Gartner

IT Roadmap for Cybersecurity

Excerpt



How do successful organizations develop risk-based security programs to support business agility and resilience?

Digital business transformation and emerging cyber-physical systems create unprecedented security risk. By 2027, 75% of employees will acquire, modify or create technology outside IT's visibility — up from 41% in 2022.* In response, many organizations adopt new cybersecurity approaches.

But organizations struggle to balance cybersecurity with the need to run the business. Chief information security officers (CISOs) can help by developing processes that enable risk-based decisions while protecting against security threats and preventing data breaches and other cybersecurity events.

From our expert research and interactions with thousands of companies across industries, we have compiled cybersecurity best practices into a customizable roadmap. Use this roadmap to understand the key stages, resources and people required to plan and execute an effective cybersecurity initiative.

67%

of CEOs and senior business executives want more technology work done directly within business functions/departments and less in IT.

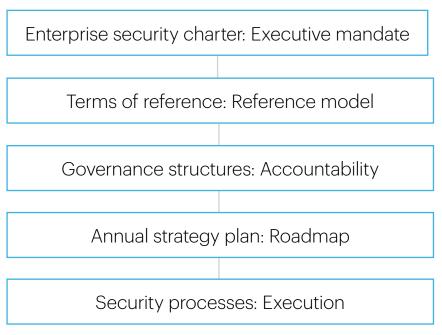
Source: 2022 Gartner CEO and Senior Business Executive Survey

By developing and implementing a robust and defensible cybersecurity program

The only way to deal effectively with the evolving risks of digitalization and increasing cyberthreats is to institute a continuous security program. Unfortunately, too many organizations just "tick the boxes" when they aim to establish a security capability — that is, they typically produce a lot of documentation and invest aggressively in technology. But they spend little or no time on establishing effective governance or the ability to assess and interpret risk effectively.

A defensible security program substantiates the answer to the important question from stakeholders: "Is the organization doing enough to reasonably protect its information resources?"

Components of a Cybersecurity Program



Source: Gartner

Some of the top questions of the cybersecurity initiative are:

- How will this support business resilience and growth goals while reducing risk?
- How can we use an outcome-driven approach to establish cybersecurity priorities and investments?
- Which leaders and teams need to be involved?

What are the key stages?

This best-practice insight is distilled from interactions with clients who have successfully implemented cybersecurity initiatives. This map shows the sequence of objectives and desired outcomes and is useful for aligning all stakeholders.

A few key milestones and a sample of associated Gartner resources are highlighted below, but the full roadmap will include complete details of all milestones and resources for each stage.

Align strategy Develop action plan Initiate execution Build and mature program Reassess and optimize

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Align strategy Develop action plan

Initiate execution

Build and mature program

Reassess and optimize



Align strategy

Set objectives and build business case

Selected tasks

Understand key business priorities; define program mission and vision; and identify business, technology and threat drivers

Identify goals, program value, and key stakeholders' roles and responsibilities

Define security controls in line with organizational strategies and map them to a standardized security framework

Get stakeholder feedback, define key objectives and finalize initial summary of security strategy document

+ more

Sample associated Gartner resources

- **Analyst inquiry:** Engage with an analyst to finalize the right metrics that can measure the impact of cybersecurity
- **Analyst inquiry:** Engage with an analyst to discuss the right approach to communicate the business impact of cybersecurity to the stakeholders
- **Research:** How to Build a Robust, Defensible Security Program That Enables Business Growth and Agility

+ more



Develop action plan

Create risk prioritization framework

Selected tasks

Conduct vulnerability assessment and penetration testing

Establish current maturity baseline, define target state and conduct gap analysis

Get executive or board buy-in and resource backing

Develop security architecture, policy framework and solution layer

+ more

Sample associated Gartner resources

- **Research:** CISO Foundations Toolkit: Strategic Planning Presentation and Dashboards
- Tool: IT Score for Security and Risk Management
- Research: Ignition Guide to Building an Annual Cybersecurity Budget

+ more

Align strategy Develop action plan Initiate execution Build and mature program Reassess and optimize



Initiate execution

Design and adjust team structure

Selected tasks

Integrate capabilities, tools and technologies

Establish security team roles and responsibilities and identify stakeholders to be accountable, consulted and informed

Develop critical competencies and train for desired of missing skills

Use metrics and incentives to drive accountability among owners

+ more

Sample associated Gartner resources

- Consultation by phone: Engage with an expert to discuss "The CARE Standard for Cybersecurity"
- Research: Read about cybersecurity threat and its impact on the business
- **Research:** How to Design a Practical Security Organization
- + more



Build and mature program

Maintain accountability and assurance through governance

Selected tasks

Develop critical incident response capability and an action plan in case of breaches

Develop a program structure to monitor and combat advanced threats

Instill a culture of secure employee behavior and initiate tailor training and awareness campaigns

Develop advanced reporting and response and craft a communications plan for cyber breaches

+ more

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- **Research:** How to Build a Robust, Defensible Security Program That Enables Business Growth and Agility

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Establish baseline Identify opportunities Implementation Institutionalize Reassess and optimize



Reassess and optimize

Communicate program value

Selected tasks

Create a plan to communicate value to the organization and the board

Track metrics and seek feedback to assess and improve program effectiveness

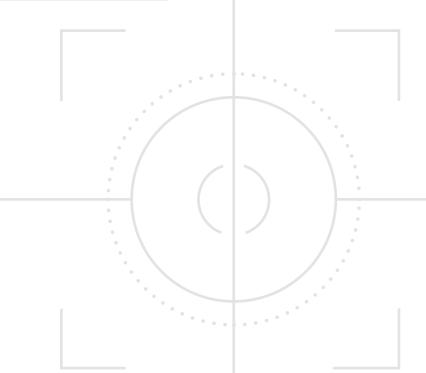
Revisit maturity assessment to further optimization

+ more

Sample associated Gartner resources

- **Consultation by phone:** Discuss the key points that can help in the further optimization of cybersecurity preparation in the organization
- **Analyst inquiry:** Redo the Gartner IT Score assessment to measure progress and reprioritize
- **Research:** Tool Board Briefing: How to Communicate the Cyber-Risk Posture of Your Organization

+ more



Who needs to be involved?

The most successful companies establish cross-functional teams for their cybersecurity initiatives. We have outlined the recommended functions to involve and their roles to ensure the best success in hitting the milestones.

CISO

Leads development of cybersecurity strategy and program; ensures cybersecurity strategy is aligned with business strategy and objectives; directs assessment, action plan and execution; helps communicate cybersecurity strategy and progress across the organizations; collaborates on program implementation with key leaders and stakeholders

CIO

Collaborates with organizational leaders and guides the building of the cybersecurity program; communicates strategy and objectives across the organization

Technical professionals team

Designs, implements, or improves and maintains security architectures, policies and procedures; monitors and evaluates cybersecurity performance, and improves it on the basis of new threats; improves skills as needed

Enterprise applications and software engineering leader

Key partner for the CISO; assist with implementation and operation of key elements of security programs and operations

Enterprise architecture leader and team

Collaborate with the CISO and other IT leaders to make sure that security strategy and architecture are aligned and incorporated into overall enterprise architecture

Infrastructure and operations team and leader

Key partner for the CISO; assist with implementation and operation of key elements of security program and operations

Data and analytics leader

Partners with the CISO to establish data ownership, data value and data security governance

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Customer success story: Enabling IT Compliance With Cybersecurity Roadmap

Mission-critical priority

With the aim to streamline business processes and develop a digital-business-ready environment, Pacific Textiles wanted to develop a framework that adheres to IT compliance, minimizing cybersecurity risk.



How Gartner helped

With access to Gartner experts, research and tools, Pacific Textiles was able to digitalize information through an ERP system, automate manufacturing processes with new technology and craft a ready-to-execute cybersecurity roadmap.



Mission accomplished

With the help of Gartner, Pacific Textiles was able to:

- Take a holistic approach to governance and risk management procedures
- Build a strong digital business foundation
- Optimize business processes, saving time and energy for the top management

Gartner for Chief Information Security Officers

Drive value across the business with expert guidance, tools, peer networking and targeted events.





Demonstrate Business Value

Be a better cybersecurity leader in key areas:

- Role, relationships, talent and culture
- Obtaining defensible budgets
- Cybersecurity program strategy and vision

Avoid risk with strong daily cybersecurity programs:

- Enterprise risk management
- Future of work, risk response strategies, change management

Optimize tech investments and execution:

- Trends on emerging tech advances
- Pragmatic measurement and decision-making tools
- In-depth technical implementation guides
- Contextualized industry insights



Accelerate Key Initiatives

Turn strategy into action with tools that accelerate execution and deliver on business outcomes:

- CISO Effectiveness Diagnostic
- Cybersecurity Controls Assessment
- IT Score
- Board Briefing Templates



Peer Networks

Connect with other security industry leaders in 1:1 chats, peer-led discussions, polls, and access technology ratings and reviews.



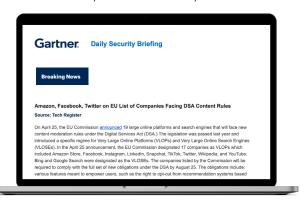
Engaging Events

Enjoy VIP access at Gartner Security & Risk Management Summit with numerous educational breakout sessions, and many more opportunities to connect with peers and Gartner experts. Plus, apply to be part of the CISO Circle for exclusive sessions and networking opportunities.



Daily Security Briefing

Stay on top of the most pressing news with a digest of articles from reputable news sources, including a cross-industry, global summary of the most recent threats and security news of the day.



"It's the first thing I read each morning. I use it to head off concerns that come from execs and forward any new vulnerabilities to my team to ensure we take measures to mitigate risk."

CISO, Global Wireless Technology Provider

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Actionable, objective insight

Explore these additional complimentary resources and tools for cybersecurity leaders:

Research

The CISO's Guide to Your First 100 Days

Find out the actions you should take in your first 100 days as a CISO.

Webinar

Treat Cybersecurity as a Business Investment for Better Outcomes

Understand how to communicate outcome-driven metrics to your board of directors.

eBook

Leadership Vision for Security and Risk Management Leaders

Explore the top 3 strategic priorities for security and risk management leaders.

Conference

Explore Gartner Cybersecurity Conferences

Advance your cybersecurity and risk management strategy by attending a Gartner conference.

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