Cybersecurity

Securely enabling transformation and change

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Experience the commitment®

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Cybersecurity overview

Moving from run to change and grow

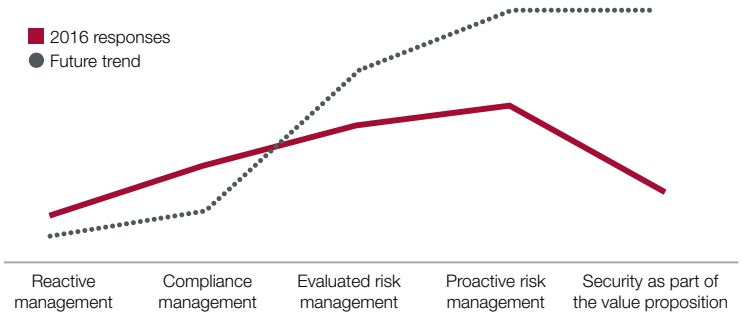
With unprecedented factors creating an urgent business case for digital transformation, now is a critical opportunity for business and government to evolve the role of security in their day-to-day operations.

Driven by market and regulatory changes, and highly mobile consumers demanding new products and services, today's enterprises are transforming into digital, customer-first organizations. Yet along with the benefits of digitalization—more online and mobile touchpoints with customers, citizens, employees and suppliers—comes security risks evolving so quickly, it is almost impossible to keep up. All sectors are challenged to identify, quantify and manage this risk.

While the vast majority of CGI clients interviewed in our 2016 Global 1000 outlook* indicate they have a cyber program in place, they are at various stages of maturity in their security programs. For some industries, the high cost of security compliance is limiting investments in digital transformation. For others, cybersecurity is starting to become an enabler of new digital value propositions that have security "built in."

Organizations that view security not only as a mandatory part of operations, but also as an enabler to growth and change, will maximize the benefits of digital transformation. Only 14% of clients in our Global 1000 outlook say they are at a level of maturity where cybersecurity is part of their value proposition.

Cybersecurity program maturity



(Source: CGI Global 1000 (2016)

* The CGI Global 1000 outlook brings together the findings, insights and CGI's point of view on the strategic topics that emerged through face-to-face interviews conducted by CGI consultants with more than 1,000 business and IT leaders across 10 industries and 20 countries between January and April 2016.

50%

executives rank of protecting the organization from cyber threats as a top business priority

*Source: CGI Global 1000 (2016)**

58%

of executives are challenged to balance funding for cybersecurity with the business goals to support digital transformation

*Source: CGI Global 1000 (2016)**

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Business **drivers**

Addressing priorities with risk-driven insights

CGI clients in our 2016 Global 1000 outlook indicate that business and IT leaders are aligned on the top security priorities that support and enable business growth. Key cybersecurity insights include:

Enterprise-wide concern: Security has made the leap from being a technical issue to a global trend impacting all industries and is a top 3 priority for 51% of executives and boards of directors interviewed. Now an enterprise-wide concern, the barriers to security program evolution encompass people, process and policy—as well as technology.

Employee awareness: While increasing cyber awareness by employees is an effective strategy and first line of defense, employee training and awareness poses a challenge for 44% of organizations.

Executive awareness: Ensuring that the C-level and boards of directors understand the security posture and cyber risk profile of the organization is a challenge for 27% of organizations.

Channel concerns: Addressing increased risk from supplier networks has 34% of organizations concerned.

Compliance: 40% of executives say understanding and keeping pace with regulatory requirements is having a very high impact.

Our clients' top cybersecurity priorities

- Balancing cybersecurity requirements with the business needs to support digital transformation
- Keeping up with risk and compliance requirements
- Attracting and retaining cyber talent to enable cyber capabilities
- Creating a cyber-aware culture

Cybersecurity strategy

A business-focused approach

In today's technology-driven world, organizations have moved beyond viewing information security as solely an IT issue. Protecting customer and business data is now an integral part of the overall business strategy. With security breaches and other infrastructure attacks reported daily, senior executives realize that the trust customers place in their organizations can be destroyed with one hacking incident. It is no longer about simply securing the network—it is about securing and enabling the business.

CGI takes a holistic view of cybersecurity as the technology, services and policies that protect public sector and commercial organizations from the risk of electronic attacks to minimize business disruption and data loss. For government organizations, we understand concerns about potential erosion of civil liberties and privacy balanced against public safety. For commercial organizations, we work with our clients' senior leadership teams to balance the level of risk they are willing to accept and the need to build a strong security business case.

Recognizing that cybersecurity is a business enabler for nearly anything our clients want to achieve, we help clients build security into business strategies to advance:

- New technologies—cloud, Internet of Things and mobile platforms
- New ways of working—collaboration, mobile workforce and automation
- Increasingly agile and globalized supply chains
- Innovative, creative and collaborative business environments to attract the best talent
- Data and privacy compliance obligations

How we work together

Security breaches don't just happen between 9 and 5, so organizations need a partner with the agility, insight, foresight and capabilities to anticipate attacks and take decisive action. CGI's local cyber teams and executives are not hamstrung by corporate bureaucracy—they are empowered to make decisions at the clients' front lines, to ensure rapid response and swift resolution to security incidents.

With an unassuming style and consultative approach, we blend into our clients' culture and get the job done. Clients give us high marks for the way we work—in close collaboration, as great listeners and trusted partners.

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Financial services

Retail banks are moving beyond just transforming the customer-facing digital experience and emphasizing the secure digitalization of the business processes. Among their security priorities are:

- Delivering better end-to-end customer experience, with a drive to embed secure processes with easy user interfaces
- Protecting the bank and clients against fraud and cybersecurity threats

Retail and consumer services

Today's connected customers demand a seamless, real-time experience across all channels. As executives strive to transform quickly into end-to-end digital enterprises, cybersecurity continues to be a high priority, with a focus on:

- Securely collecting penetrating insights into consumer behaviors and preferences to better anticipate demand and build trusted relationships
- Addressing the inherent cyber risks of seamless integration of physical stores with websites, mobile apps, the Internet of Things (IoT), massive cloud capacity, social media and real-time data
- Using managed security services to help drive down the cost of protecting the business

Oil and gas

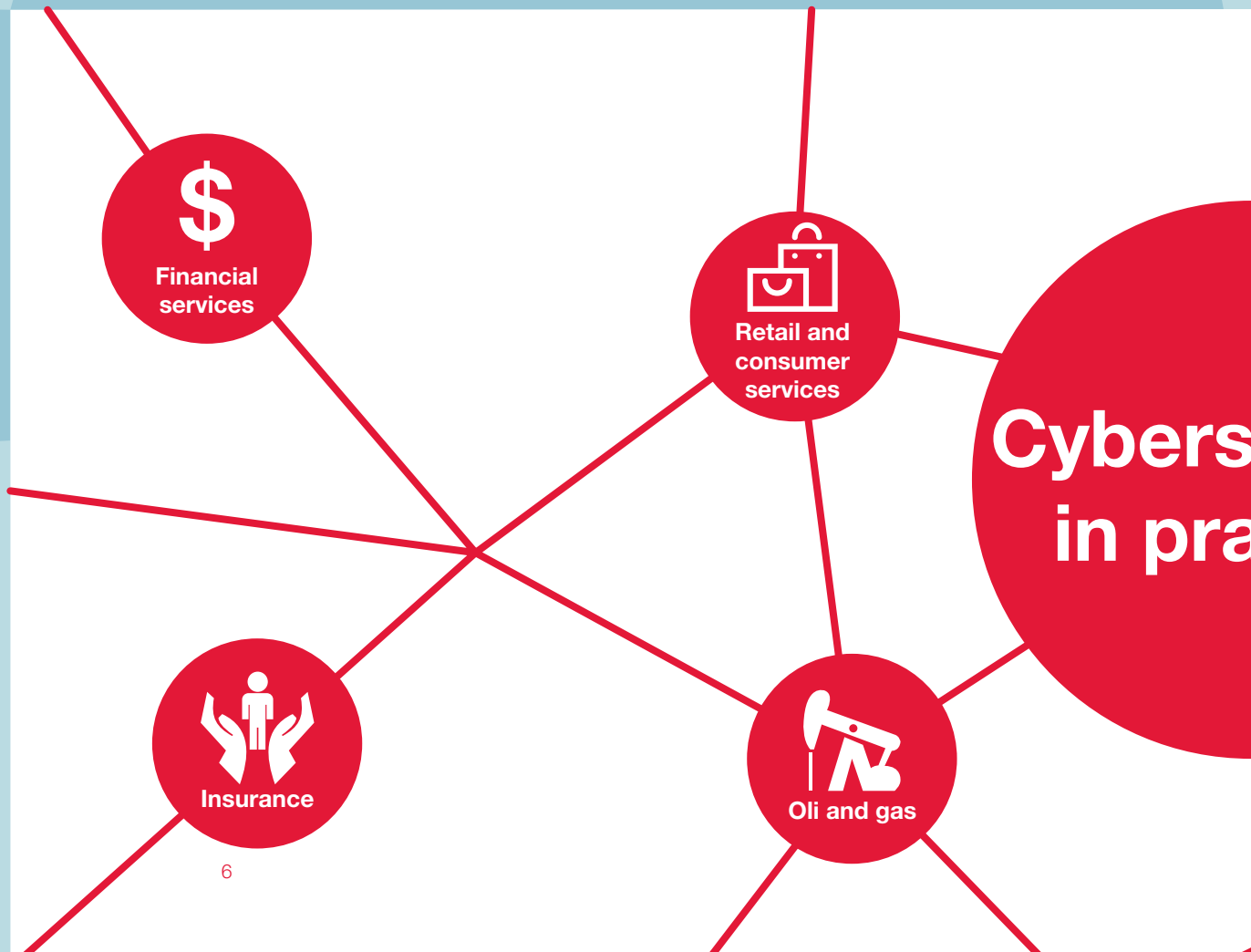
Revenue pressures from falling oil process have increased focus on operational improvements and cost reduction, including modernizing IT to prepare for digital transformation.

- Regulatory compliance and data privacy protection continue to be mandatory business priorities.
- Securing critical infrastructure continues to be a top priority and has shifted to a business-as-usual requirement.

Insurance

Insurance companies are preparing for digital transformation through consolidation and cost management as well as exploitation of data and new technologies.

- Most insurers are taking a follow-the-market approach to cybersecurity programs.
- Concerns over data privacy and confidentially remain a top concern and drive cyber investment.
- Many insurers are looking to expand their revenue streams by providing cyber insurance policies to commercial and government organizations.



Manufacturing

The momentum around digital transformation in manufacturing has grown, with most companies now firmly in the digital experimentation phase. Cybersecurity is becoming an integral part of the business strategy and a priority.

- Securing operational technology (OT) in the plant and ensuring that data and customer information is protected (both OT and IT) is a top priority and a challenge for manufacturers.
- As manufacturers start to sell directly to consumers as a new revenue stream, they are focused on securing direct to new customer channels and interacting securely over social channels.

Utilities

Increasing costs of running legacy operations, ever-evolving regulations and increased customer demands are keeping most utilities in the early stages of digital transformation. Among their security priorities are:

- Addressing rising concerns over cyber-attacks on critical infrastructure
- Keeping pace with regulatory changes with an enterprise-wide approach to security and compliance

Health

Healthcare faces enormous challenges to reduce the cost and improve the quality of care delivery to increasingly connected citizens. Key security objectives include:

- Protecting patient-centric, distributed medical records from identity theft
- Enabling a protected and complete view of medical records for better diagnosis and treatment decisions
- Ensuring reliable and trusted links between medical devices located remotely, that cannot be modified without proper medical authority

Government

Meeting rising citizen expectations for digital public operations and services has moved digital transformation to the top of the agenda.

- Cybersecurity is increasingly important with the move to digital business and security programs and compliance are key priorities receiving funding.
- Privacy and confidentiality of citizen and classified data is a key concern.
- Low rates of employee turnover combined with an aging workforce make it challenging to update skills related to cybersecurity.

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CGI's **cybersecurity offering**

Full spectrum of security

CGI cybersecurity offerings cover the full spectrum of security work. From risk assessment through technical solutions to managed services, CGI has a full suite of services that will promote confidence in the operating environment and remove barriers to business growth.

Risk consulting: CGI provides clients with a number of risk management assessment and advisory services. Our CGI IRIS methodology is often used to enable clients to quickly gain knowledge of organization-wide risks and mitigation.

Engineering and integration: We assist clients with protecting data and infrastructure through security systems integration and implementation, solution architecture, design, development and deployment. We also help them implement and operate security systems and tools to automatically assess and strengthen their security posture.

Managed security services: Advanced security services delivered from our global network of Security Operations Centers are considered an essential element of our clients' modern cybersecurity programs. Our clients gain cost-effective access to advanced levels of protection on a scalable platform that can quickly adapt as the business and risk environment demands.

Continuous services to ensure cybersecurity resilience remains at predefined level, risks are monitored and possible security incidents are identified and remediated

High-end risk, compliance and management consulting to identify organizational cybersecurity risks and regulatory environment

Intellectual property, technical expertise, testing services and industry-specific solutions to implement and test security capabilities

Our principles

We base our approach on the following principles:

- Partner with clients to build a strong business case for a robust security program that balances risk and cost
- Credentialed experts working on the front lines with deep understanding of the security tools and technologies
- Local teams with deep industry expertise and understanding of unique client environments
- Ensure that security is a part of all that we do for our clients.

Delivery **model**

Driving cultural transformation

CGI views cybersecurity as more than a technology solution. It's a cultural change that covers people, processes and technology. Organizational culture is often the biggest barrier to evolving a security program. Technologies must be used securely, processes must be designed to protect sensitive information, and people must recognize that they have a fundamental role to play in ensuring security within their organization.

IDENTIFY	PREVENT	DETECT	RESPOND
Develop the organizational understanding to manage cybersecurity risk to systems, assets, data and capabilities.	Develop and implement the appropriate safeguards to ensure delivery of critical infrastructure services.	Develop and implement the appropriate activities to identity the occurrence of a cybersecurity event.	Develop and implement the appropriate activities to take action regarding a detected cybersecurity event.

STRATEGIC ELEVATION (POLICY, GOVERNANCE, TRAINING & AWARENESS)

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Why **CGI?**

- 35+ years as a trusted security advisor to clients across all market sectors, bringing expertise and insights from a wide variety of situations
- Vendor-neutral technology approach to ensure best fit solutions for each client
- Respected thought leadership in building secure systems for civillian government, defense and commerical organizations around the world
- A global network of security operations centres focused on serving government and commercial clients
- Three government-accredited IT security certification labs in Canada, the UK and the US, as well as a cyber innovation lab and four centers of excellence for ethical hacking
- Close ties with professional associations, trade organizations and governments to engage in emerging cybersecurity policy
- Commitment to clients demonstrated by an outstanding track record of 95% on-time, within budget delivery

Driving your digital transformation

CGI helps clients achieve superior value through end-to-end digital transformation. Our expertise across legacy and digital environments uniquely enables us to support clients at every point in their digital transformation journeys.

We have the methodology and capabilities to assist clients in defining their digital strategies and roadmaps, as well as the breadth and depth of experience to deliver their transformations through key digital enablers. CGI's enterprise digital transformation capabilities and industry expertise help clients embark on their transformations and succeed in becoming customer-centric digital organizations.

Learn more about our digital transformation capabilities and industry expertise by visiting:

cgi.com/digital-transformation or by contacting us at info@cgi.com.

Visit cgi.com/cyber or contact us at info@cgi.com to explore how CGI's cybersecurity solutions can help you transform your organization.

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About **CGI**

Founded in 1976, CGI is one of the largest end-to-end IT and business process services providers in the world, helping clients become digital organizations through high-end consulting, enabling IP solutions and transformational outsourcing. With a deep commitment to providing innovative services and solutions, CGI has an industry-leading track record of delivering 95% of projects on time and within budget, aligning our teams with clients' digital transformation strategies to help them better run, change and grow their businesses.

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