Cloud Strategy, Planning and Architecture Advisory

Designing a future-fit cloud and platform strategy and architecture

CGI

Today's organizations require agility and innovation to deliver seamless digital experiences—anytime, anywhere. Cloud solutions are essential enablers of agile operating models that adapt continuously to constant change.

Yet, many organizations still lack a future-fit, agile technology or cloud strategy that dynamically evolves with continuously changing digital business realities. They also lack a future-fit, adaptive technology platform and cloud reference architecture.

Both are indispensable to guiding the journey towards an adaptive agile enterprise successfully competing in a volatile world.

How will you future-proof your transformation journey with more strategic use of the cloud?

Envisioning the future-fit technology foundation for an adaptive enterprise

Cloud is the "new normal" for how we work and an essential enabler of agile operating models that adapt continuously to constant change.

Some say cloud is the new operating model, especially in a digital world of anywhere operations.

Over nearly two decades, cloud services have become mass-adopted and pervasive. Cloud service providers—ranging from AI start-ups to independent software vendors to hyper-scalers—continue to innovate new services at a breakneck pace. The combination of cloud and other technologies, such as Internet of Things, advanced analytics, artificial intelligence, automation, 5G and edge computing, form the key ingredients of modern digital business solutions.

Today's enterprise cloud challenges often stem from inflexible cloud strategies, overly simplistic modernization efforts, immature cloud-native practices, poorly governed and integrated yet sprawling SaaS solutions, and governance, management and operational models that were not designed for the velocity, connectedness and dynamism of the cloud age.

Many organizations still lack a future-fit, agile technology or cloud strategy that adapts to changing digital business realities and operating models. They also lack an adaptive technology platform and cloud reference architecture. Both are indispensable for the journey to become an agile and adaptive enterprise successfully competing in a volatile world.

3 in 4
enterprises do not have a purpose-fit cloud strategy.
(Source: Gartner®[1])

70%
of mainstream organizations will use a composability metric to select new cloud applications and platform services by 2023.
(Source: Gartner®[2])

25%+
of new cloud applications will use data-centric event-driven architectures rather than traditional code-centric ones by 2025, enabling better automation and business agility.
(Source: IDC)

Foundation for value-based implementation planning

A living cloud strategy with a clear view on the role of cloud services in your agile operation requires a group effort. Our approach relies on an inclusive and cross-functional cloud strategy council with participants from IT, business units and functional leadership, where CGI is a facilitator and expert advisor. The resulting cloud strategy, architecture and plans reflect your organization's imperatives and goals. We work with you on four fronts:

- **Setting up the ongoing strategic planning process:** We bring the methodology, outline, virtual online platform and workshops to facilitate the development and regular refresh of the future-fit multi-cloud strategy.

- **Strengthening your architecture discipline and maintaining a hybrid cloud reference architecture:** We help you assess new concepts such as containerization, service mesh or zero-trust security for their potential. We collaborate with your architects to update your hybrid cloud reference architecture.

- **Establishing a value-based adoption and implementation planning process:** Keeping strategy and implementation as two distinct processes, we help you establish a clear value-based portfolio and roadmap of modernization initiatives. We model your key business imperatives and value chain and prioritize key initiatives.

- **Planning and organizing for cloud capabilities:** We help you organize, staff and develop a Cloud Competency Center (CCC). Enabling the right skillsets also may require retraining current staff, new hiring, flexible augmentation and outsourcing.
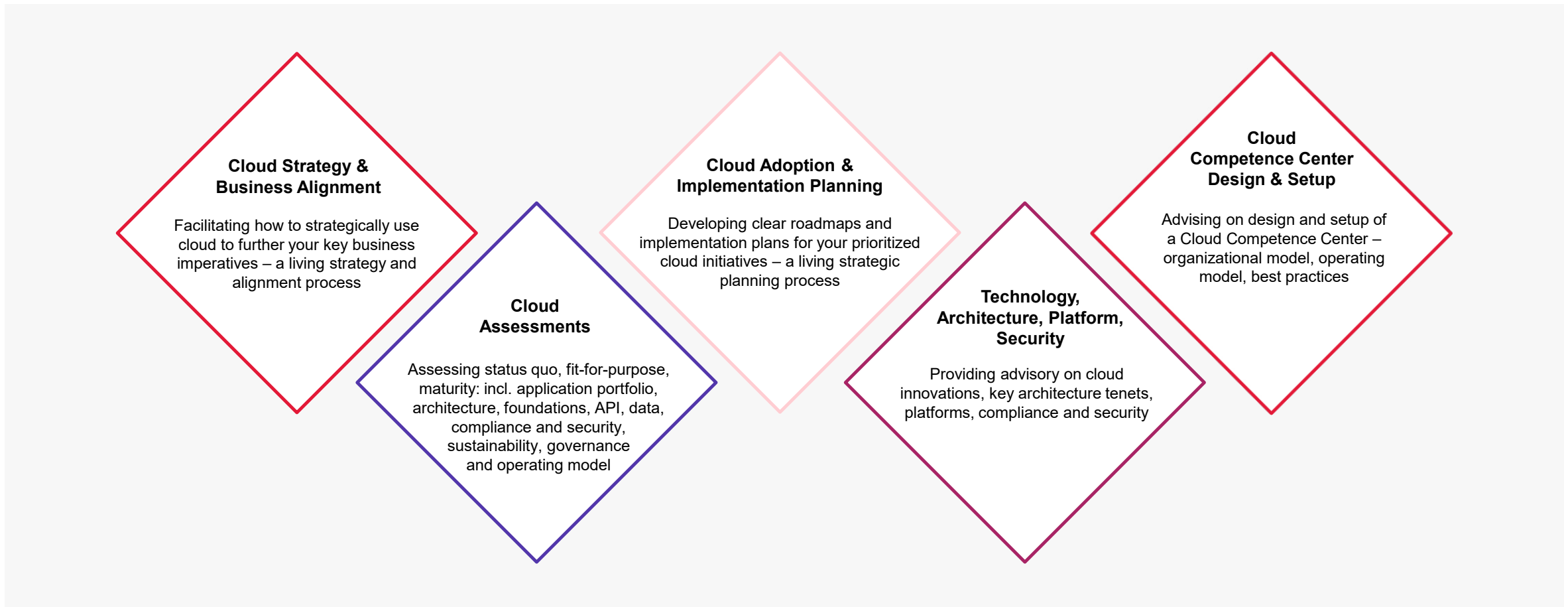
With CGI's Cloud Strategy, Planning and Architecture Advisory services, our business and technology strategists and architects guide you in establishing, maturing and facilitating the critical strategic planning functions for your modernization journey.

What success looks like

- You have an effective **cloud strategy process** that regularly aligns to and evolves with your changing business, technology and operational needs and the evolving regulatory environment.

- You have a dynamic, value-based, **prioritized backlog of cloud modernization initiatives**, along with a clear roadmap and detailed implementation plans.

- You drive **composability** in your cloud-based software engineering, as well as in your service and business capabilities, through a strong **software, solution and enterprise architecture discipline**, to enable your agile and adaptive enterprise.

- You have the **right cloud competencies and talent** to support the execution of your cloud-based modernization initiatives across the enterprise and the transition to a dynamic cloud governance and operating model.

CGI Cloud Strategy, Planning and Architecture Advisory Services

Cloud Strategy & Business Alignment

Facilitating how to strategically use cloud to further your key business imperatives – a living strategy and alignment process

Cloud Assessments

Assessing status quo, fit-for-purpose, maturity: incl. application portfolio, architecture, foundations, API, data, compliance and security, sustainability, governance and operating model

Cloud Adoption & Implementation Planning

Developing clear roadmaps and implementation plans for your prioritized cloud initiatives – a living strategic planning process

Technology, Architecture, Platform, Security

Providing advisory on cloud innovations, key architecture tenets, platforms, compliance and security

Cloud Competence Center Design & Setup

Advising on design and setup of a Cloud Competence Center – organizational model, operating model, best practices

Cloud Strategy and Business Alignment

Our experts facilitate an inclusive, cross-functional process with you to formulate and update your living cloud strategy document. We bring proven templates and a method for discovery, synthesis and strategy validation that considers your business imperatives and organization, your current situation and technical debt as well as the latest technology and industry developments. The output is a concise, future-fit living cloud strategy aligned to your organization's unique:

- Business strategy, imperatives and goals
- Current state hybrid IT workloads and environments
- Key cloud baseline and definitions
- Key cloud principles (e.g., cloud-first, multi-cloud / hybrid cloud, application-specific clouds, best-of-breed, buy before build, cloud service brokering and integration, portability, cloud exit, etc.)
- Architecture tenets, principles and patterns

- Key vendors
- Technology and platform considerations
- Service model
- FinOps model
- Governance and CloudOps model
- Risk and compliance and security
- Sustainability objectives
- Procurement and legal considerations

Cloud Assessments

Assessments typically are customized and an integral part of a larger cloud initiative. Our cloud experts work with your stakeholders on assessing and analyzing the as-is state, operation, maturity and critical gaps with respect to cloud. We do this through online self-assessments, document reviews, in-person facilitated assessment interviews and (virtual) x-functional assessment workshops. Assessment areas include:

- Business vision, strategy and ambitions and their alignment to a technology and cloud strategy
- Organizational maturity for cloud readiness, including governance and operations
- Cloud risk, compliance and security (including data protection, workload protection and identity and access control)
- Sustainability

- Enterprise and cloud architecture and foundations
- Cloud cost and finances
- Capabilities and skills
- Cloud Competence Center organizational design, staffing and effectiveness
- As-is state and dependencies of infrastructure, data and application environments and portfolios.

Cloud Adoption and Implementation Planning

With a future-fit cloud strategy as the foundation and a cloud assessment as a baseline, implementation planning can commence. A crucial activity is to establish and maintain a dynamic, value-based and prioritized backlog of cloud modernization initiatives. Scope can include infrastructure, platforms, data, applications, operations, finance and security.

Tactical planning items include building skills, selecting providers, solution architecting, cloud service procuring, estimating, provisioning, automating, complying, securing and operating at scale. Depending on the engagement depth, outcomes range from a dynamic cloud modernization initiative backlog and roadmap, to high-level solution and architectural blueprints, and implementation plans.

Technology, Architecture, Platform, Security Advisory

It is daunting to know when and how to pivot to which technology as you progress with your transformation to agility, composability and resilience. Security threats evolve and regulations change. It is our job, through our emerging technology and cloud practices with thousands of experts, to continuously assess the cloud innovation and regulatory landscape. We experiment with new technologies in our labs and cut through the hype. We discover new patterns in architecture, security and regulatory compliance and assess their impacts. You can rely on us to provide unbiased advice, recommendations and, if desired, skills and talent augmentation to help you navigate your ongoing journey with technology selection, architecture, platform, compliance and security designs.

Cloud Competence Center Organizational Design

We recommend establishing an in-house Cloud Competence Center (CCC) to bring together resources, talents and skills to support an enterprise's cloud modernization journey. A CCC supports the cloud strategy and implementation planning processes. It helps individual modernization initiatives and project teams with tools, standards, templates and practices to successfully and cost-effectively transition to the cloud. A CCC also enforces best practices in cloud governance, CloudOps and FinOps.

From helping numerous clients stand up their CCCs, we bring valuable experience in how to organize, position, staff and operate a CCC. Our organizational development experts join our cloud technology and operational experts to help you design, stand up, staff and operate a high-impact CCC. We assist with organizational models, staffing profiles, best practices, knowledge transfer and talent sourcing. Our role can be tailored from advisory, to talent augmentation, to knowledge transfer and training, to operating.

Case in point

Hybrid Cloud Competence Center for a top 20 world bank

CGI is a key partner in a leading bank's digitization program. Under the program, the bank developed a hybrid cloud strategy to use SaaS, PaaS and IaaS services and avoid owning and managing its own infrastructure wherever possible.

Our experts played a key role in planning, implementing and managing the bank's hybrid, multi-cloud platform. Services ranged from architecture design and technology evaluation to establishing a joint Cloud Center of Excellence (CCoE). We worked with the client to stand up all governance around the cloud journey and cloud operation, ensure platform and process compliance, conduct risk assessments and mitigate risks. We also developed the cloud infrastructure, including infrastructure as code scripts for automated provisioning and security controls validation.

The CCoE was setup as a shared operation between bank employees and CGI experts. As the client's maturity increased, they took the lead. We quickly adapted our best practices, frameworks and reusable assets for the full breadth of a modern CCoE, with all documentation easily accessible in an intuitive Wiki.

The bank now has a highly secure, reliable and automated enterprise-wide cloud platform for agile innovation, development and production in a DevSecOps model. Additional benefits include: standardization, enforcement of cloud principles and policies, risk mitigation (including exit strategies), upskilling and organizational maturity, and accelerated implementation of new cloud projects.

Case in point

Cloud architecture and implementation planning for a Canadian insurance carrier's modernization

A Canadian insurance carrier and 25-year client of CGI sought better operational agility in their core IT and business processes. They also desired to achieve greater cost optimization, robust disaster recovery and enhanced security by moving to a hybrid multi-cloud environment (hosted by AWS and CGI). At the same time, they were replacing their aging policy administration system.

As part of a comprehensive implementation planning effort, CGI experts performed cloud readiness assessments across the insurer's technology, data, application, security, compliance and operations landscape. We developed the multi-cloud solution architecture as well as a modernization, migration and commercial-off-the-shelf system integration plan. Operations were rethought and retooled for modern CloudOps and AIOps.

Using agile and DevOps methods, we built, integrated and delivered the modernized multi-cloud solution in multiple AWS and CGI availability zones with 32 user story sprints in record time. CGI now operates the modern environment for our client as part of our cloud management and operations services.
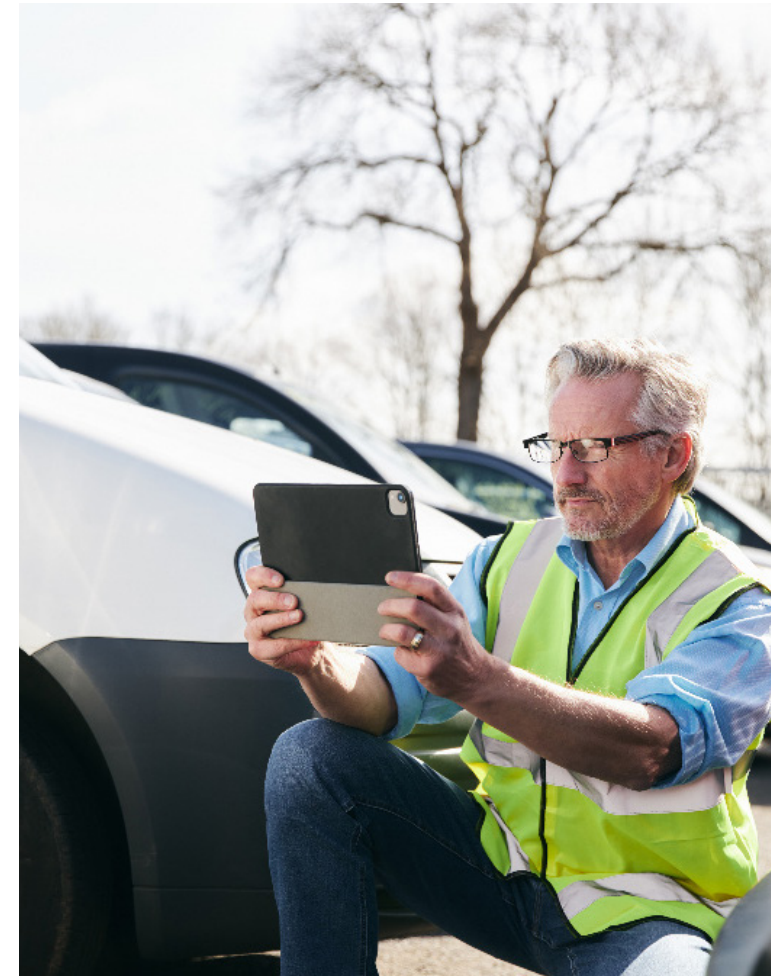
We combine industry, regulatory, technology and operations expertise to provide unbiased advice

We guide you through a successful strategy and implementation planning, capturing your vision, priorities and goals. Our technology, industry, regulatory and operational experts bring proven methods, best practices and templates so you can be confident in your future-fit strategy, architecture and implementation roadmap and plans.

For 45+ years, we've helped leading organizations optimize business and operating models as well as enterprise and technology architectures, environments and solutions—all while keeping them secure and compliant.

We combine local and global industry, market and regulatory knowledge with a deep understanding of technology trends and a track record of building, testing and operating solutions for our clients' most complex challenges. We are an unbiased trusted advisor with a strong ecosystem of innovation partners, including key cloud service providers. We leverage:

- **Digital industry blueprints** to help you stay abreast of strategic shifts

- Global **emerging technology practice** with 46 networked teams that continuously scan the technology landscape to provide salient advice

- 12 **Innovation Labs** where we experiment with new technologies to solve your business challenges

- **Global cloud practice of 7,000+** strategists, architects, developers and operators to support your cloud journey

- **Global architecture practice with 1,500** certified architects and our Responsive, Collaborative Approach to Digital Architecture (RCDA)

- **Advisory role** for national and regional cloud regulatory and security frameworks in Europe and North America

When it comes to business and technology strategy, architecture and planning services CGI is the partner of choice for our clients around the world. Let us help you chart your future with our full breadth and depth of services and expertise.

We stand ready to help you rethink a future-fit cloud and technology strategy and architecture.

CGI's Cloud Strategy, Planning and Architecture Advisory Services are part of our full suite of cloud services designed to help with the transformation to an agile, adaptive and resilient enterprise. In addition to our cloud strategy, architecture and planning advisory services, we offer strategic IT and application cloud modernization, cloud-native development innovation, enterprise SaaS solution installation and configuration, cloud turn-around intervention, and ongoing cloud management, operations and optimization services.

Contact us at info@cgi.com **or learn more at** cgi.com/cloud.

About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 80,000 professionals provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

For more information,

Visit cgi.com

Email us at info@cgi.com

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[1]Gartner® "Infographic: Cloud Strategy Cookbook," David Smith, Milind Govekar, 4 May 2021

[2]Gartner® "Over 100 Data and Analytics Predictions Through 2025," Alan D. Duncan, 18 March 2021

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