DARKTRACE

■ Executive summary

State of Al Cybersecurity 2025

Industry perspectives on the growing role of AI in cybersecurity

The impact of AI in the cybersecurity field is a double-edged sword: there is an expanding body of evidence showing that it is being harnessed more and more effectively by threat actors, but it is also transforming the defensive arsenals of security teams. We surveyed over 1,500 cybersecurity professionals from around the world to uncover their attitudes, understanding, and priorities when it comes to AI cybersecurity in 2025.



The threat

Cyber-threats are becoming a reality, and organizations are acting now, with many more now saying they feel prepared to defend – but 45% still do not.



■ Of CISOs now agree

Al-powered cyber-threats are already having a significant impact on their organization. A 5% increase from 2024



 Of professionals feel unprepared to defend against Al-powered cyber-threats.
Down from 60% last year

The confidence gap

62% of CISOs feel prepared vs. 52% in other security roles



Comprehension

Cybersecurity professionals are slowly gaining a better understanding of different AI types and techniques, but there is a long way to go.

42%

 Report full confidence in their understanding of the different Al types used in their security stack.

The knowledge gap

60% of CISOs know exactly what AI types are being used in their stack vs. just 18% in other security roles

Al Security Policy

More talk than action

95%

said their organizations were either discussing a policy on the safe and secure use of AI or had already implemented one, but only a minority (45%) had already established such a policy.

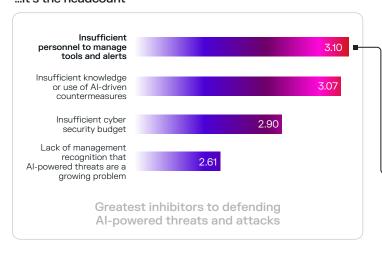
Most common steps taken to reduce risk around Al use:

- Implement security controls to prevent unwanted exposure of corporate data when using Al (67%)
- Implement security controls to protect against other threats/risks associated with using AI (62%)
- Implement AI-specific training for application developers (48%)

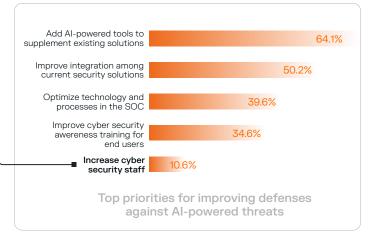
) Hiring

Despite 'insufficient personnel' being considered the greatest inhibitor to defending Al-powered threats, increasing cybersecurity staff is at the bottom of the priority list, with 11% (and only 8% of executives) planning to increase cybersecurity staff in 2025 - even less than in 2024.

It's not the budget or the lack of awareness ...it's the headcount



... but very few are prioritizing hiring this year



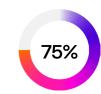


Al Cybersecurity Solutions

Confidence in defensive AI is growing ...

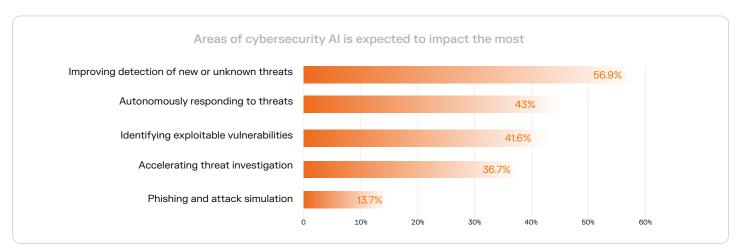


Strongly agree that Al-powered security solutions significantly improve the speed and efficiency of their ability to prevent, detect, respond to and recover from cyber-threats



Are confident that Al security solutions can better defend against Al-powered threats than traditional tools

.... and the area AI is expected to have the MOST impact is the detection of new / unknown threats



Decision-makers expressed a preference for broader platforms over point products and solutions that don't require their data to be shared externally. The vast majority have confidence in Al's ability to help them become more proactive.

■ Proactive

agree the use of Al within the security stack is critical to freeing up time for the security team to become more proactive ■ Platform

prefer a platform approach to defense over implementing a collection of point solutions

■ Privacy

prefer solutions that do not require their data to be shared externally for model training and other purposes

Download the report

for the full findings, trends, and analysis

Uncover the complete findings from the 23-question survey. See how these results break down by org size, job title, industry, and region, and get practical advice on dealing with the reality of cybersecurity in the era of Al.

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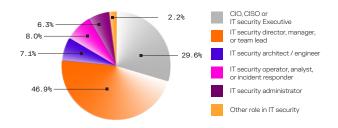


Survey Methodology

Our survey was conducted online in September 2024. Respondents held a variety of positions within information security. Roughly 30% were CIOs, CISOs, or other senior leaders. Survey participants came from 14 different countries in four different regions, including North and Latin America, Europe, and the

Asia-Pacific region. Their organizations ranged in size from 500 employees to more than 25,000, with most (59%) working for organizations with more than 1,000 and less than 10,000 employees.

Survey participants by role



Survey participants by size of organization

