit ESG initiatives by decreasing waste in various forms.
- ▶ AI-enabled forecasting and planning can create day-by-hour insights and analytics.
- ▶ Real-time order visibility and customer experience for supply chain organization by building web-based analytics platform that works for client's internal and external stakeholders.

For example, taking frequent, high-resolution pictures of a high-pressure pipe to monitor for cracks creates a massive amount of data, which can clog the bandwidth if sent back to a central data center. Processing this data at the edge reduces bandwidth and allows for a rapid response if a defect is detected. Data specific to the defect can then be sent back to the cloud for further analysis and to share with other facilities that have similar equipment to proactively address defects before they impact production.



How edge computing takes on a key role in data-driven business.

[Read the full article.](#)

End-to-end IT integration: how are you taking advantage of the technology ecosystems at your fingertips?

Ask yourself: How can we create an interconnected cloud ecosystem inside and outside of the business that is both secure and frictionless?



The transformation of traditional business value chains into ecosystem partnerships is happening in the cloud. Dynamic, cloud-based ecosystems support transformation by allowing businesses to respond to customer needs at scale, freeing them from the costs and constraints of on-premises and legacy solutions. Ecosystems in the cloud better integrate transformative technologies and allow for real-time data gathering and sharing, meaning businesses are better aligned and their collaboration is more secure.

This relies on two main factors:

- ▶ **Resiliency:** the virtual workplace gives the company the ability to provide continuous, uninterrupted service to their customers, regardless of unexpected circumstances, while also responding to the needs of its remote employees.
- ▶ **Security:** utilizing cloud-based infrastructure allows for zero-trust architecture and the maximum security of globally distributed systems.

Industry spotlight: health care – cloud migration and optimization

Cloud technology is increasingly important in health care, but one core workload has been holding back progress: the electronic medical record, or EMR. Systems such as EPIC have been extremely challenging to migrate or modernize to the cloud, as their architectures are an anti-pattern for running in the cloud. EMR vendors are working with the major hyper-scalers to re-architect their solutions to better fit the cloud paradigm.

Optimize the cloud for returns and sustainability.

[Learn more about health care and Energy cloud use cases.](#)

Industry spotlight: Health care – cloud migration and optimization



Elevating security



Accessing data from various locations



Streamlining and simplifying a complex ecosystem



Scaling up

Most major health care providers are considering a move of EMR to the cloud for the following reasons:

- ▶ Elevate security and compliance posture – Cloud service providers have established security controls and guardrails to be compliant with Health Insurance Portability and Accountability Act (HIPAA).
- ▶ Accessibility of patient data – Data is available on organizational devices as well as on bring-your-own-device (BYOD) for providers.
- ▶ Reduction in complexity is a reduction in risk – security and regulatory compliance guardrails defined and implemented across the entire cloud environment decrease the likelihood of not only high-risk configuration settings but misconfigurations deployed within approved cloud services.
- ▶ Deploy defined security guidelines into infrastructure-as-code (IaC) pipelines to automate the configuration of cloud resources based on defined security framework.
- ▶ Improved service levels – scalability, performance and resilience of applications to meet planned growth in demand.

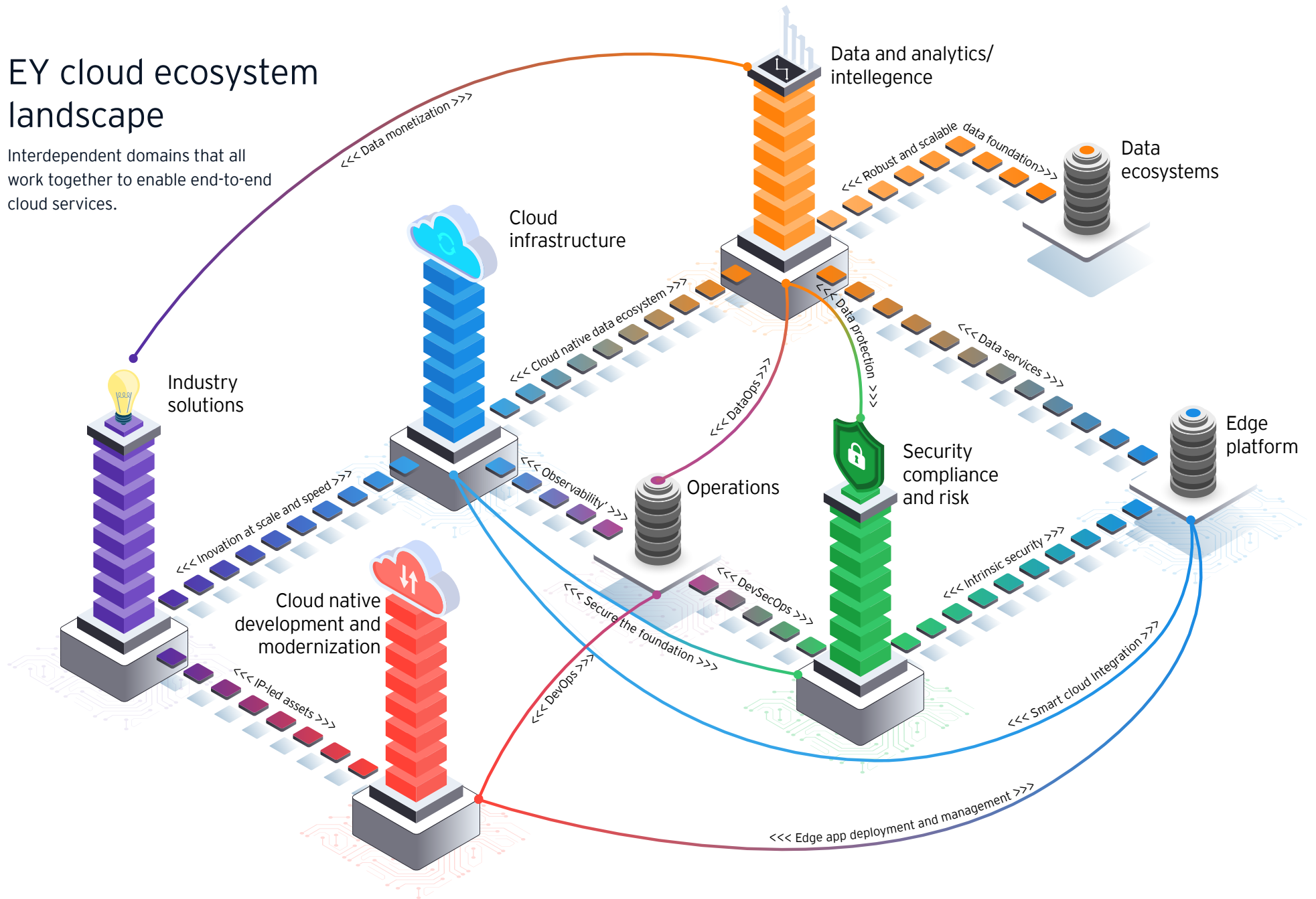
The EY cloud ecosystem landscape

How EY teams seamlessly combine interdependent domains across public, private and edge cloud platforms with industry-specific architectures for tailored, secure, end-to-end cloud services.



EY cloud ecosystem landscape

Interdependent domains that all work together to enable end-to-end cloud services.





Cloud infrastructure

- ▶ The distributed cloud enables the more efficient and localized serving of data across multiple clouds, legacy data centers and edge locations. EY teams can help navigate the complexities of the distributed cloud, establishing that requirements for performance, redundancy and regulations are met by providing cloud assessment and readiness, migration and strategy, cloud governance, legacy modernization, architecture and solution design, cloud-native and edge-native development, DevOps, and operational support.

Cloud-native app development

- ▶ Cloud app development is foundational to the journey to becoming a true cloud-based organization and harnessing the power of the cloud. Our teams work with clients to facilitate the shift from legacy software to modern cloud development. By employing cloud-native technologies and a product-driven op model, we improve time to market, increase product quality and develop differentiation in a structured, secure and optimized way.

Data analytics

- ▶ Many organizations are beginning to see the benefits of the increased agility and rapid innovation that the cloud affords, but most still can't realize maximum value from their data. EY teams work with our clients to help them mature to a data-driven and AI-supported business model that will enable them to take full advantage of the speed, scale and innovation benefits of being a true cloud-based business. By operating within a cloud-native ecosystem, companies can gain access to data, analytics and key metrics across all platforms and applications that can help them make impactful data-driven decisions for their business.

Cybersecurity

Cybersecurity and risk management play a pivotal role in enabling a successful cloud transformation. But many organizations can't define where the security responsibilities of their cloud service provider (CSP) ends and their own begins. This can leave a business vulnerable to security challenges, breaches and fines. The EY cloud security team helps clients understand, align and implement the appropriate controls of this shared responsibility model, allowing CSPs to maintain the security of the cloud and companies to both understand and manage their own security requirements within it.

EY teams help to simplify and streamline the lengthy risk and audit process to implement an automated continuous compliance program. This combines sophisticated automation tools and actionable metrics to build a path to production from risk management to DevSecOps through control assurance, risk management, implementation and acceleration.

Industry solutions

Industry cloud solutions are built with an understanding of the regulatory environment, data security needs and technology hurdles presented by individual industries. Accelerate speed to market with EY industry clouds, through sector-specific use cases and opportunities to co-create solutions with industry professionals and ecosystem partners.



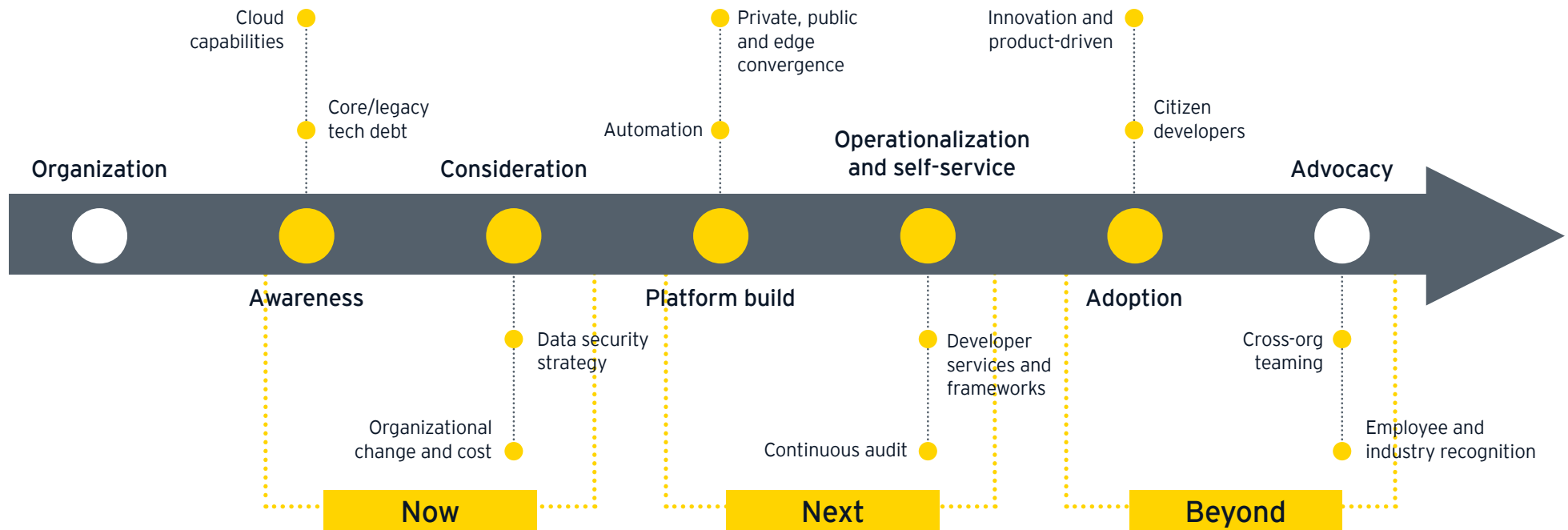
When faced with transformation, how will cloud be your silver lining?

[Continue reading to learn more.](#)

The EY Distributed Cloud Platform

Moving forward, all applications, workloads and data will run across three “clouds” (edge, private and public). All will be interconnected, secured, and share massive amounts of data in motion and at rest.

Moving your organization from distributed cloud awareness to advocacy



What is the EY Distributed Cloud Platform?

A secure, productivity-focused delivery vehicle for creating and consuming scalable IT services and data across all cloud environments that empowers developers to deliver without being slowed down by managing infrastructure.

The EY Industry Cloud Platform

The EY Industry Cloud Platform is an emerging, open ecosystem, enabling and accelerating digital transformation by deploying industry-specific architecture, data and technology assets.



Next-gen cloud computing, powered by composable architectures and ecosystems.

Accelerate your business plans and create long-term value.

Tomorrow's innovations are being created in the next-generation cloud. The cloud-native building blocks of composable architectures enable businesses to scale and adapt their processes at speed and seamlessly integrate data and services. To maximize value in the cloud, leaders should look outward and transform traditional value chains into dynamic, secure, cloud-based ecosystems that facilitate better collaboration and rapid innovation.

A human-centered mindset and culture, where customers come first, from ambition to strategy to products and services, is critical for creating exponential, long-term value in the cloud. Looking within, leaders should promote a cloud-first approach, requiring new capabilities, skills and talent strategies.

Are you using the cloud to modernize your business core, build data centricity and connect distributed ecosystems? We offer a full range of [cloud services](#) that can help.

Contact Consulting at EY.

Learn how to capture hidden value in your business transformation with the cloud.



EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

© 2022 Ernst & Young LLP
All Rights Reserved.

US SCORE no. 17974-221US.
2208-4078233
ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

ey.com