



Cloud



Digital Customer Experience



Digital Employee Experience



Digital Insight



Internet of Things



Payments



IP Solutions



Cyber Security



Cloud

CGI

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Digital transformation in the cloud

In the digital era, the cloud is everywhere and constantly evolving. Even when not visible, cloud-enabled services are driving digital transformation within enterprises, reshaping the experiences of both employees and consumers.

Today, the confluence of new technology with the rapid pace of the cloud has brought us to a tipping point. It now is possible for businesses to deliver new services in weeks and they recognise the power of the cloud. More than 80% of enterprises are expected to be using the cloud by the end of 2015 (Source: Ovum), and the technology has conquered early security and regulatory concerns.

The cloud is carrying this change into different areas. For example, cloud services make it possible to:

- ▶ Create secure mobile offices for government organisations.
- ▶ Modernise learning in public schools via educational applications hosted in the cloud.
- ▶ Initiate and process insurance claims using a mobile device.

Each time, the cloud transforms both business and end-user experience.

Yet, as the cloud continues to evolve, the way that IT can innovate within a business is changing. To plan effectively, organisations need a technology roadmap that helps them track their progress against the emerging landscape.

Only enterprises that manage this change will successfully enable digital transformation in the cloud.



80%
of enterprises will be
using the cloud
by the end of
2015.

Source: Ovum - 2015 Trends
to Watch: Cloud Computing,
November 2014

35%
of new applications will use
cloud-enabled,
continuous delivery by
2017.

Source: IDC FutureScape:
Worldwide Cloud 2015
Predictions, Doc #253476, Dec 2014

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Business drivers

Cloud computing disrupts traditional IT

As spending on cloud infrastructure continues to grow five times more than overall enterprise IT (Source: Goldman Sachs Investment Research, 2015)¹, there are several factors behind this growth:

- ▶ **Scalable, agile IT**
A shared pool of computing resources make it possible for businesses to ramp up or down to meet increased demand without large investments in IT infrastructure. This also makes it possible for them to respond rapidly to meet unpredictable market demand.
- ▶ **Faster, better delivery**
Businesses are increasingly seeing the benefit of adding value quicker, as offered by the cloud. Now IT development is not only cheaper, but it's also quicker and better.
- ▶ **Cost flexibility**
Cloud services are offered on a pay-as-you-go model, where businesses only pay for what they actually use, removing capex barriers to building new services.
- ▶ **Enterprise collaboration**
Data stored on the cloud is accessible to all individuals and teams across an organisation. This makes it easier for businesses to break down departmental silos and encourage collaboration.
- ▶ **Business innovation**
This facilitation of increased collaboration also creates a common platform for the sharing of information and ideas, sparking innovation.
- ▶ **Legacy transformation**
The cloud makes it possible for businesses to upgrade to the latest technologies, while reducing cost. As a result, there is a growing demand for legacy application transformation into clouds like Microsoft Azure.

¹ Columbus, Louis. "Roundup of Cloud Computing Forecasts and Market Estimates, 2015." Forbes, January 24th 2015.
<http://www.forbes.com/sites/louiscolombus/2015/01/24/roundup-of-cloud-computing-forecasts-and-market-estimates-2015/>





Technology enablers



▶ **Stable, fast Internet connectivity**

Today, the ubiquitous Internet and broadband improvements offer reliable, high-speed access to cloud-based services. Without the Internet, data stored in the cloud would remain inaccessible.



▶ **Mobility**

The proliferation of a wide range of mobile devices supports anywhere, anytime access to cloud-enabled services for employees, customers and enterprises.



▶ **Virtualisation**

Using this technology, several virtual systems are created on a single physical machine, enabling dynamic provisioning of capacity from large pools of shared resources to meet business demand.



▶ **Multi-tenancy**

Data stored on the cloud is accessible to all individuals and teams across an organisation. This makes it easier for businesses to break down departmental silos and encourage collaboration.



▶ **Business innovation**

Broader cloud adoption is also facilitated by multi-tenant architectures that allow a single instance of a software application to support multiple customers. This includes adequate separation measures to support compliance and security policies.



▶ **Open source gains momentum**

Security concerns surrounding open source clouds are now being conquered. These platforms are increasingly delivering cloud services to enterprises leveraging the flexibility and pace of innovation that open source components can provide.

Delivering the **solution**

CGI offers clients an end-to-end solution from consultancy to implementation, integration and management of cloud-based services. We help our clients navigate the cloud, transform their business and operate as a service.

Our solution includes:

- ▶ A cloud strategy that defines an appropriate roadmap with the best providers, processes, methods, governance and technology.
- ▶ Cloud readiness assessment to evaluate current usage and recommend the most appropriate model.
- ▶ Cloud security assessment to understand both current and potential risks.
- ▶ Cybersecurity services that provide 24X7 protective monitoring and intervention services.
- ▶ Public cloud implementation, integration and management.
- ▶ CGI cloud-based services such as virtual workspace and analytics-as-a-service.
- ▶ Hybrid cloud implementation and integration.
- ▶ The CGI Enterprise Cloud Platform that offers public cloud functionality in the safety of a private cloud.
- ▶ Community cloud implementation and integration.

Certified, secure cloud services

CGI was the first large cloud provider to receive the U.S. Federal Risk and Authorization Management Program (FedRAMPSM) cloud security certification, and one of the first to receive the Defense Information Systems Agency's (DISA's) cloud security accreditation. CGI also offers secure cloud services through the UK's G-Cloud initiative.

Cybersecurity

At CGI, our cybersecurity services help clients assess risk, protect their business and operate with confidence.

10 Security Operations Centres continuously identify and monitor cyber threats and 3 accredited security certification facilities provide extensive assessment services.

20–40% cost savings are achieved by clients that rely on CGI managed security services provided by local cyber teams, backed by our 1,400 cyber experts globally.

Our recommended approach:

- ▶ Start with the simple things—identify common commodity services that are easy to deploy as quick wins, allowing the enterprise to learn the language of the cloud and build the cloud profile at the heart of “digital”...and remember, all clouds are not the same.
- ▶ Look for high-profile opportunities that require a digital overhaul—expand and evolve cloud platforms in a way that keeps long-term interoperability and innovation as a headline and linked to the digital.
- ▶ Don't forget about people—build tools and processes to support Agile and DevOps across delivery, accelerating the pace of delivery and business engagement for digital projects. Get governance, security and compliance right at the outset, and it'll pay you back time and again.
- ▶ Recognise that cloud isn't hosting—cloud technologies can evolve quicker than your business. Build a cloud roadmap and manage it by listening to the market, watching competitors and focusing on digital outcomes that are key to gaining support for later stages of the programme.
- ▶ Don't hesitate to bring in specialist skills, rather than risk failure.

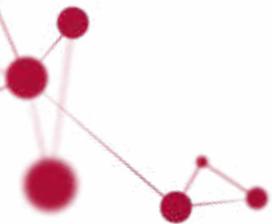
All clouds are not the same, so how do you choose the best place to start?

Our approach recognises that all clouds are not equal and it's important for an organisation to choose the best place to begin.

While organisations are looking to maximise value from their data, picking the right data is crucial.

What's more, as the cloud is continuously evolving, it is necessary to build a cloud roadmap that tracks a clear evolution based on emerging cloud themes and digital technologies.

Our 'all clouds are not equal' approach ensures that our cloud strategy supports organisation's digital transformation journey from the outset and evolves with a business.



Why CGI?

- 1** A complete range of cloud services backed up by our UK-based, award-winning five-star service desk.
- 2** Extensive experience of complex systems integration projects—ensuring that clients have the right cloud services, all fully integrated.
- 3** Technology and vendor agnostic partnerships with large and small providers.
- 4** Straightforward, transparent pricing—with no hidden extras.
- 5** A track record of successfully bringing cloud services to government clients across the world.
- 6** More than 35 years of experience as an IT outsourcing and infrastructure services provider brought to all cloud services engagements.



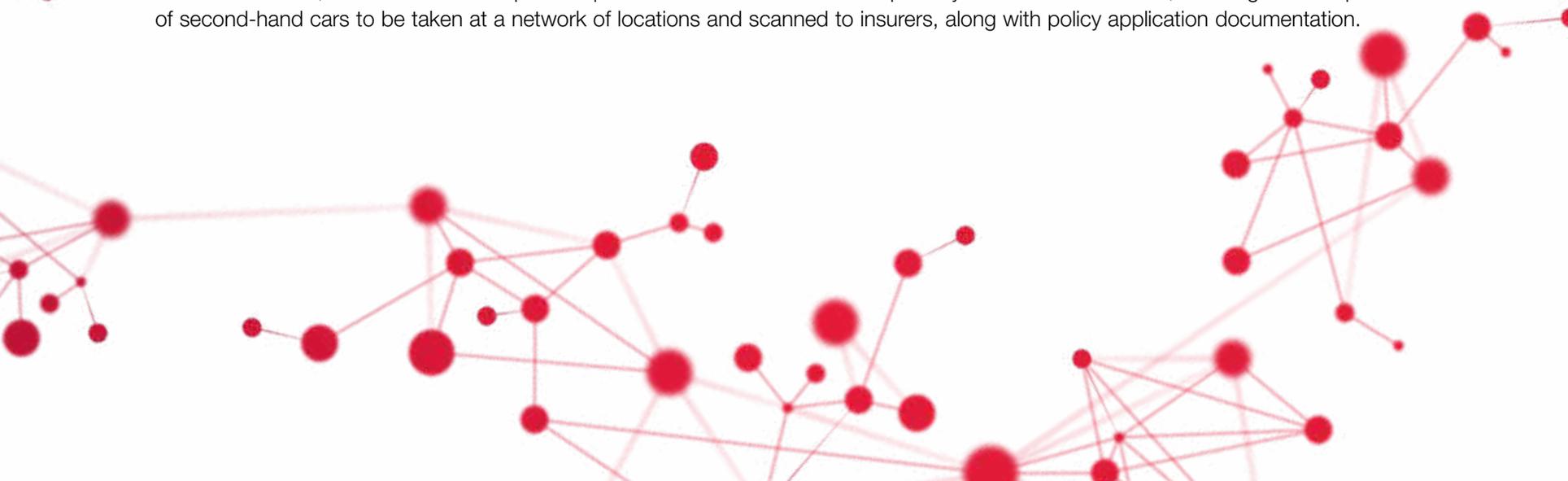


Best Practices Award

CGI won the Frost & Sullivan North American Government Cloud Solutions Company of the Year Award for 2013 for its “strong commitment and capabilities to help its government clients evaluate, implement and manage cloud solutions more easily, successfully and cost effectively”.

Examples of our **cloud solutions**

- ▶ CGI enabled the virtualisation of more than 4,000 workstations for the Laurentian Bank of Canada, making it the first banking institution in Canada to make wide use of cloud services. The virtual infrastructure was delivered via CGI's cloud environment and eliminated any burden on the bank's data processing centres.
- ▶ In the UK, CGI's private cloud platform for the Ministry of Defence brings 6000 legacy applications into the cloud. The platform is designed to scale to future requirements for the next 20 years.
- ▶ CGI has also enabled the U.S. Department of Homeland Security (DHS) to benefit from unlimited capacity and the pay-for-use model in the cloud. When CGI moved DHS websites into the cloud, the department successfully eliminated at least 350 services.
- ▶ CGI developed and operates the Helix Nebula Cloud Marketplace for Science Computing. This is a cloud brokerage-based marketplace where large European science institutions and universities can procure high-performance Infrastructure-as-a-Service (IaaS) computing and storage resources.
- ▶ CGI has also helped John Hancock Financial Services consolidate and transform its five data centres into two efficient, green and cost effective data centres. This eliminated several physical servers and reduced overall virtual server physical footprint by 26%.
- ▶ In the oil and gas industry, CGI is a cloud services provider for 38 upstream operators, managing joint venture production data for more than 700 joint ventures.
- ▶ Our web-enabled, cloud-based Checkpoint inspection services have been adopted by insurance businesses, enabling certified photos of second-hand cars to be taken at a network of locations and scanned to insurers, along with policy application documentation.



Shift



CGI receives Customer of the Year award

VMware Inc. presented CGI with a Customer of the Year award in the End-User Computing category at VMworld TAM Day 2014. Recognising CGI's virtual desktop infrastructure (VDI) solution for the Laurentian Bank, Andy Nederveld, director of VMware's TAM Program in the Americas said, "Employing VMware Horizon technology, CGI has designed innovative end-user computing solutions that can meet the needs of clients in various industry sectors. Their robust Desktop as a Services offering was recognised in the End-User Computing category during TAM Day at VMworld 2014."

“CGI’s integration services enable us to deliver our agenda more effectively. The provision of desktop services hosted on CGI’s Secure Government Cloud offers a more flexible and open platform in line with UK Government’s IT disaggregation strategy. We have chosen the right partner for our diverse IT needs.”

Martin Ritchie

CTO, UK Department of Energy and Climate Change

About CGI

Founded in 1976, CGI is a global IT and business process services provider delivering high-quality business consulting, systems integration and managed services. With 68,000 professionals in 40 countries, CGI has an industry-leading track record of delivering 95% of projects on time and within budget, aligning our teams with clients’ business strategies to achieve top-to-bottom line results.

CGI

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