

Digital Security Operations Modernization Advisory

Building modern, proactive security
operations for the digital world

CGI



Today's organizations require agility and innovation to deliver seamless digital experiences—anytime, anywhere. In response, customer, employee and supplier ecosystems have become more complex, connected and open. At the same time, cyber risks and threats are growing in velocity and complexity.

Addressing today's digital realities requires a fundamental change in security operations, whether evolutionary or transformative. Building modern, proactive security operations for the digital world has become a business imperative for enterprises across industries.

How can you gain
real-time, situational
awareness of threats in
an increasingly complex
business environment,
while also driving
business agility?

Securing today's digital realities

Enterprises are continuously evolving to deliver value to customers, citizens, employees and shareholders at pace in response to fast-changing needs.

New technologies, data sources and connections are enabling this evolution, including multi-cloud environments, edge computing, automation, artificial intelligence (AI), Internet of Things, 5G, micro-services, devices, and application programming interfaces (APIs). However, cyber threat actors are harnessing these same advances to create an increasingly sophisticated and dynamic risk landscape. The cybersecurity arms race is escalating.

Enterprises also are expanding their supplier ecosystems and customer bases. Many are involved in mergers, acquisitions, divestitures and reorganizations, and have increasingly hybrid workforces (human and non-human) operating from almost anywhere.

At the same time, greater volumes and types of data can be accessed more easily (e.g., via the cloud and edge computing). Enterprises are making phenomenal progress in using this data to “train” AI solutions, automate decisions, control robots and co-bots, and optimize human experiences. Stricter data protection and privacy regulations are increasing across the globe. Non-compliance or a breach can have devastating reputational and financial effects.

As data and technologies become more widely distributed and connected, trusted physical security perimeters are disappearing, and enterprises are transitioning to alternative security models. In addition, the “as a service” trend is forcing organizations to change how they purchase, operate, monitor, control and decommission IT.

Of nearly 1,700 business and IT executives interviewed for the 2021 CGI Voice of Our Clients:

Cybersecurity

is the most frequently mentioned business priority.

75%

say testing and verifying their organization's response capabilities is the most important cybersecurity element; 23% say acquiring digital insights and data management is important.

20%

are currently implementing or have completed algorithmic automation (driven by advanced analytics, including machine learning) implementations.

Source: 2021 CGI Voice of Our Client

Modernizing security operations with an insights-led approach

We understand the complexity of securing operations in a digital world and recognize what is at stake: your organization's reputation, competitiveness and bottom line. Our promise is simple—to help you build modern security operations that meet evolving digital demands.

- **Enable innovation and collaboration at pace:** Today's security operations must extend beyond traditional enterprise boundaries to external ecosystems. A modern approach across the continuum of security operations enables the safe creation, operation and evolution of flexible, efficient and collaborative ecosystems.
- **Adopt a proactive stance through real-time situational awareness:** Critical to security operations modernization is having the right processes, skills and technologies. These technologies include advanced analytics, artificial intelligence, machine learning, automation and orchestration of cybersecurity workflows, as well as real-time visualizations of your vulnerability and threat landscape.
- **Respond effectively when a crisis occurs:** As cyber threats and risks grow in volume and complexity, modern secure operations enable enterprise respond effectively, while capturing lessons learned.



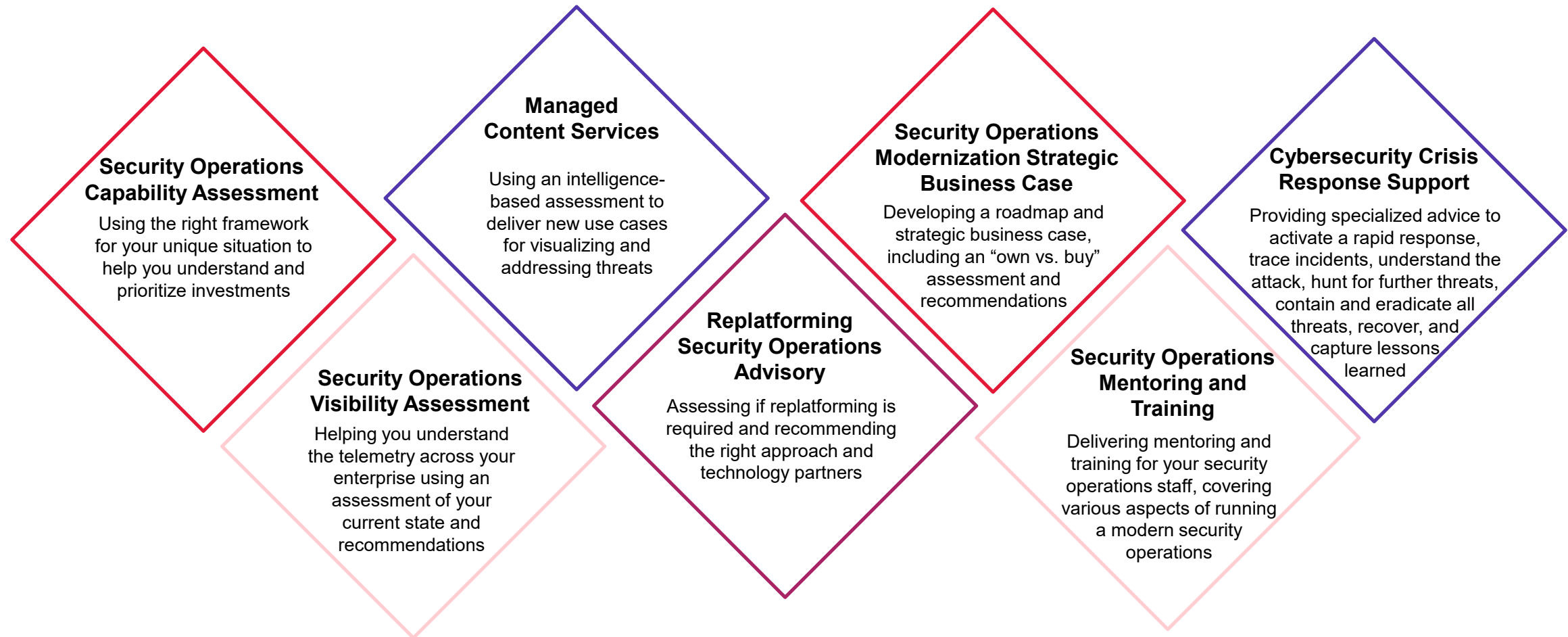
With CGI's Security Operations Modernization Advisory Services, you can modernize your security posture with dynamic operations using advanced capabilities and a proactive approach.



What success looks like

- **Real-time visibility:** You have visibility over your entire operations continuum, including ecosystems, and can capture and manage large and rich data sets, and provide real-time intelligence through advanced analytics and artificial intelligence.
- **Proactive stance:** As malicious actors and state-sponsored attacks continue to evolve, your modern security operations (e.g., platforms, tools, visualizations, trained staff, etc.) are proactively anticipating, monitoring and responding using real-time telemetry.
- **Shared threat intelligence:** You are sharing threat intelligence with other groups, helping you to reduce response time to events and enact preventative measures.
- **Efficient and effective operations:** Automations and orchestrations ensure increased operational effectiveness and reduced operational costs.
- **Prepared for crisis response:** When a crisis happens, you are prepared to react appropriately and in a timely manner, because you have practiced using scenario simulations.

CGI's Security Operations Modernization Advisory



01

Security Operations Capability

Security operations approaches of the last decade or even the last five years (e.g., pre-cloud, pre-smartphone, pre-artificial intelligence, pre-bots, pre-Internet of Things/operational technology) no longer are viable. Today's digital demands require a fundamental change, whether evolutionary or transformative. Through our capability assessment, we can support you in addressing a broad spectrum of secure operations in the digital world. We assess your end-to-end capabilities—from processes, playbooks, mandates, policies, skills, service-level deliverables, personnel and size, to tooling and technology. Using the right framework for your situation, we help you understand capability strengths, weaknesses and gaps, as measured against a defined baseline, to prioritize future investment.

02

Security Operations Visibility

In a distributed yet converged environment, spanning from inside the enterprise (information and operational technology) to customer, supplier and partner ecosystems, how can you ensure you have the immutable version of truth and real-time situational awareness? Our experts help you understand the full breadth of your enterprise and ecosystems, including devices, data, digital identities and controls. We assess your current state, identifying strengths, weaknesses, and gaps, as well as provide clear recommendations. For example, additional visibility might be required or mechanisms for consolidating data distributed across the enterprise and embedded in ecosystems.

03

Managed Content Services

From our experience in providing 24/7 security for hundreds of clients around the world, we understand modern threats and threat intelligence. This includes rules for alerts and triggers for security operations tooling, dashboards and visualizations, along with reporting to see periodic outputs (e.g., automated audit results). In the advisory part of this service, we conduct an assessment using our global threat intelligence and evolving security operations best practices. We then propose new use cases to address emerging threats, achieve operational efficiencies, experiment and innovate with artificial intelligence-powered defenses and automations, visualize evolving threats, and provide advice on tooling configurations. We also collaborate on the DevOps part of the service in developing, testing and operationalizing the new content.

04

Replatforming Security Operations

Modern security operations require a modern tool stack. Often, traditional operations have overlapping and aging tools. We work with you to assess and rationalize your current tool stack and recommend the best pathway to state-of-the-art, future-proof operations. We apply our own experience of operating and continuously modernizing security operations for our clients and ourselves. We use our reference blueprints, architectures and taxonomies in determining the right replatforming approach and roadmap for your organization. We also provide recommendations for technologies, partners, and vendors, as well as “build vs. buy” models.

05

Security Operations Modernization Strategic Business Case

Whether your security operations target requires full replatforming, tool rationalization and incremental upgrades, process and governance updates, employee upskilling, new technologies (e.g., SOAR, artificial intelligence), or all of the above, each requires a clear and compelling business case. This includes explicit “build vs. buy” decision justification. As a truly vendor-neutral partner, with decades of security operations experience, we are in a unique position to assist you with the strategic business case for your security operations modernization.

06

Security Operations Mentoring and Training

In addition to a modern tool stack, having the right skills, personnel and proactive mindset are equally essential for modern security operations. We provide mentoring and training services for your employees across various aspects of running modern security operations. This ensures you always have the right team and that your team is evolving their skills and mindset along with technological and market developments. Our most seasoned security operations architects and managers deliver this service, bringing decades of experience and learnings to your operations.

07

Cybersecurity Crisis Response

When a crisis strikes, how do you activate a rapid response, trace incidents, understand the attack, hunt for further threats, contain and eradicate all threats, recover, and capture lessons learned? In addition to preparing you for a crisis, we can be at your side to provide advice during and after the crisis. You can benefit from CGI’s decades of experience, lessons learned, and best practices in operating a global network of 8 security operations centers through which we monitor, detect and respond to security threats for our clients 24/7.

Evolved through more than 40 years of experience in assessing and managing our clients' risks, protecting their businesses and enabling them to operate with confidence, we take an integrated approach to designing and engineering today's modern security operations.

Proven security operations delivery experience

We operate a network of 8 security operations centers across the globe from which we protect, detect and respond to threats and keep our clients secure, 24/7. We bring lessons learned and know-how from securing critical systems for complex business domains—from financial services to military operations.

Our advisory services reflect our experience in building, operating and modernizing our own security operations, and from our global client experience across diverse industries. We provide guidance for building the right capabilities, talent mix, governance, processes, technologies, tools and methods to enable real-time situational awareness of vulnerabilities and threats across the enterprise. This includes continuously monitoring, hunting, detecting and responding rapidly to contain threats.

Staying abreast of an ever-changing technology landscape, industry ecosystems and threat scenarios, we balance the need for connectivity and dynamism within your business with the need for security, privacy, ethics and trust.



CGI's Cybersecurity Advisory Services

CGI's Digital Security Operations Modernization Advisory Services are part of our suite of Cybersecurity Advisory Services designed to support you in achieving your business goals through a holistic and balanced security approach. In addition to modernizing security operations, we offer guidance for improving digital identity and access management, protecting the enterprise in a multi-cloud environment, and safeguarding operations during artificial intelligence-driven automation, as examples.

We stand ready to help modernize your security operations for the future

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

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 77,000 professionals provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally. For more information

Visit [cgi.com](https://www.cgi.com)

Email us at info@cgi.com

