# 5 Lessons Learned From CISOs' Technology Adoption Plans for 2023

Wayne Hankins

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### **Where to Start**

#### Cybersecurity Conceptual Architecture 3.0

Cybersecurity Conceptual Architecture 3.0												
Architecture	Secure Design and Threat Modeling	Cloud Security Architecture  Cyber Security Mesh Architecture (CSMA)  SASE	DCSA	Malware Protection Architecture Mobile Security Strategy	Identity Arch	SABSA Security Network Architecture Network Security Architecture (ZTA) SASE	SIEM Architecture					
		Email Sec Arch				DDoS Hardware / DDOS CSC Sanitized DNS / DOT / DOH						
			DB Activity Monitoring		Federation / SSO	NPB	Configuration Management Security (Posture Management)					
$oxedsymbol{eta}$	Containers Security		Data Transport (IPSEC/TLS)		MFA	NAC	Threat Intelligence					
Basic Security	Kubernetes Security		File System Encryption	Anti-malware / EPP for Servers	Certificate Lifecycle Mgmt	IPS	External Attack Surface Mgmt.					
	Application Security Testing	Secure Email Gateways	Full Disk Encryption	Anti-malware / EPP	Authorization	Remote Access (VPN, ZTNA)	XDR					
	Secure Coding Practices	Secure Web Gateways	Data Loss Prevention (DLP)	Endpoint Encryption	Access Mgmt	SWG	MDR					
	Software Composition Analysis	Native CP Security	Encryption Infrastructure (PKI, HSM, KMS, CA)	Baseline Security and OS Hardening	Directory Services	Firewall TLS	Vulnerability Assessment SIEM					
			Privacy-Enhancing Encryption (Computationally Safe, Homomorphic, Privacy Preserving)	-	Machine Identity	Data Diodes	OILM					
	Web Application and API Protection				CIEM	FWaaS						
_	RASP	Description	Data Masking (Static/Dynamic)		Identity Proofing	DNSSEC	Security Automation (SOAR)					
$oldsymbol{ol}}}}}}}}}}}}}}}}}}$	Secrets Management	Browser Isolation	Data Classification	Sandboxing	Passwordless	VDI/RDG / DaaS	CAASM Attack Surface Mgmt					
Advanced	CNAPP	CNAPP		Extended Detection and Response (XDR)		Deception	Breach Attack Simulation					
Security	API Security and API	CWPP	EDRM		Adaptive Auth/AuthZ	Containers	PTaaS					
	Gateways	CSPM	Tokenization	Endpoint Detection and Response (EDR)	Zero Trust	NDR	Vulnerability Prioritization					
	Mobile Application Security	SMP	Data Discovery/Mapping	MTD	PAM / PIM	SSE	Red Team					
	Application Security	SSPM	Database Encryption	Application Control and Containment	ITDR	Microsegmentation	Vulnerability Management					
People and Process	Programs	CASB / SSE	(Field/Record)	Containment		NSPM	Exposure mgmt.					
	Security Coaches and Champions	Policy as Code	Data Access Governance		Access Mgmt	DDoS Emergency Response Planning	Incident Response					
	DevSecOps Practices	Cloud Security Architect	Privacy		Identity Governance	Network Security Architect	Threat Hunting					
	Secure Continuous Delivery	Cloud Risk Assessment	Data Classification Program	Mobile App Security Training	User Lifecycle Mgmt	Network Risk Assessment	SOC Model					
Security Area	Application	Cloud & Infrastructure	Data	Endpoint	ldentity	Network	Sec Ops					



- 1 What does the technology adoption roadmap cover?
- The five lessons learned for the CISO's TAR:
  - What is the outlook for cybersecurity budgets in 2024?
  - Application and data security improve cloud-native applications?
  - Why are SRM leaders interested in infrastructure security technologies?
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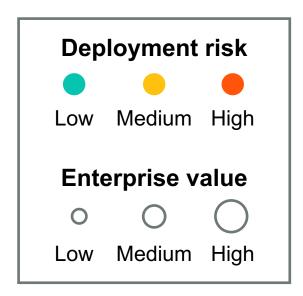


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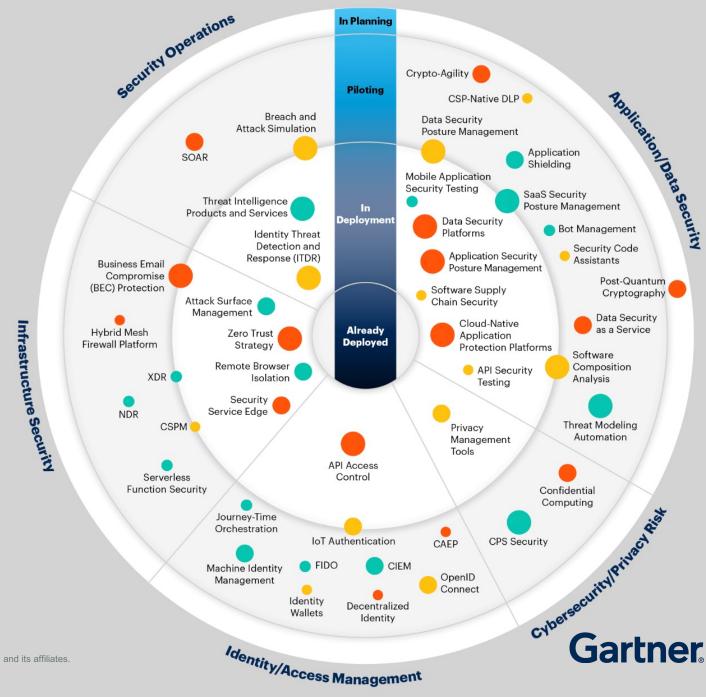
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# 2024 Technology Adoption Roadmap for Security and Risk Management



n = 164; security & risk management leaders



# 2024 Technology Adoption Roadmap for Security and Risk Management

#### **Enterprise Value**

The value factor awarded to each technology is based on the analysis of value drivers, including increased costefficiency, improved speed and agility, enabled resilience, enhanced employee productivity, and delivery of superior capabilities to consumers.

Low

Medium

High

#### **Deployment Risk**

The risk factor awarded to each technology is based on the analysis of potential risks posed, including talent unavailability, high or unpredictable costs, cybersecurity risk, technical incompatibility or architecture complexity, and inability to switch providers due to vendor lock-in.







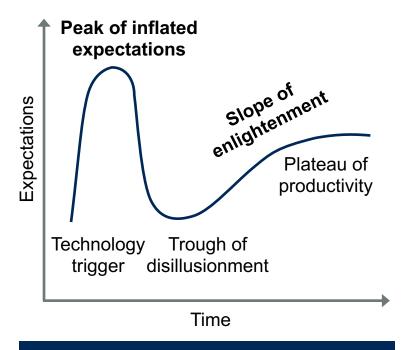
#### **Adoption Phase**

The adoption phase is determined by the current deployment plans for a majority of organizations. Technologies placed on the border between phases are on the cusp of moving into the next deployment phase.



# **Gartner's Suite of Complementary Products**

### Overview of three different methodologies



#### Hype cycle

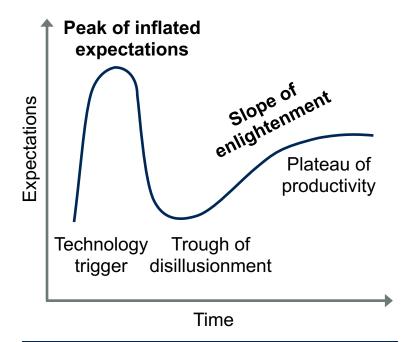
- Longer time horizons
- Technology landscape assessment
- Gartner analysts

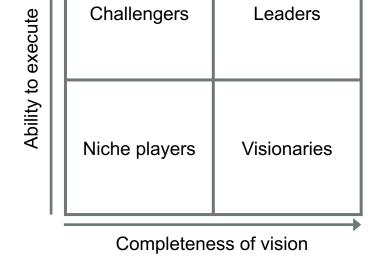
n = 164; security & risk management leaders



# **Gartner's Suite of Complementary Products**

### Overview of three different methodologies





### **Hype Cycle**

- · Longer time horizons
- Technology landscape assessment
- Gartner analysts

# Magic Quadrant and Critical Capabilities

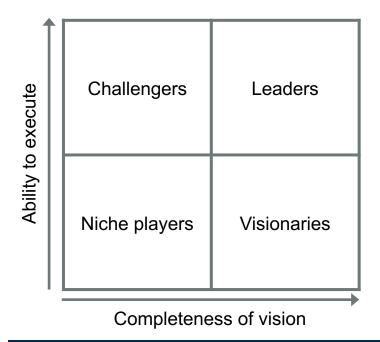
- Key vendors and products
- Enables vendor selection decisions
- Gartner analysts

#### n = 164; security & risk management leaders



## **Gartner's Suite of Complementary Products**

### Overview of three different methodologies



### Magic Quadrant and Critical Capabilities

- Key vendors and products
- Enables vendor selection decisions
- Gartner analysts



## Technology Adoption Roadmap (TAR)

- 12-18 months time horizon
- Benchmarks adoption plans
- Enterprise users





# Scope of the Technology Adoption Roadmap

**Details of the 2024 Technology Adoption Roadmap** 





Application and data security

Cybersecurity

Infrastructure security

Security

Operations security

and privacy risk

167 SMR leaders from large enterprise

44 technologies

5 technology domains



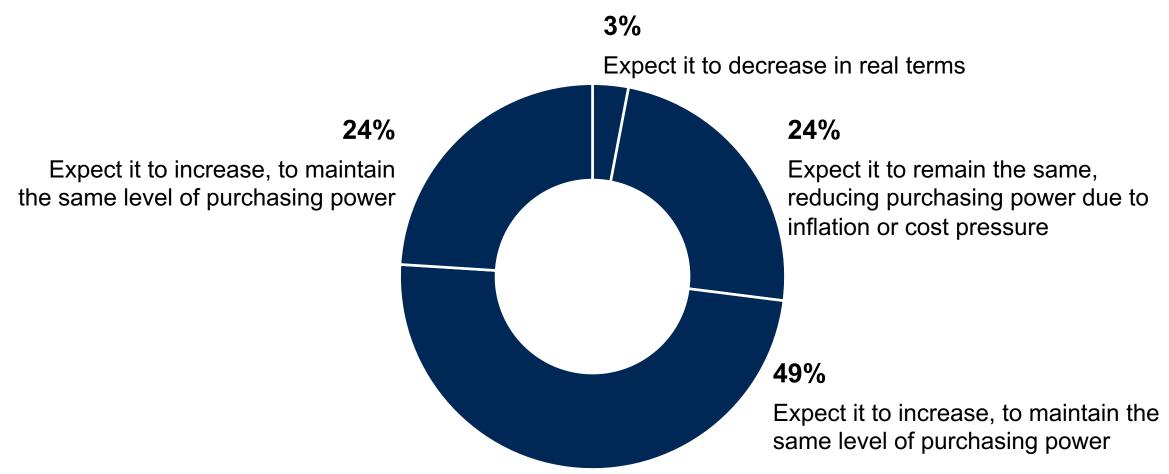


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# SRM Leaders Expecting Increase to Maintain Posture

What impact do you anticipate on your cybersecurity/information security budget for the financial year 2024, considering current economic conditions?

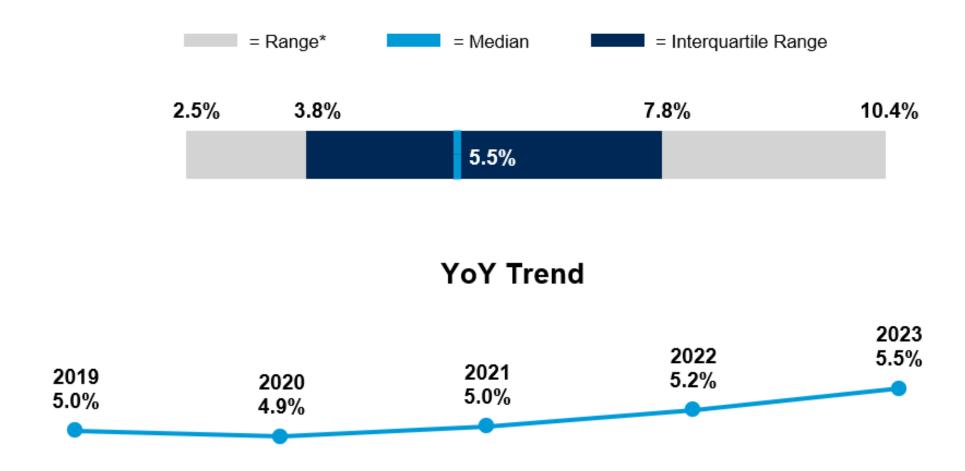


n = 167 (SRM leaders from global organizations); 44 (technologies)



# **SRM Leaders Expecting Increase to Maintain Posture**

IT security spending as a percent of total IT spending clarifies the relative level of investment to support the security of the total IT environment from a total IT portfolio perspective



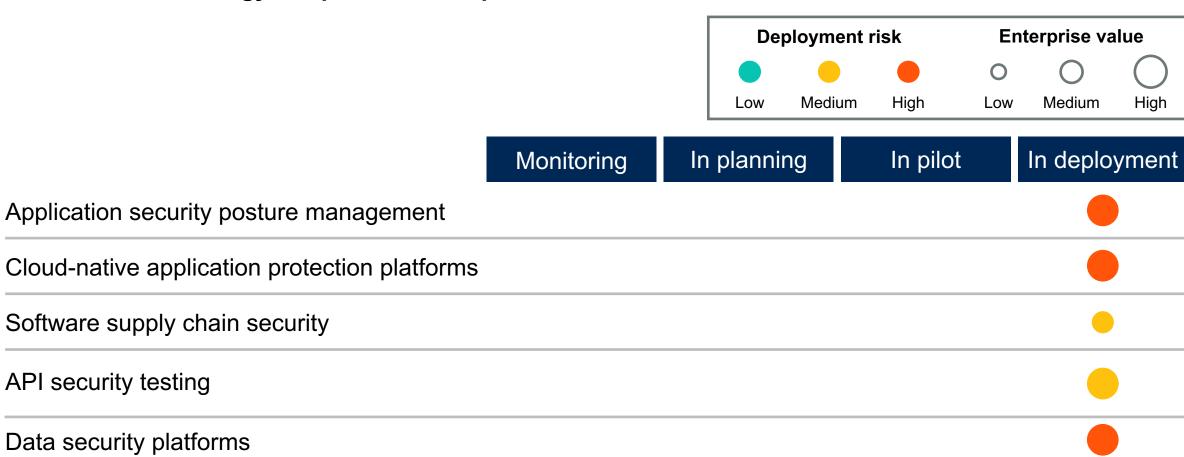
<sup>\*</sup>Range includes the 10<sup>th</sup> to 90<sup>th</sup> percentile of the sample

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# **High Risks Due to High Cost**

Deployment phases of applications and data security technologies in the 2024 Technology Adoption Roadmap



n = 167; (SRM leaders from global organizations); 17/44 (technologies)



### **Data Security Platforms**

### **Recommendation to improve DSP deployments**

- Reduce vendors or products, complexity and costs.
- Variety of data stores and business applications.
- Core design consideration
- Write policy-based data access rules.



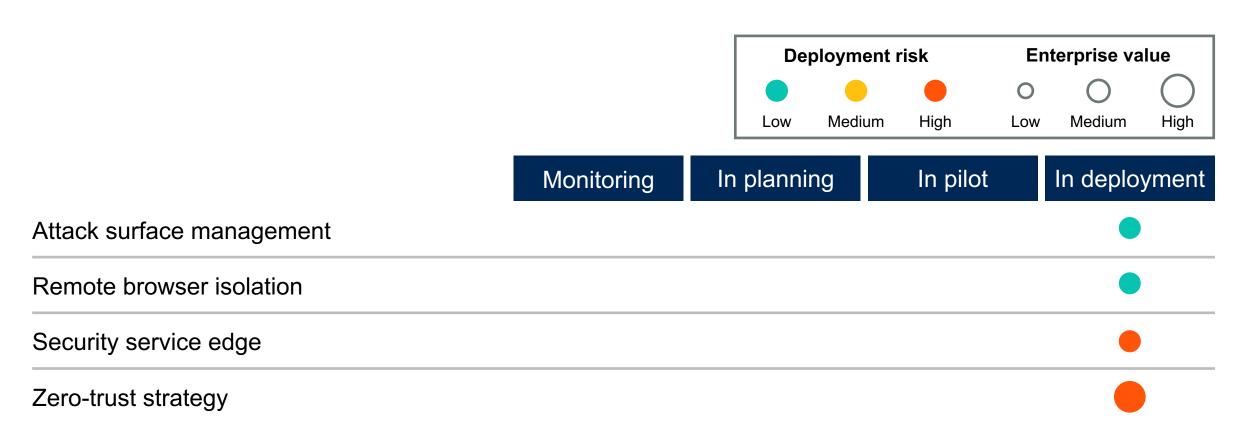


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## **High Risk Due to High Cost**

Deployment phases of infrastructure security IPs in the 2024 technology adoption roadmap

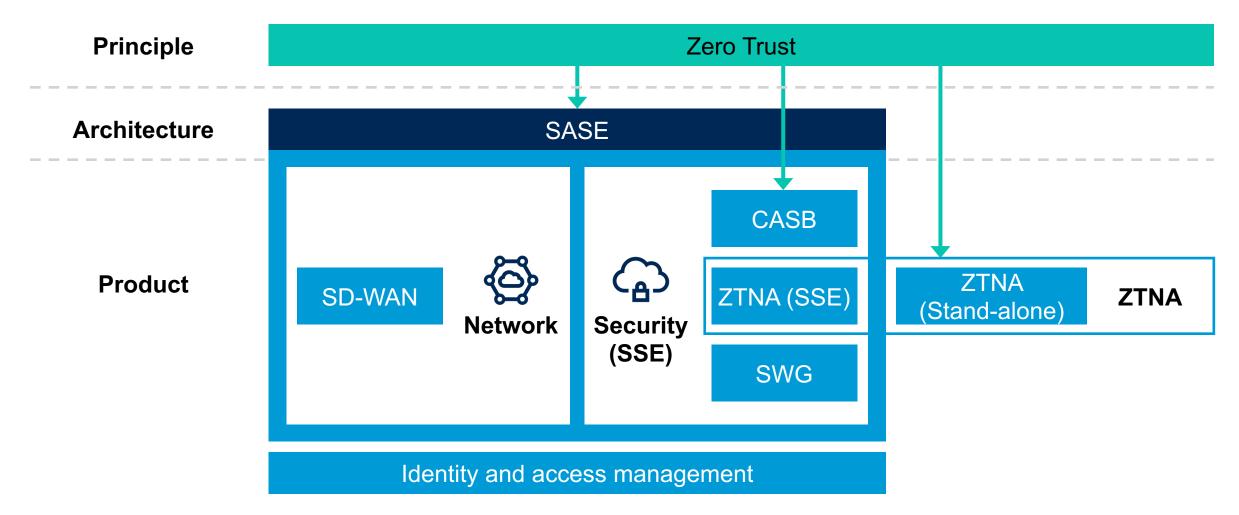


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## **Security Service Edge**

The relationship between SASE and SSE

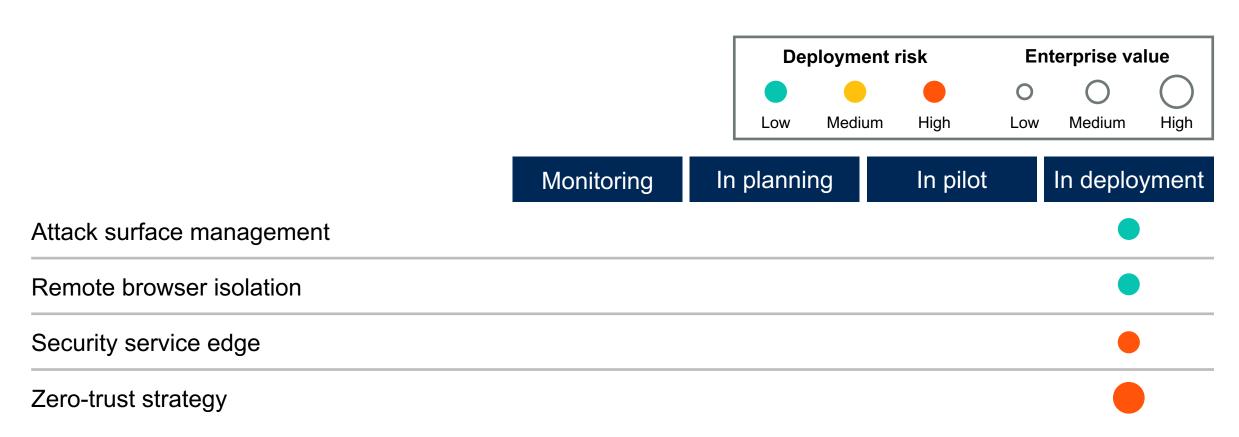


Source: Market Guide for Zero Trust Network Access, China



## **High Risk Due to High Cost**

Deployment phases of infrastructure security IPs in the 2024 technology adoption roadmap

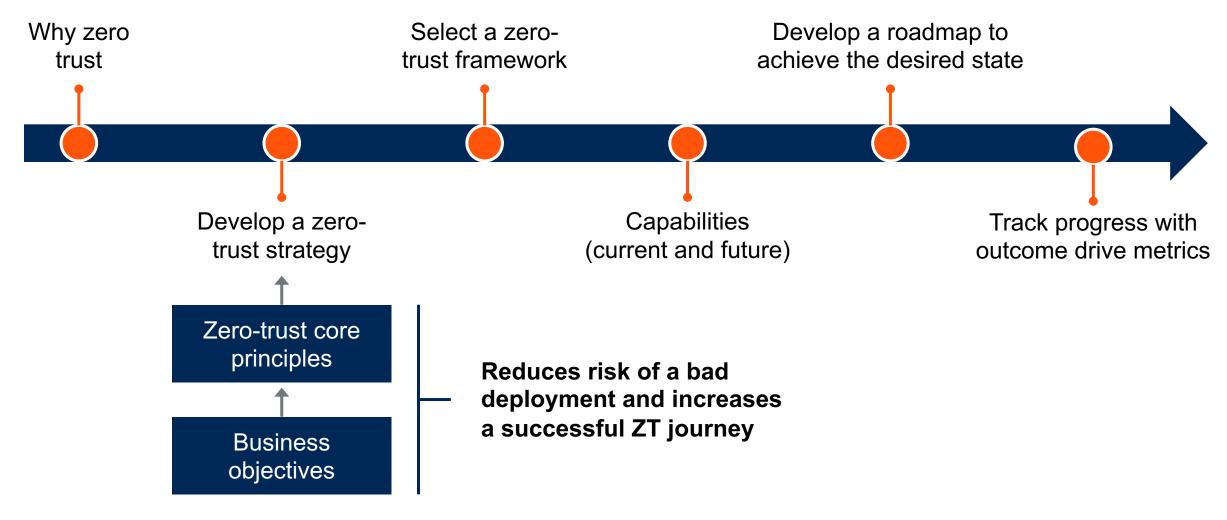


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### **Zero-Trust Strategy**

How to minimize risk during your organization's zero-trust journey





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## **SRM Leaders Revisiting Deployment Strategy**

Deployment phases of breach and attack simulation and NDR changed in the 2024 TAR

			Deployment risk			Enterprise value		
						0	0	
		L	Low	Medium	High	Low	Medium	High
	2023 TAR		2024 TAR			Risk/value TAR 2024		
Breach and attack simulation	Deployment end of 2023	In pilo		pilot		•		
NDR	In deployment		ln <sub> </sub>	pilot				



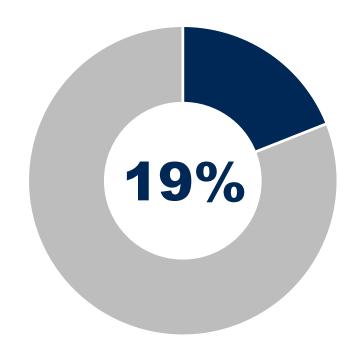


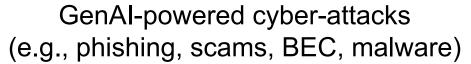
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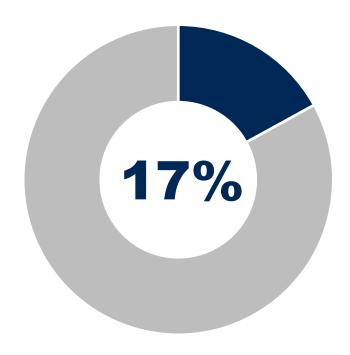


### **SRM Leaders understand GenAl Risks**

Various ways in which SRM leaders anticipate generative Al-related risks







Erroneous or unethical decision-making due to Al bias, hallucination or misinformation

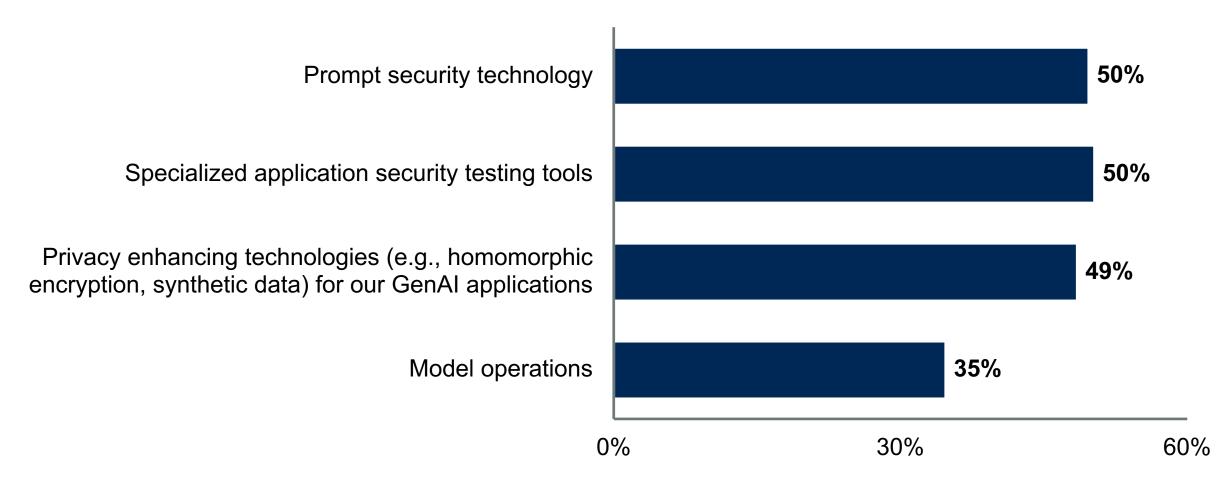
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Q: What risks concern you most regarding Generative AI or GenAI? Source: 2023 Gartner Technology Adoption Roadmap for Large Enterprises Survey



# **SRM Leaders Are Securing GenAl Applications**

Various ways in which SRM leaders are thinking of protecting their enterprises GenAl applications



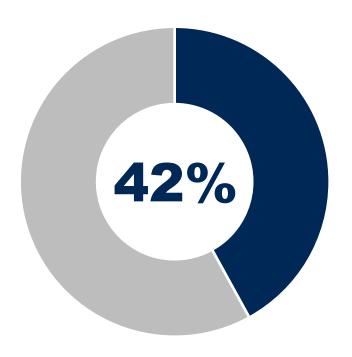
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Q: Is your enterprise investing or planning to invest in any cybersecurity technologies to protect your GenAl applications in 2023-2025? Source: 2023 Gartner Technology Adoption Roadmap for Large Enterprises Survey

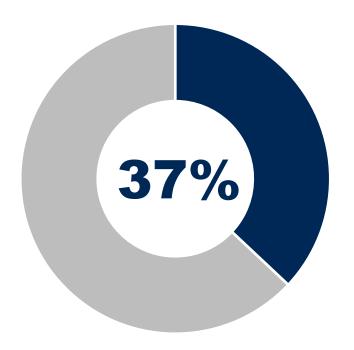


# SRM Leaders Are Optimistic About Generative Al

Various ways in which SRM leaders foresee generative Al impacting cybersecurity daily work



Generative AI user interface ("virtual assistants") in existing security tools



GenAl-powered third-party, supply chain, vendor risk management platform

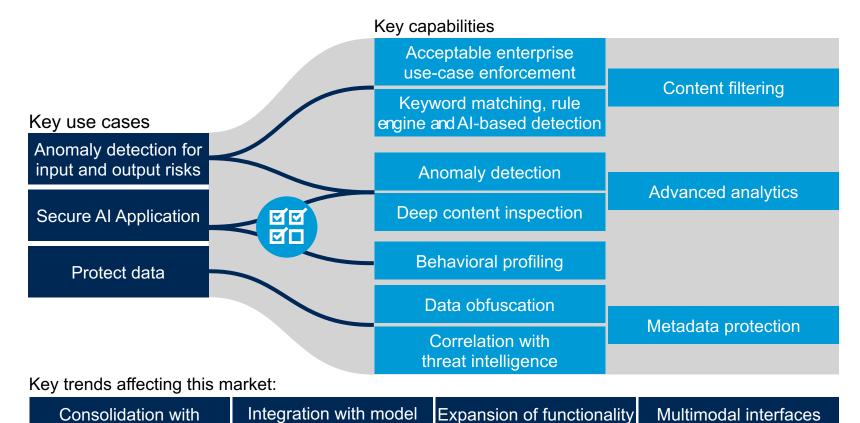
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Q: Is your enterprise investing or planning to invest in any GenAl cybersecurity technologies and/or use cases in 2023-2025? Source: 2023 Gartner Technology Adoption Roadmap for Large Enterprises Survey



# **Generative AI Brings New Risks in Three Categories**

### Content anomalies, data protection and Al application security



into adjacent areas

GenAl data protection

standards emerging

and capabilities

GenAl bias mitigation

tools merging

#### Recommendations

- 1. Proof of concepts
- 2. Content anomaly detection
- Evaluate AI application products
- Continue to use known legacy controls

Source: Innovation Guide for Generative AI in Trust, Risk and Security Management

legacy security products

Satisfy initial user

needs for usage maps

provider functionality

Niche emerging market

with low revenues

### **Recommended Gartner Research**

To learn more about access to Gartner research, expert analyst insight, and peer communities, contact your Gartner representative or click on "Become A Client" on gartner.com to speak with one of our specialists.

- Innovation Guide for Generative Al in Trust, Risk and Security Management Avivah Litan, Jeremy D'Hoinne and Gabriele Rigon
- Use-Case Prism: Generative AI for Defense Michael McFerron
- Quick Answer: What Is Zero Trust Networking?
  Andrew Lerner and John Watts
- 2024 Strategic Roadmap for SASE Convergence John Watts, Andrew Lerner and Neil MacDonald
- Top Trends in Cybersecurity for 2024
  Richard Addiscott, Jeremy D'Hoinne and others
- Quick Answer: What Are the Core Principles of Zero Trust?
  Wayne Hankins, Charlie Winckless and Andrew Lerner
- Infographic: 2024 Technology Adoption Roadmap for Security and Risk Management
  Aanchal Mair



### **Additional Recommendations**

- Align the appropriate level of protection to support the business crown jewels.
- If you have a business impact analysis report, leverage it to help identify what are your critical assets for the business and develop to support the business.
- Utilize outcome-driven metrics. They have a direct line of sight to the operational outcomes of investment and to the level of protection delivered in a business context.



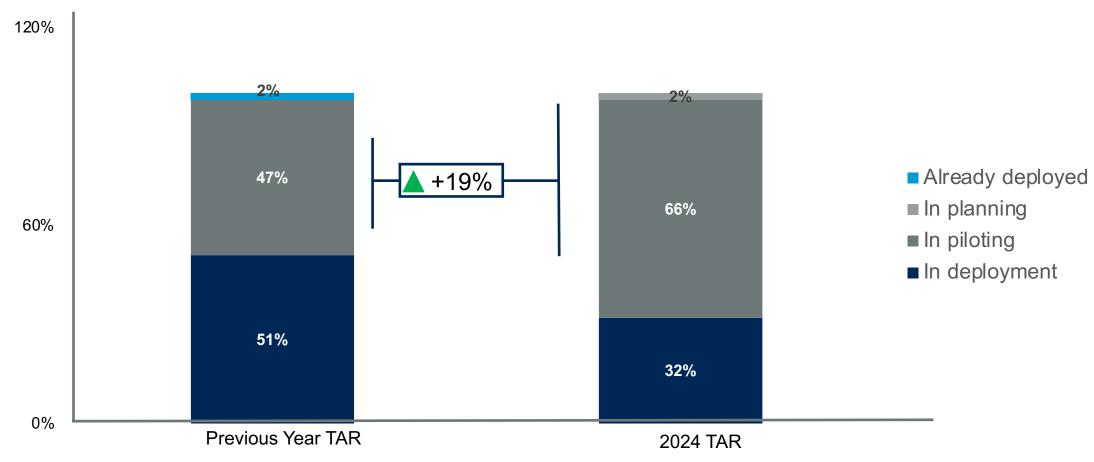
### **Additional Resources**



### More Technologies in Piloting in 2024

### Distribution of technologies by adoption stage

Percentage of technologies



n = (SRM | leaders from global organizations) = 126 (2022), 167 (2023); n (technologies) = 49 (2022), 44 (2023)

Source: 2022 Gartner Technology Adoption Roadmap for Large Enterprises Survey; and 2023 Gartner Technology Adoption Roadmap for Large Enterprises Survey

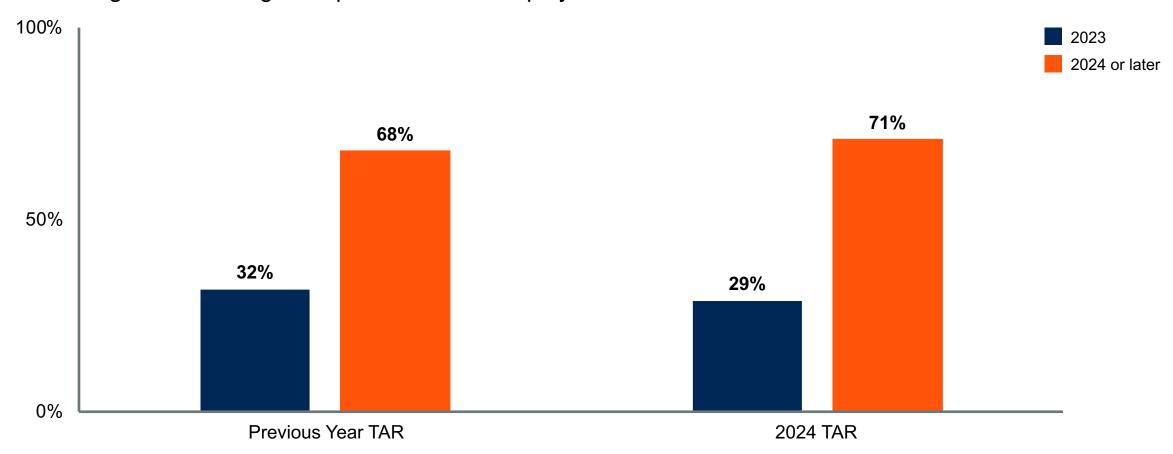
Q: Please indicate the stage that best reflects your organization's adoption plan for each of the technologies: Not Monitoring, Monitoring, Planning, Piloting, in Deployment and Already Deployed.



### **Moderate Speed of Deployment in 2024**

### Distribution of technologies that are "In deployment" stage by timeline

Percentage of technologies expected to be in deployment within the next 18 months



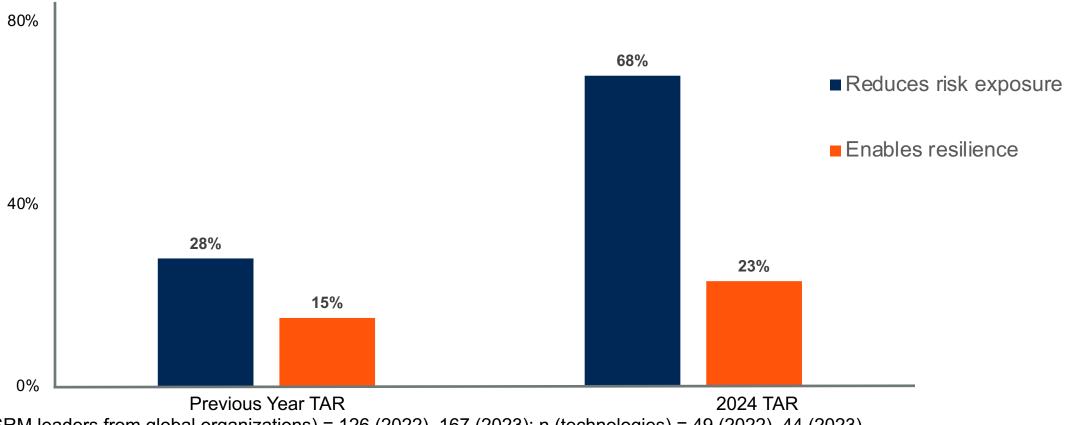
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Q: Please indicate the stage that best reflects your organization's adoption plan for each of the technologies: not monitoring, monitoring, planning, piloting, in deployment and alread captures.

# Reduces Risk Exposure No. 1 Priority for Tech Adoption

Reduces risk exposure and enables resilience selected as a value driver for techs in previous and current year's TAR Percentage of technologies



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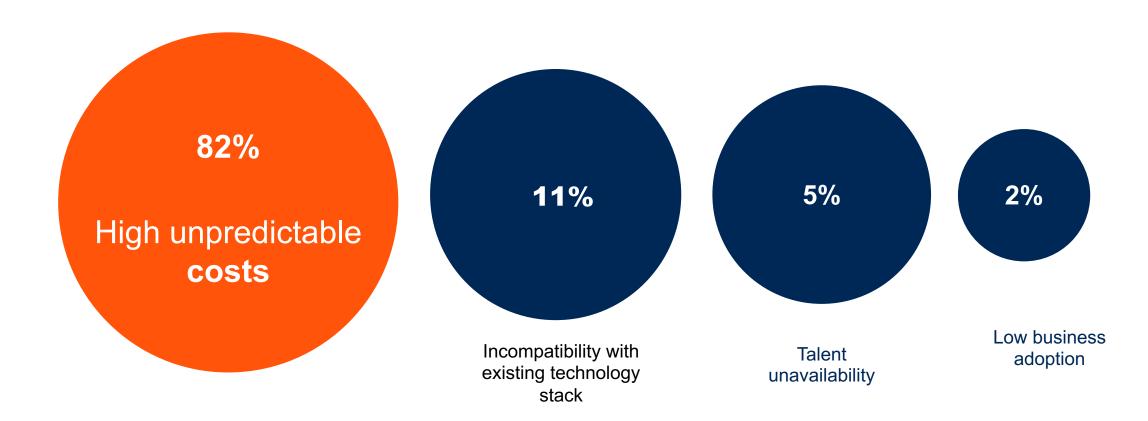
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Q: Please indicate the stage that best reflects your organization's adoption plan for each of the technologies: not monitoring, monitoring, planning, piloting, in deployment and alread captures.

## **Unpredictable Cost No. 1 Risk for Tech Adoption**

### Primary risk driver of technologies this year

Percentage of technologies



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