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Addressing Cybersecurity Gaps from Edge to Cloud: Key 2025 Research Insights

2025 Global Study on Closing the IT Security Gap

Ponemon INSTITUTE

The 2025 Global Study on Closing the IT Security Gap

Sponsored by Hewlett Packard Enterprise

Independently conducted by Ponemon Institute LLC

Publication Date: February 2025

Ponemon Institute© Research Report

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Now in its fourth year, **The 2025 Global Study on Closing the IT Security Gap: Addressing Cybersecurity Gaps from Edge to Cloud,** published by the Ponemon Institute and sponsored by Hewlett Packard Enterprise, looks deeply into the critical actions needed to close security gaps and protect valuable data in the AI era.

2,100+

IT security practitioner respondents

16+

Industry verticals represented

Global

Representation: Australia, Japan, North America, United Kingdom, Germany, France

Includes insights and best practices on:

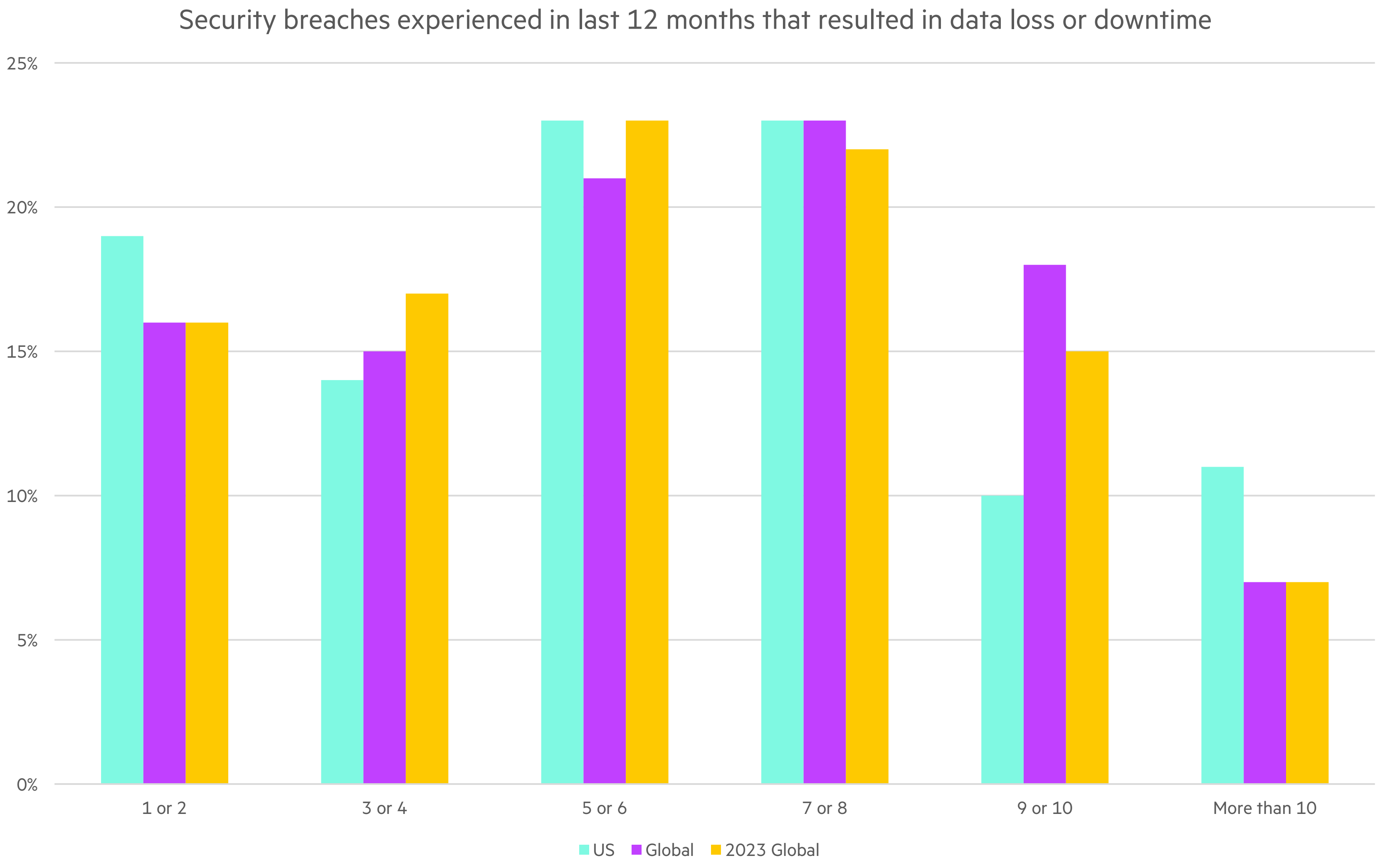
AI adoption — Risk reduction strategies — IT team collaboration
Network security — Hybrid cloud — Cyber-resilience

“The increasing sophistication of cyber criminals — as well as accelerating adoption of AI — make it more important than ever for organizations to become aggressive in closing security gaps in their IT infrastructure.”

Ponemon Institute, 2025

Key insights

Security breaches are a frequent concern



- Globally, most organizations experienced 7-8 breaches resulting in data loss or downtime
- Globally, organizations are experiencing more breaches than last year
- Most US organizations reported experiencing 5-8 breaches in the last 12 months

Multiple operational and governance gaps persist

What are the primary operational and governance gaps in your organization's IT infrastructure?

(Top-ranked answers)

#1

Security staffing, skills and experience shortages

#2

Security solutions can't keep up with exponentially increasing data

#3

Business continuity plan does not include cyber incidents

Insufficient budget

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Pen testing, data protection, NDR top steps to minimize threats

What are the most effective steps to take to minimize threats within your organization's IT infrastructure?

(Top-ranked answers)

#1

Implement NDR (network detection and response)

Conduct comprehensive penetration testing

#2

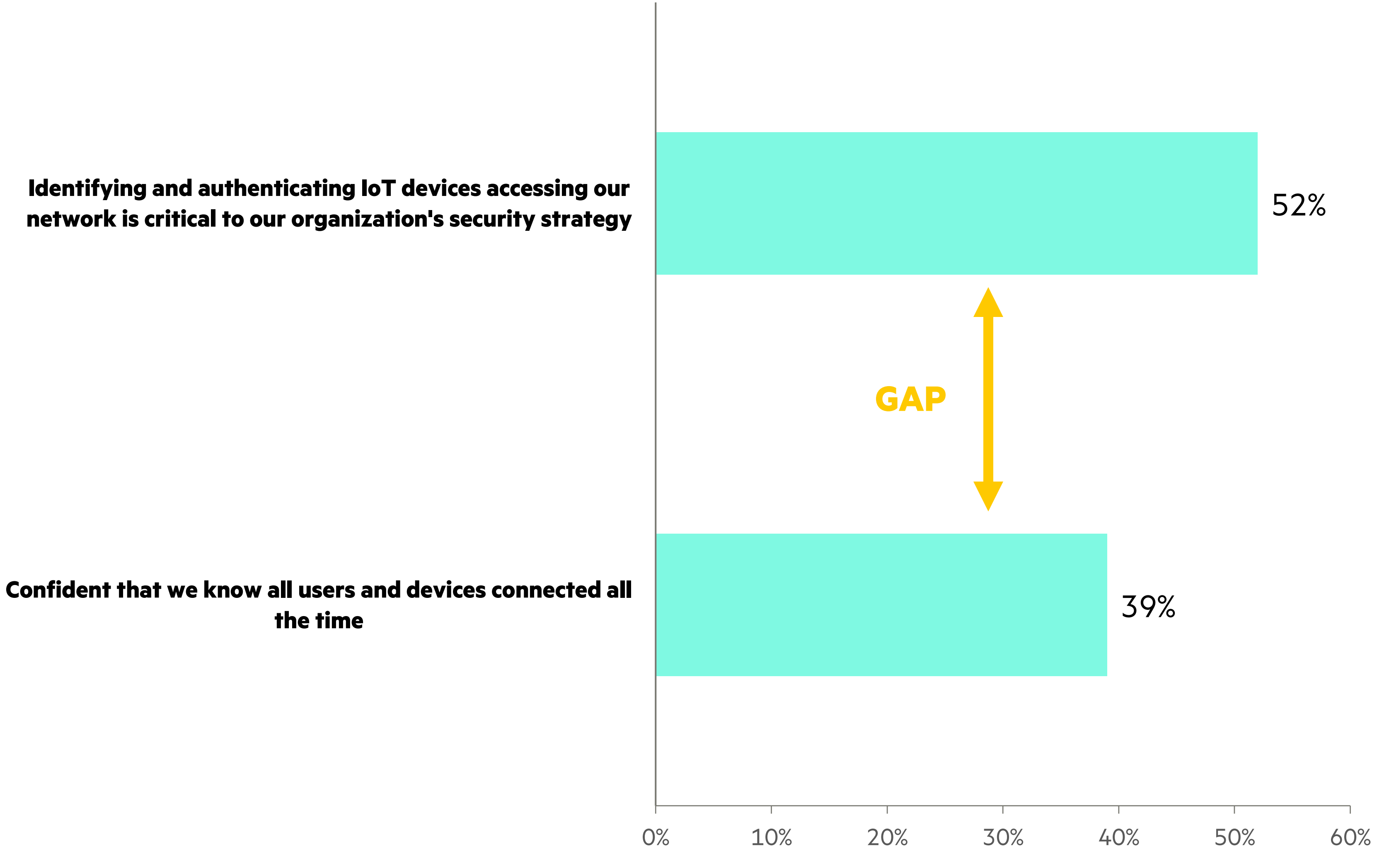
Prioritize rapid attack and breach detection

#3

Implement a secure and continuous data protection and back up strategy

Implement kernel detection and utilize silicon root verification

Securing IoT is critical to closing cybersecurity gaps



“What is required to achieve a strong level of IoT security within your organization?”

Network access control

is ranked #1 or #2
in all countries globally
(except Japan)

🟩 Global

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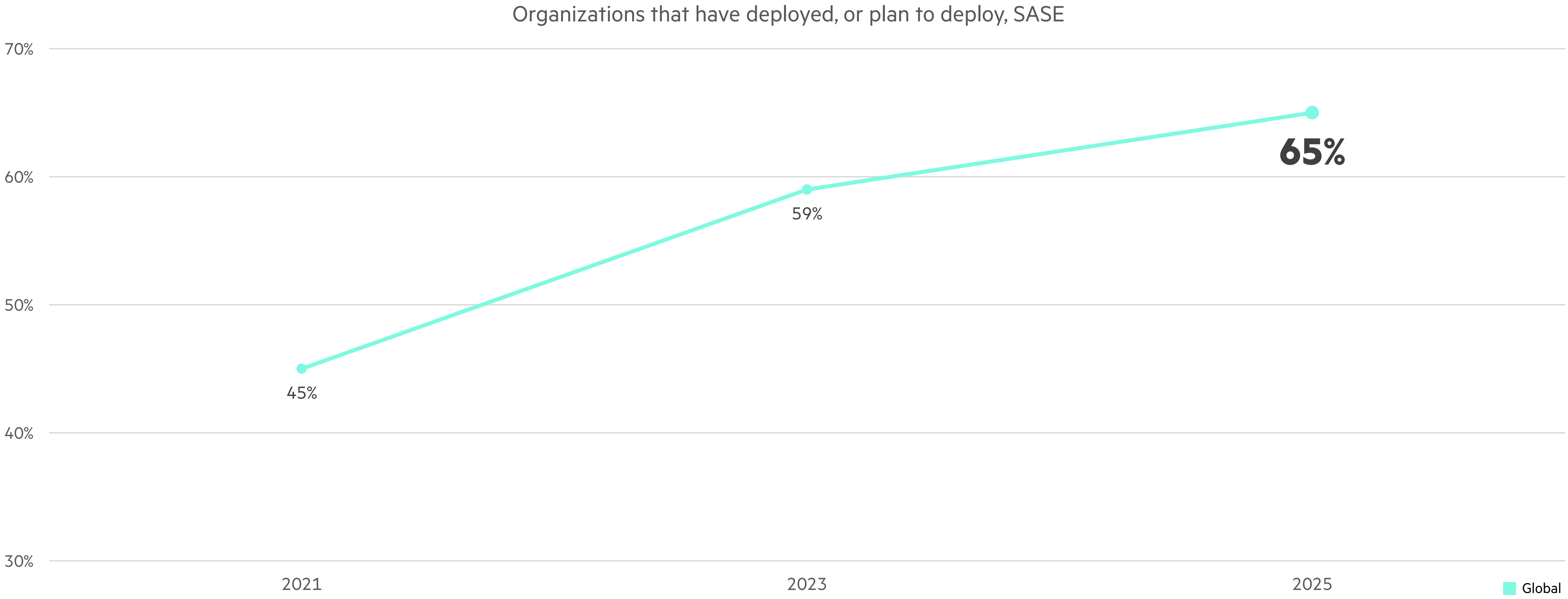
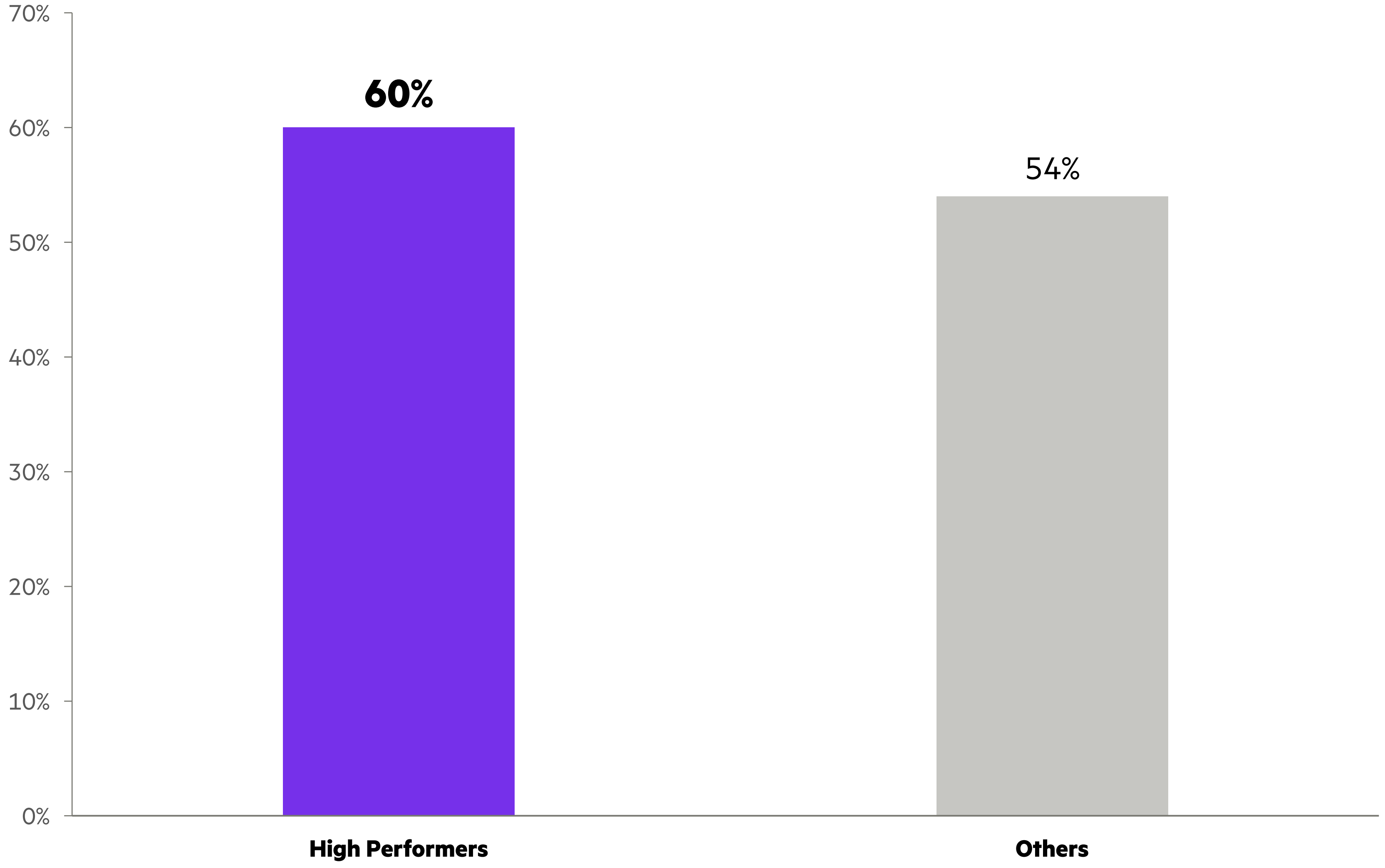
SASE adoption is rising



Rate of SASE adoption has been increasing steadily over the years

Best practices of high-performing security organizations

High-performing network and security teams collaborate effectively



60% of high-performing security organizations agreed that their network and security teams collaborate effectively to reduce cybersecurity gaps and improve cyber resilience

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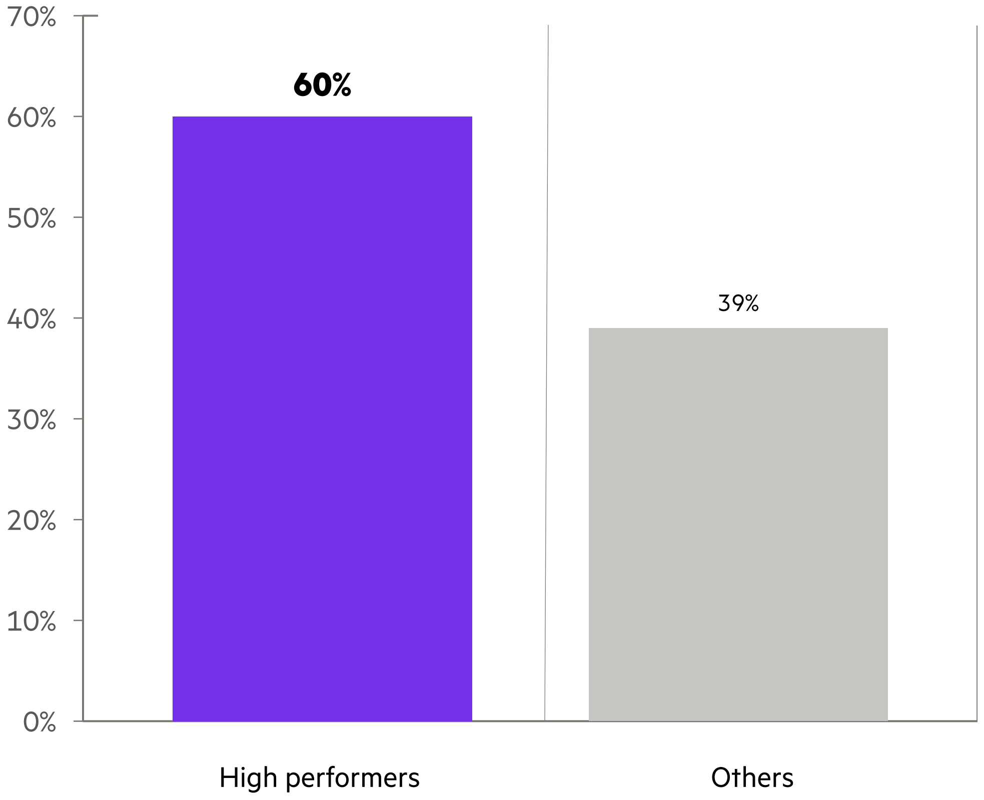
High-performing security organizations prioritize network access control

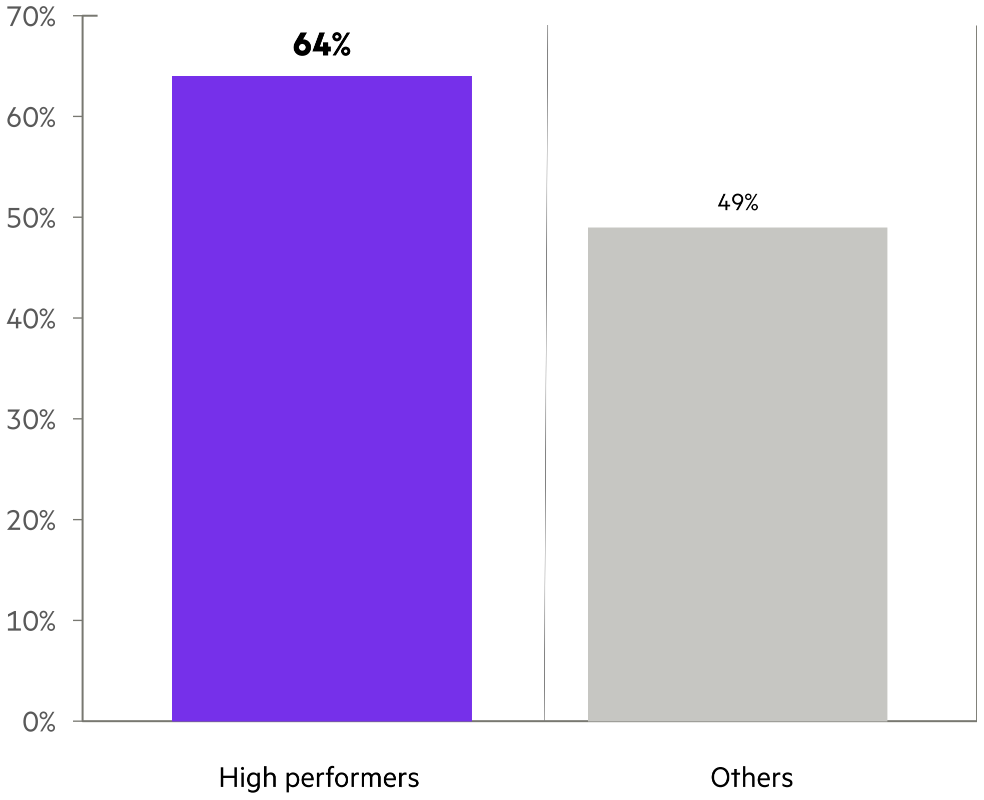
NAC solutions are important to security strategy

On a scale of 1 = not important to 10 = highly Important, 7+ responses presented

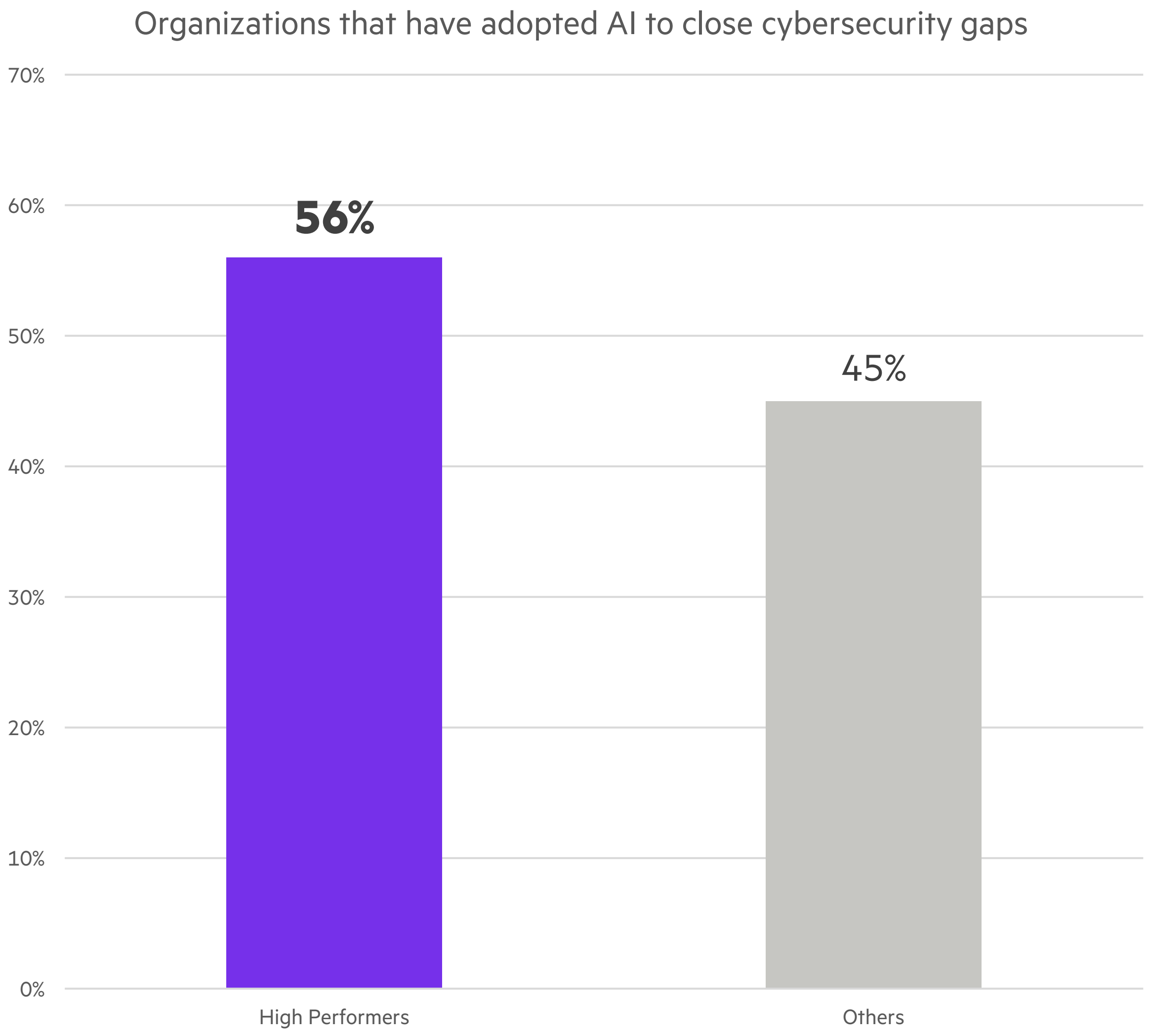


Integration of NAC functionality with other elements of the security stack is important

On a scale of 1 = not important to 10 = highly Important, 7+ responses presented



High performers are more likely to adopt AI for security



High-performers’ priorities for using AI to close cybersecurity gaps (Top-ranked answers)

#1 Improve collaboration between network and security teams

#2 Improve IoT device profiling accuracy

Prioritize vulnerabilities based on exploitability and impact

#3 Detect and prevent attacks more effectively

Detect changes to overall security posture

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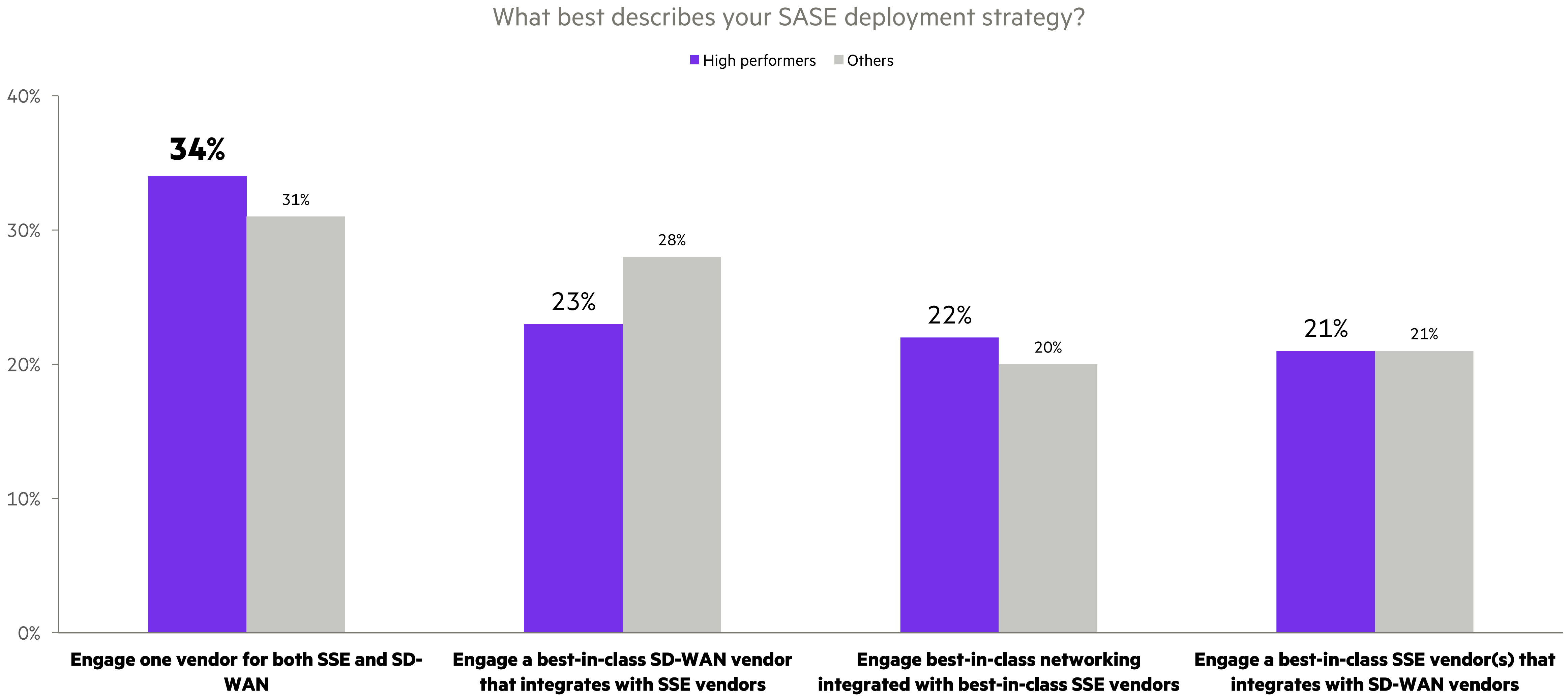
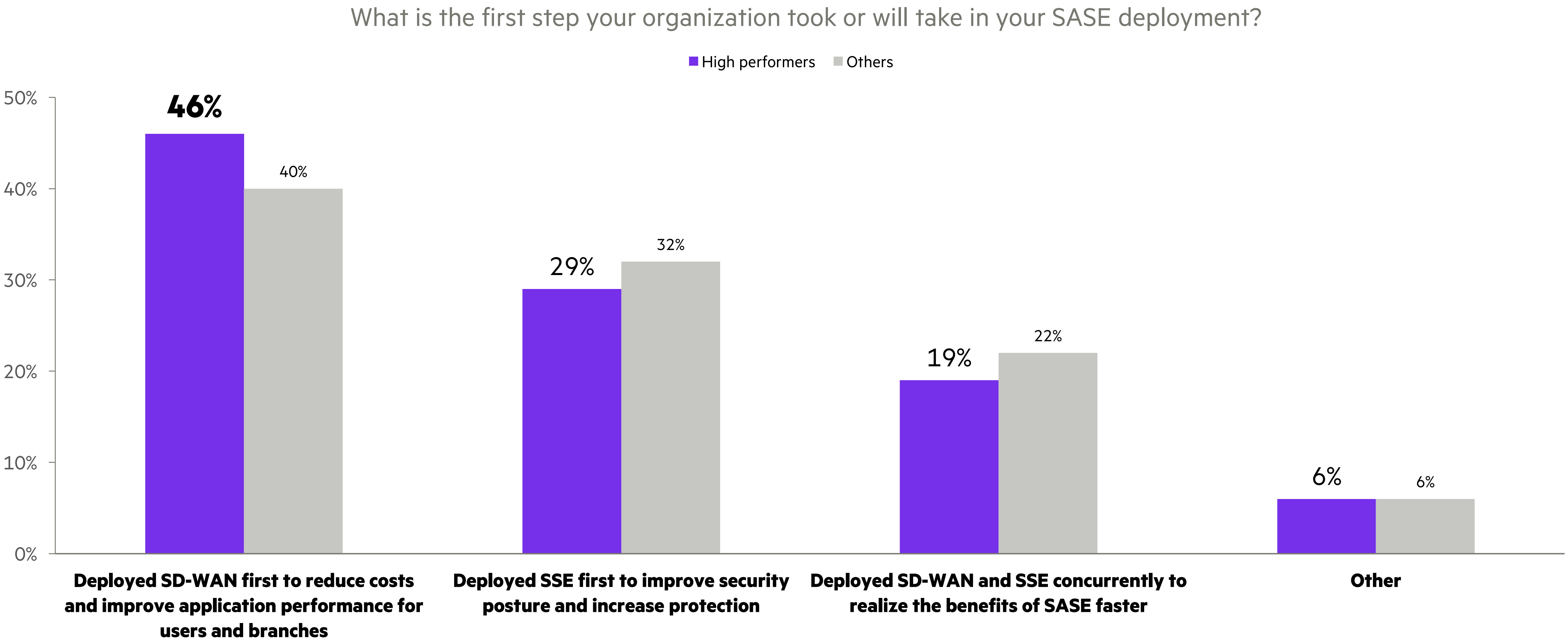
High-performing organizations are more likely to choose single-vendor SASE



High-performing organizations are more likely to start their SASE journey with SD-WAN



Thank you

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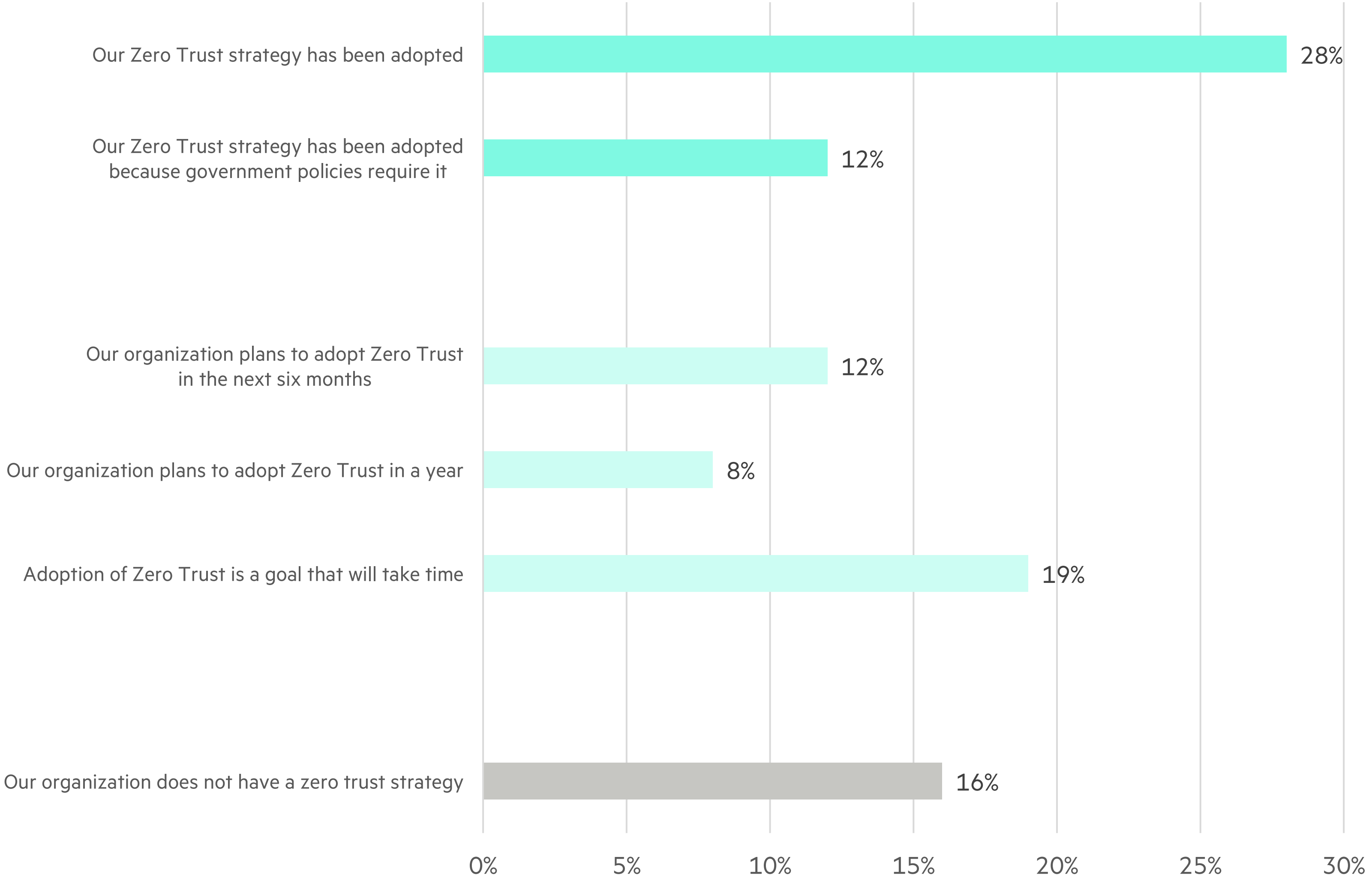
Additional insights

Zero trust strategies are a business imperative



60% of organizations globally have adopted or plan to adopt zero trust security strategies within a year

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Continuous data protection, breach detection, pen testing top high performers' steps to minimize threats

What are the most effective steps to take to minimize threats within your organization's IT infrastructure?

(Top-ranked answers)

#1

Implement a secure and continuous data protection and back up strategy

#2

Prioritize rapid attack and breach detection

#3

Conduct comprehensive penetration testing

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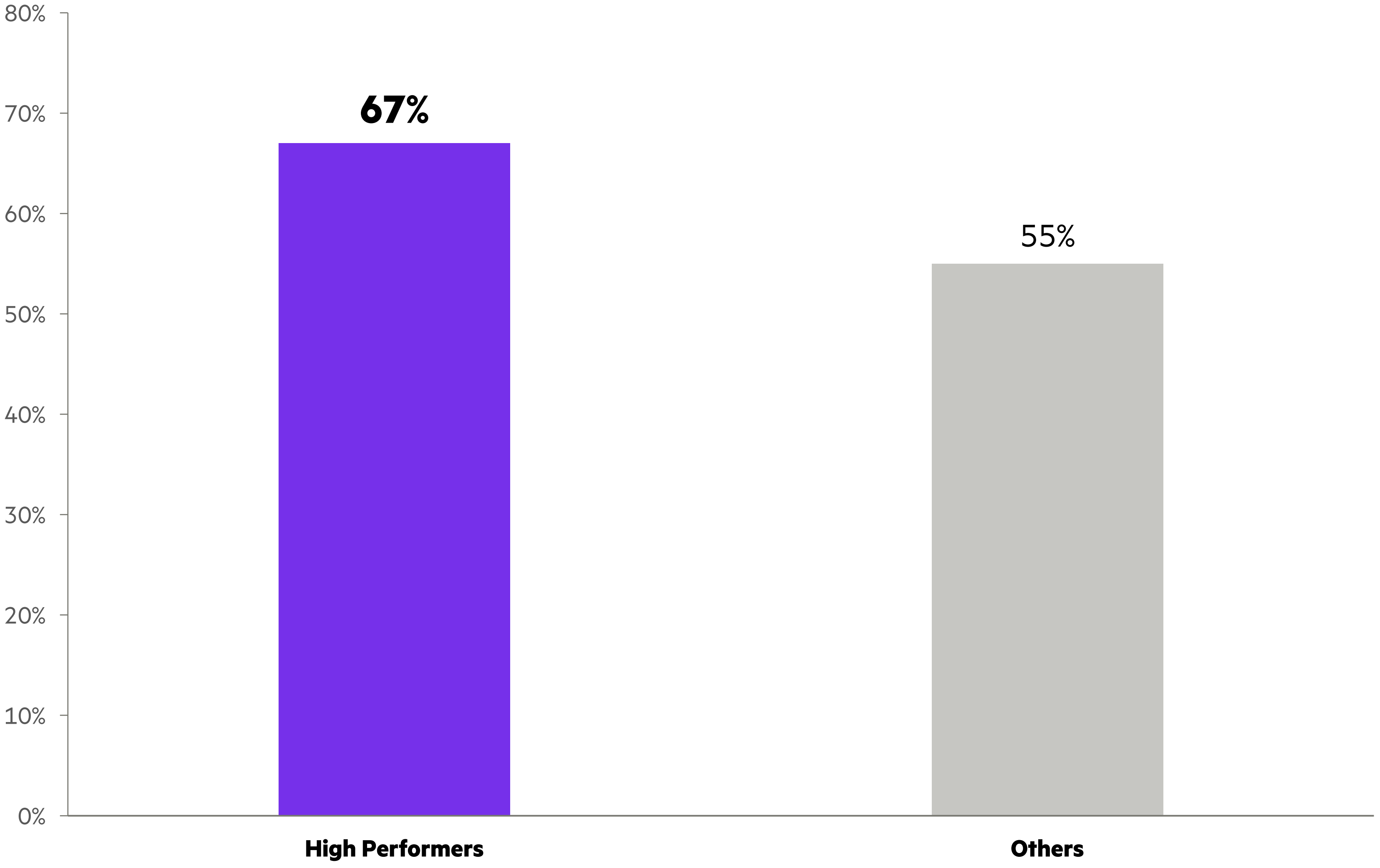
Securing IoT is a critical for high-performing organizations



67% of high-performing security organizations agreed that identifying and authenticating IoT devices accessing their network is critical to their security strategy

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