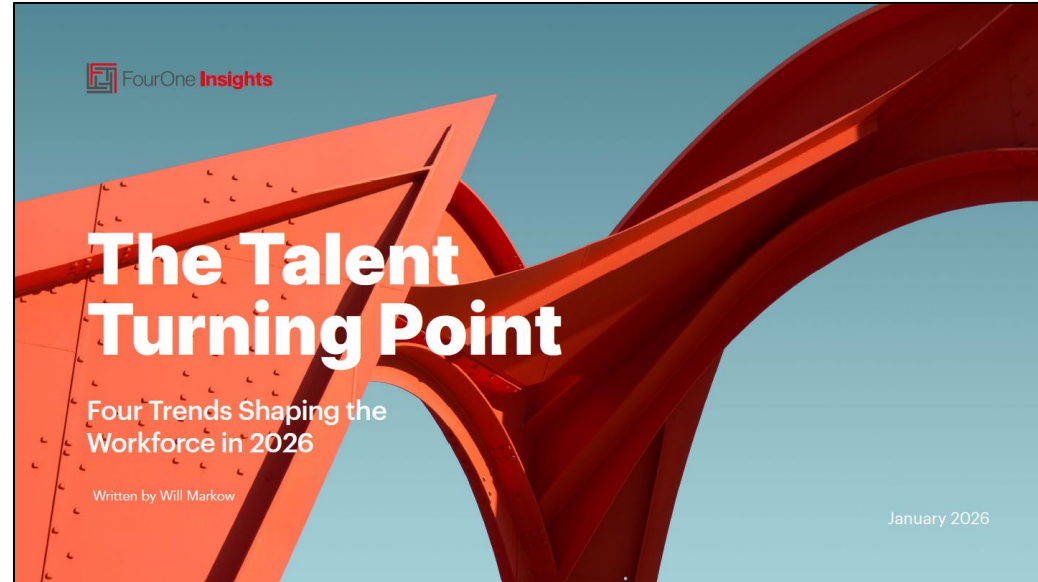




Future-Proofing the Cybersecurity Workforce

Will Markow
Founder and CEO

What Trends are Shaping the Future of the Workforce?



The Vanishing Career Ladder

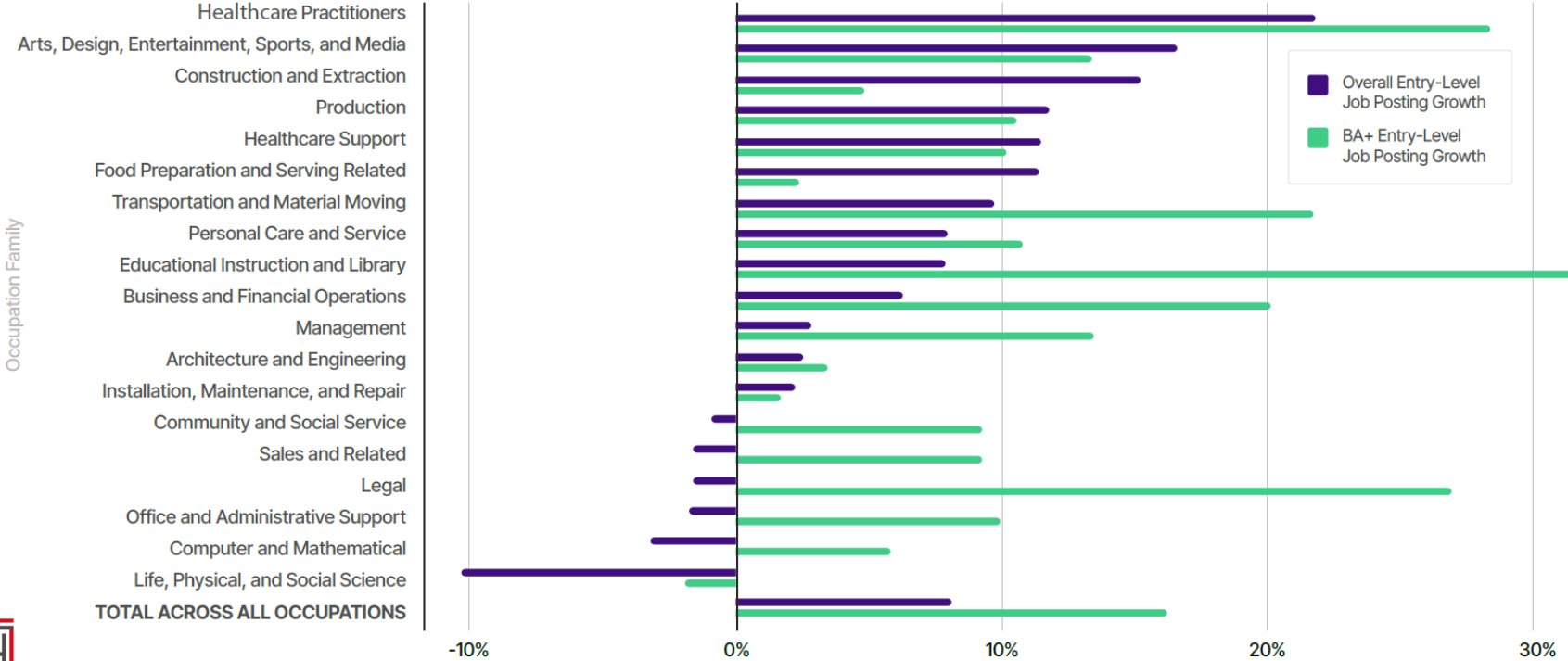
Will Entry-Level Jobs Rebound?



Access to Entry-Level Opportunity Is Inconsistent

Year-Over-Year Entry-Level Job Posting Growth

Source: FourOne Insights analysis of job postings data from Lightcast.

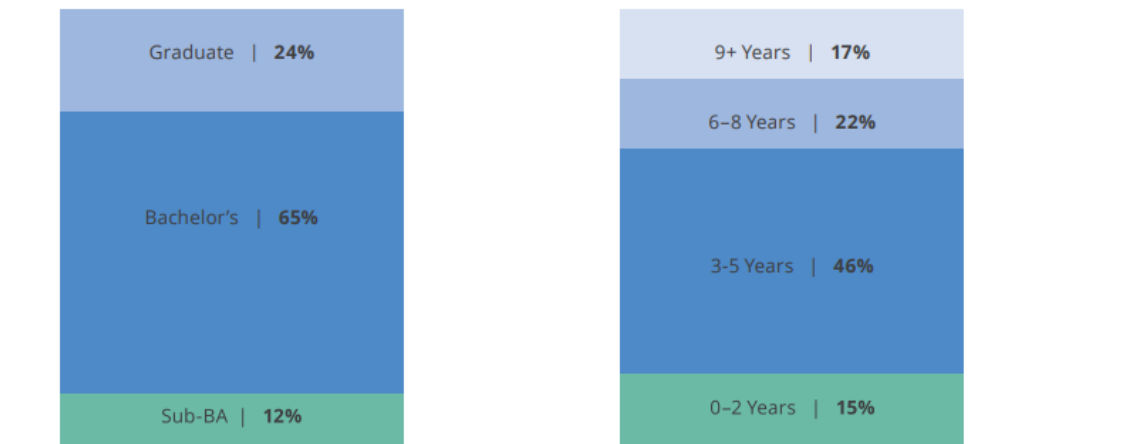


The Cybersecurity Career Ladder is Missing a Rung

Employers request heightened education and experience levels, preventing new workers from entering the field

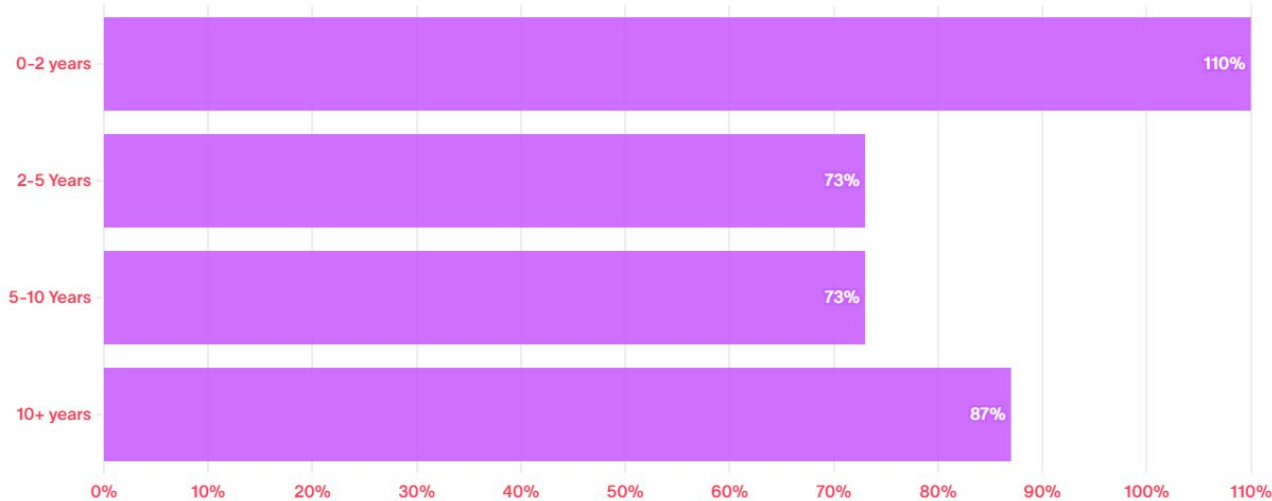
Cybersecurity education requirements

Cybersecurity experience requirements



We Need More Cyber Workers, But The Talent Pipeline is Clogged

Cybersecurity Supply and Demand Ratio by Experience Level



We don't have enough entry points to cybersecurity, creating a dearth of experienced talent

Note: Experience levels are categorized into different ranges denoting the number of years of experience. Each range is defined by a lower limits (inclusive) and an upper limit (exclusive). Date range: September 2023-August 2024

Source: Lightcast

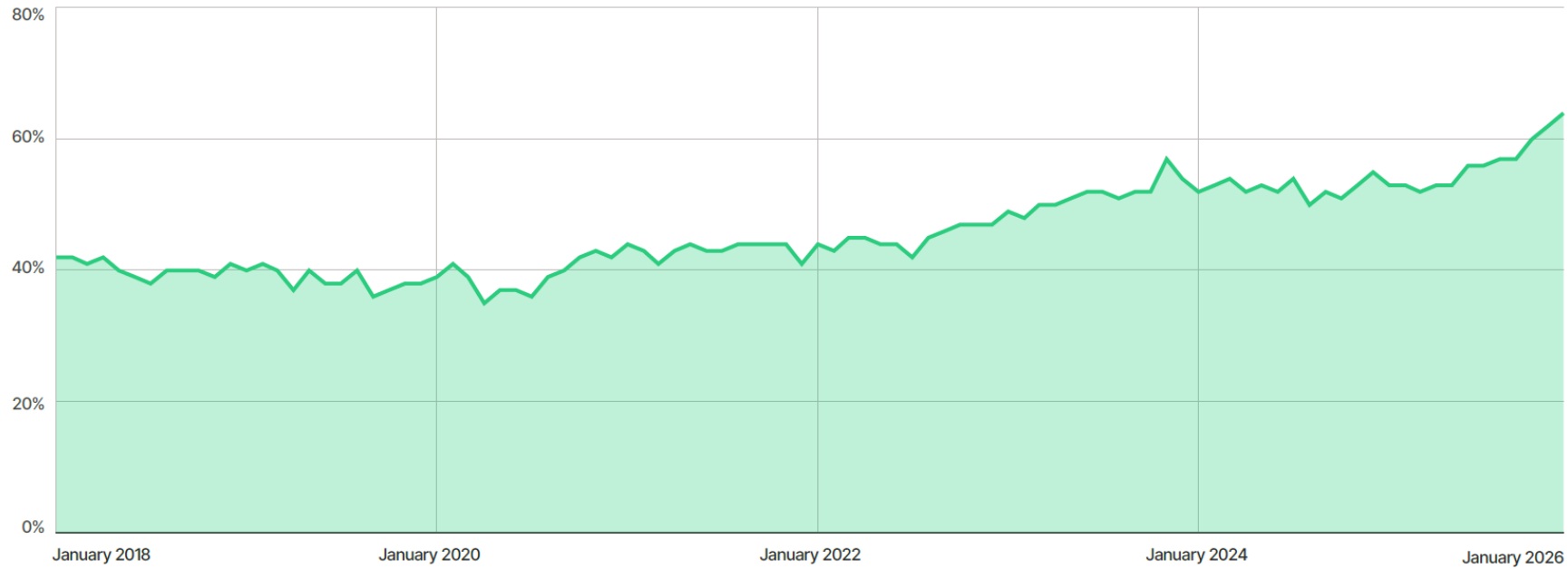


The AI Turning Point Will Hype Transform into Operational Maturity?



AI Adoption is Spreading Across Organizations

Share of AI Job Postings Outside of Tech Jobs

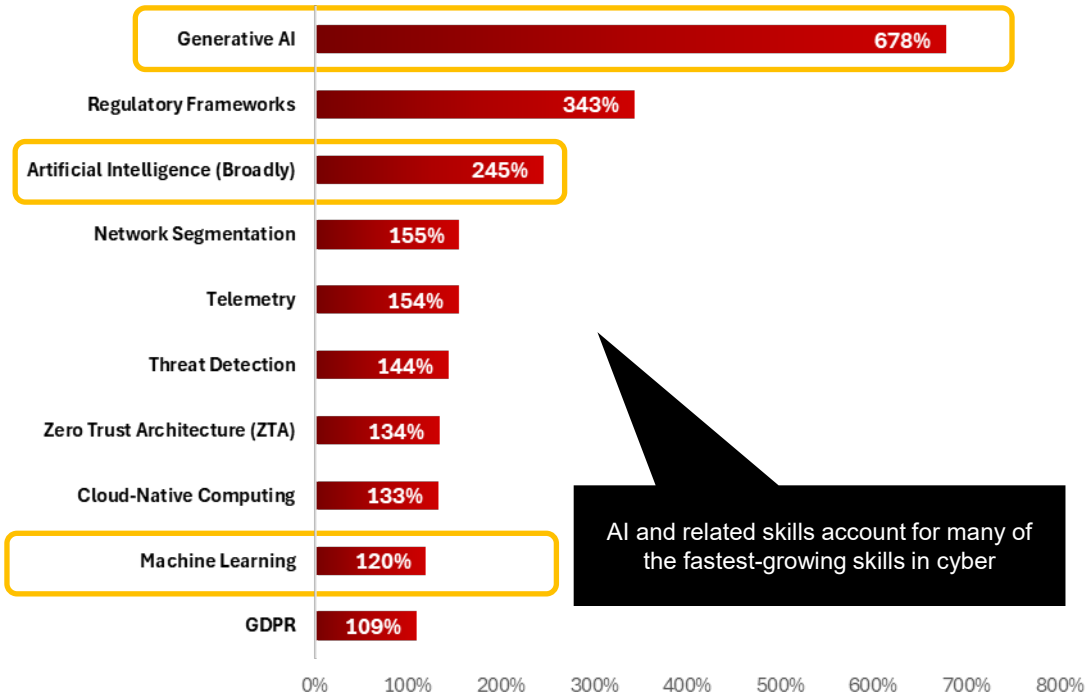


AI is Driving Skill Evolution in Cybersecurity

Since 2023,
23%

of key cybersecurity skill requirements have changed

Fastest-Growing Skills in Cybersecurity
2023 to Oct. 24 – Sep. 24



AI and related skills account for many of the fastest-growing skills in cyber



Generative AI is Reshaping Cyber Workflows

Highest-Value Tasks GenAI is Automating or Augmenting: Infosec Analysts

Estimated Share of Work Automated or Augmented by GenAI: Infosec Analysts

17% - 26%

Task	Estimated Annual Cost Per Task Without AI	Frequency of Task Automated with GenAI	Frequency of Task Augmented with GenAI
Modify computer security files to incorporate new software, correct errors, or change individual access status.	\$15,657	64%	0%
Develop plans to safeguard computer files against accidental or unauthorized modification, destruction, or disclosure and to meet emergency data processing needs.	\$14,104	0%	42%
Perform risk assessments and execute tests of data processing system to ensure functioning of data processing activities and security measures.	\$7,351	71%	22%
Coordinate implementation of computer system plan with establishment personnel and outside vendors.	\$4,661	68%	23%
Document computer security and emergency measures policies, procedures, and tests.	\$4,123	51%	36%



The Top-Heavy Organization

Will Managers Drown in
Added Responsibility?



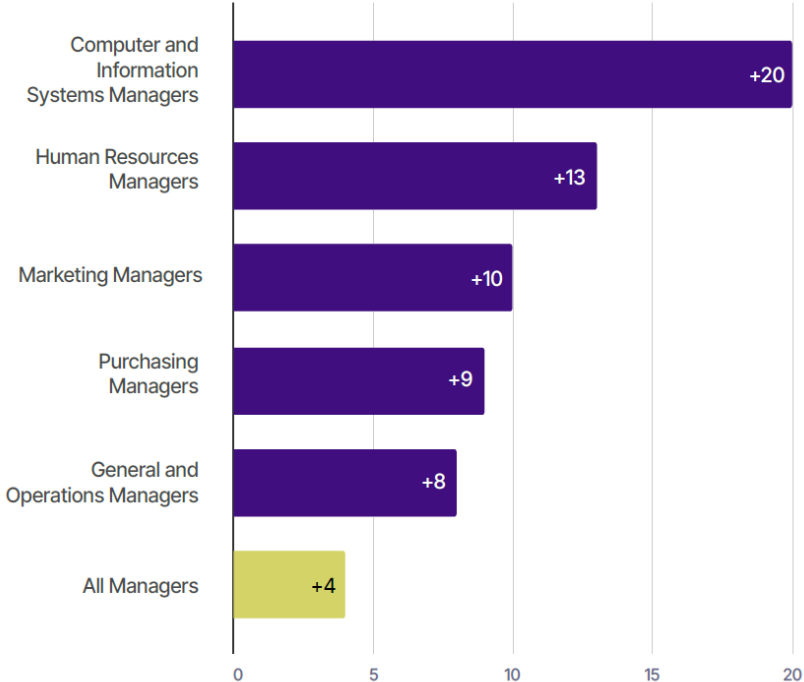
Responsibilities are Piling Up for Managers

From 2022 – 2024, managerial employment grew by

1.1 Million

This was the largest absolute increase of any job family

Growth in the Number of Commonly Requested Skills: 2022 - 2025



Skills in Managerial Cyber Roles Are Changing Rapidly

Role	Share of Key Skills that are Growing Rapidly	Key Fast-Growing Skills Since 2023
Cyber Architect	63%	Artificial Intelligence (+221%) GDPR (+187%) Google Cloud Platform (+163%)
CISO	60%	Third Party Risk Management (+768%) Scalability (+483%) Artificial Intelligence (+348%)
Cyber Manager	60%	Artificial Intelligence (+209%) Google Cloud Platform (+174%) Continuous Improvement Process (+153%)
Cyber Product Manager	56%	Service Offerings (+1,100%) Artificial Intelligence (+477%) Cyber Threat Intelligence (+315%)
Penetration Tester	49%	Artificial Intelligence (+279%) ISO/IEC 27001 (+158%) MITE ATT&CK Framework (+92%)
Cyber Engineer	45%	Threat Detection (+152%) GDPR (125%) Cyber Threat Hunting (+94%)
SOC Analyst	30%	ISO/IEC 27001 (+256%) Microsoft Sentinel (+248%) Continuous Improvement Process (+169%)
Cyber Analyst	5%	Cyber Threat Hunting (+65%) Windows PowerShell (+35%) Cyber Threat Intelligence (+21%)

CISOs and Cyber Managers see their skill requirements shifting faster than almost any other role



Cybersecurity
Managers
Need Future -
Proofing

78%

Share of cybersecurity managers with no prior managerial experience

11 Years

Average length of time since cybersecurity managers graduated with their most recent degree



The Talent ROI Reckoning

Will Organizations Learn to
Maximize Talent
Investments with Strategic
Planning?

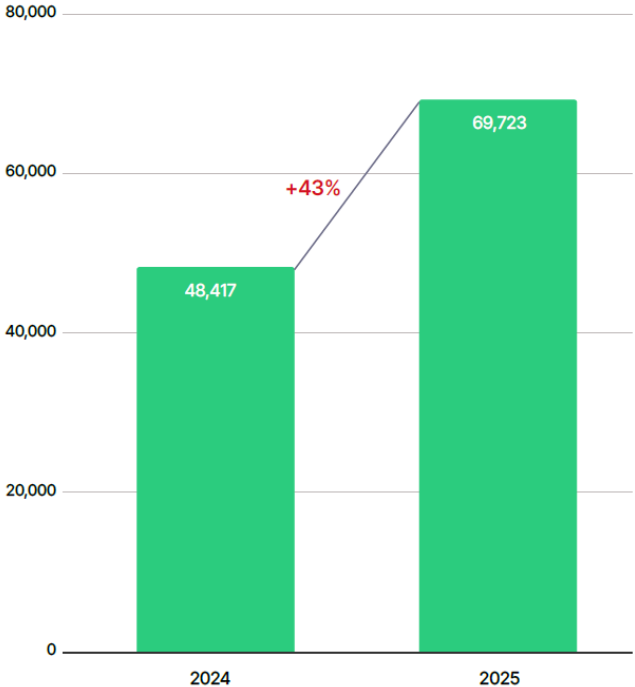


Employers are Prioritizing Strategic Workforce Planning

In 2025, employer demand for skills related to workforce planning and talent strategy jumped

43% YoY

Job Openings Requesting workforce Planning or Talent Strategy Skills



Cyber Employers Can Boost Talent ROI by Training for High-Growth, High-Value, Undersupplied Skills

Fastest-Growing Cyber Skills

Skill	Growth since 2023	Available Workers Per Opening (Aug. 25)	Salary Premium
Generative AI	678%	0.8	\$32,640
Regulatory Frameworks	343%	0.1	\$10,880
Artificial Intelligence (Broadly)	245%	0.3	\$28,544
Network Segmentation	155%	0.2	\$6,016
Telemetry	154%	0.1	\$10,880
Threat Detection	144%	0.3	\$4,992
Zero Trust Architecture (ZTA)	134%	0.1	\$15,232
Cloud-Native Computing	133%	0.1	\$13,952
Machine Learning	120%	0.4	\$29,568
GDPR	109%	0.3	\$7,040
All Cyber Jobs	8%	1.0	NA

Many emerging cybersecurity skills boost salaries by \$10k-\$20k+



Cyber Employers can Improve Hiring Outcomes by Rightsizing Job Requirements

Sample Cybersecurity Job Requirements

IT Security Analyst

Qualifications

- 2+ years of progressively increasing responsibility in the areas of information security, cloud security, or cybersecurity
- Bachelor's degree in IT, cybersecurity or related area of study, **or**
- **Deep cloud (AWS) experience**
- Strong understanding of testful API development, SDLC processes, and security automation desired
- Experience with multiple environments and operating systems, devices and databases including Windows Server, Active Directory, VMWare, Azure, AWS.
- Strong analytical and problem solving skills
- Strong Incident Response background is preferred
- Fundamental understanding of security related technologies such as SIEM and SOAR
- Must have/obtain and maintain one or more Cloud or Security certifications such as AWS, Azure, CISSP, CISA, CISM, CIPT, SSCP, CCSP
- Strong understanding of information security standards, concepts, controls, testing **techniques and technical risk assessment**

Removing a BA requirement
Saves \$16,000 and grows entry -level candidate pool by 61%

Building, not buying, emerging cybersecurity skills
Saves \$10,000+ for each emerging skill

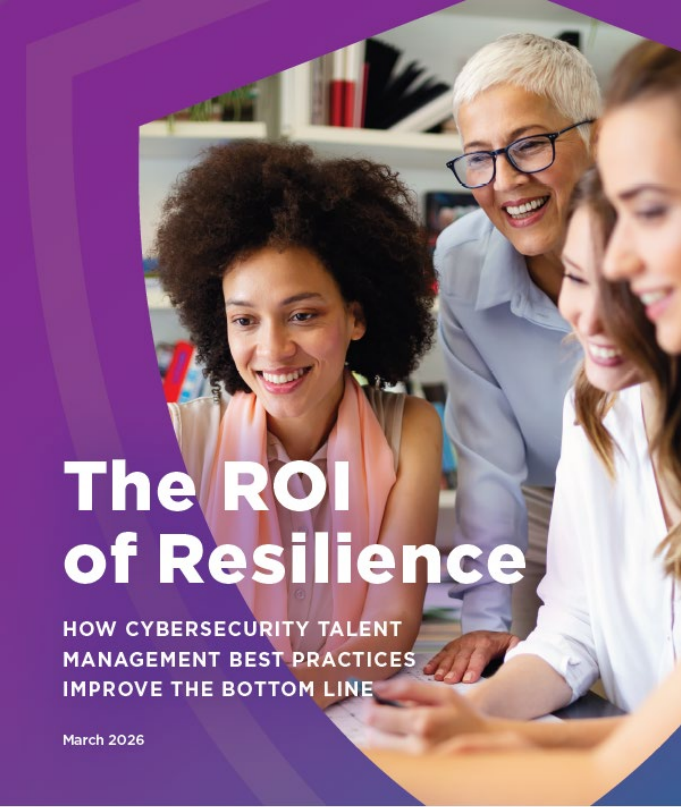
Eliminating specific certification requirements
Drops average salary costs by \$9,000



How Can Employers Boost Cyber Talent Resilience and ROI?





Quantifying the ROI of Cyber Talent Resilience



**The ROI
of Resilience**

HOW CYBERSECURITY TALENT
MANAGEMENT BEST PRACTICES
IMPROVE THE BOTTOM LINE

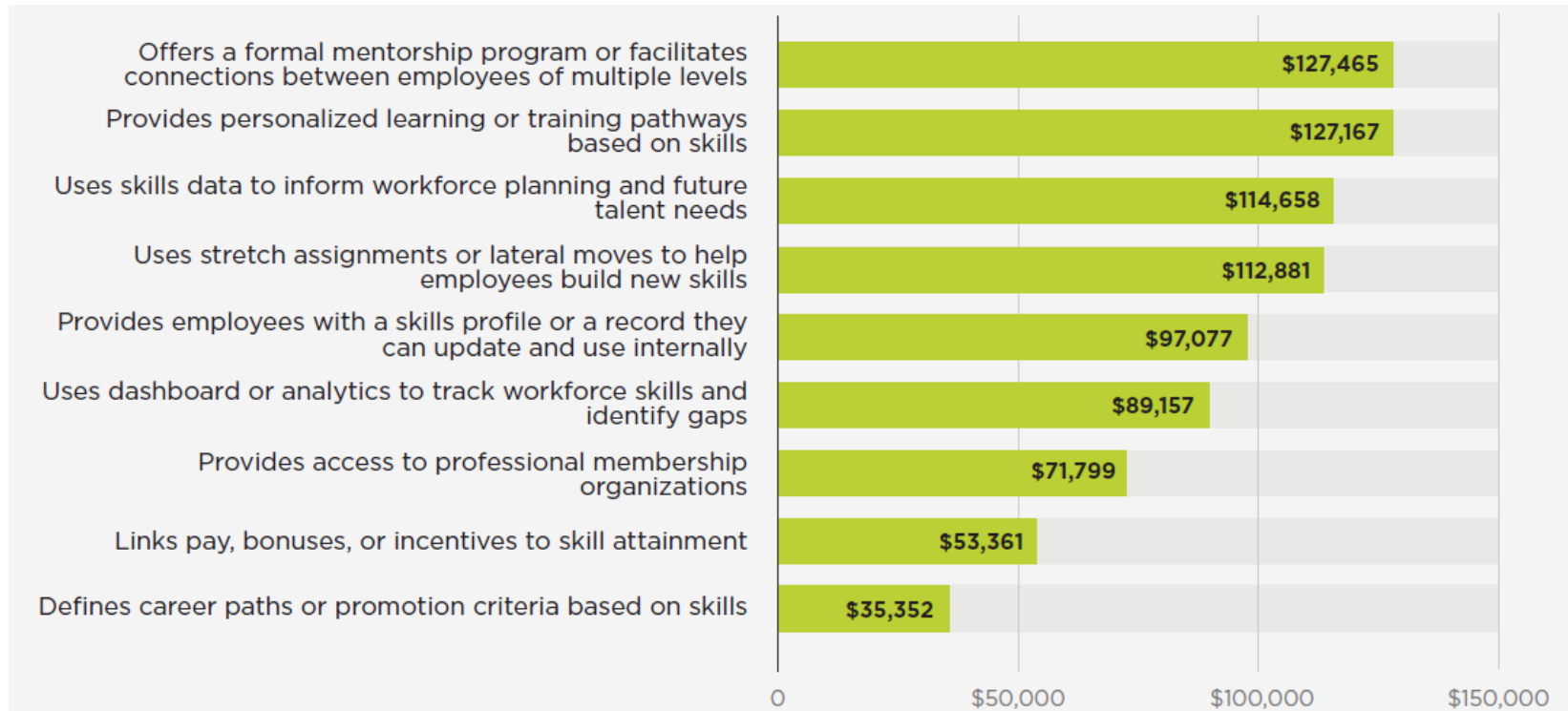
March 2026

Skills-based, Talent-friendly Practices

Generate the Highest Returns

Average Productivity Loss Avoided Per Cybersecurity Worker by Selected Talent Practices
(based upon average increased tenure and decreased time to fill)



Despite the Value of These Practices, Adoption is Uneven

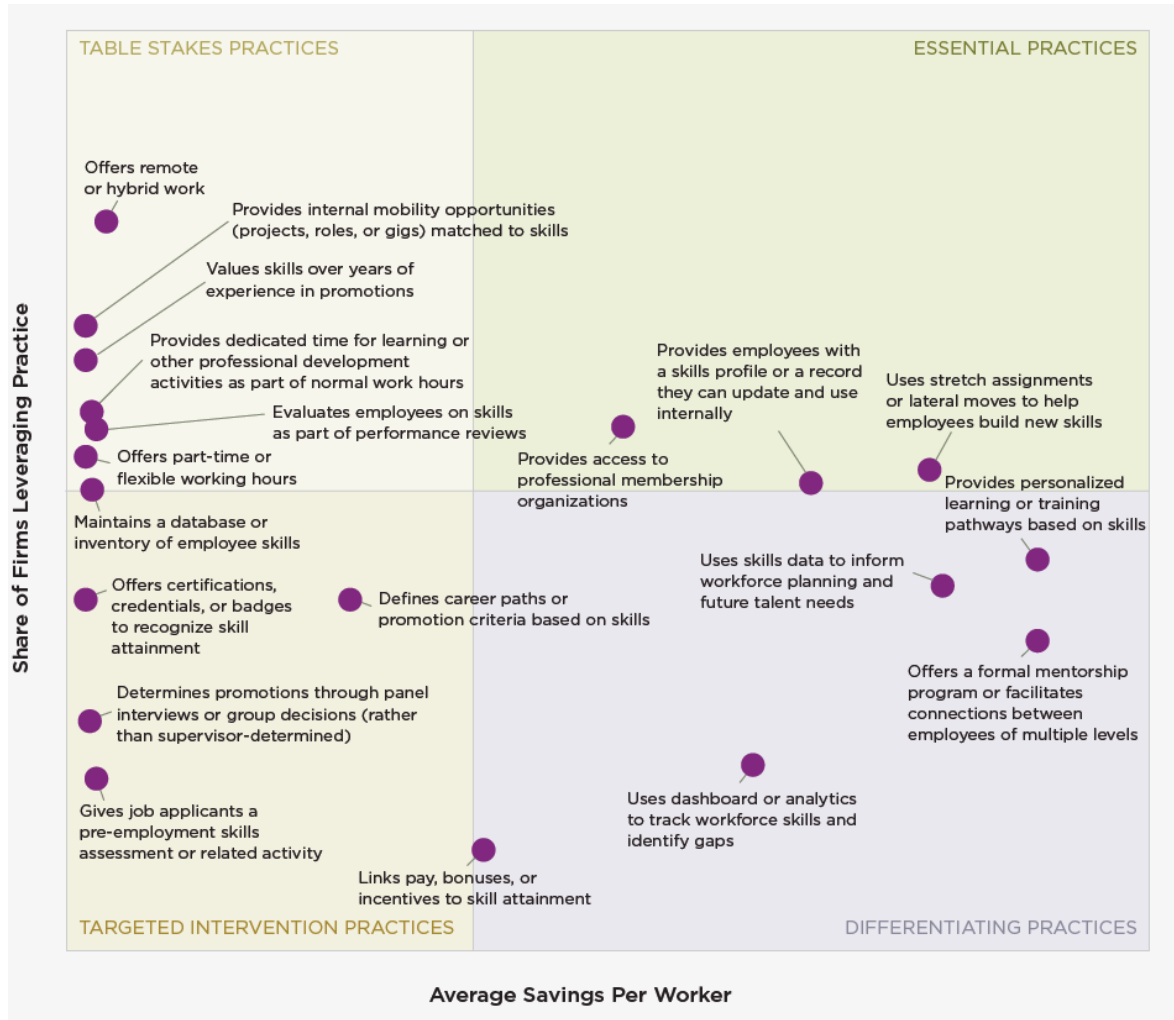
Talent Savings to Employers vs. Share of Employers Leveraging Practice

Practice	Share of Employers Leveraging Practice	Average Cost Savings Per Cybersecurity Worker
Offers a formal mentorship program or facilitates connections between employees of multiple levels	49%	\$127,465
Provides personalized learning or training pathways based on skills	55%	\$127,167
Uses skills data to inform workforce planning and future talent needs	53%	\$114,658
Uses stretch assignments or lateral moves to help employees build new skills	61%	\$112,881
Provides employees with a skills profile or a record they can update and use internally	60%	\$97,077

None of the highest-value talent practices are leveraged by more than 55% of employers



Talent Practice Prioritization Matrix

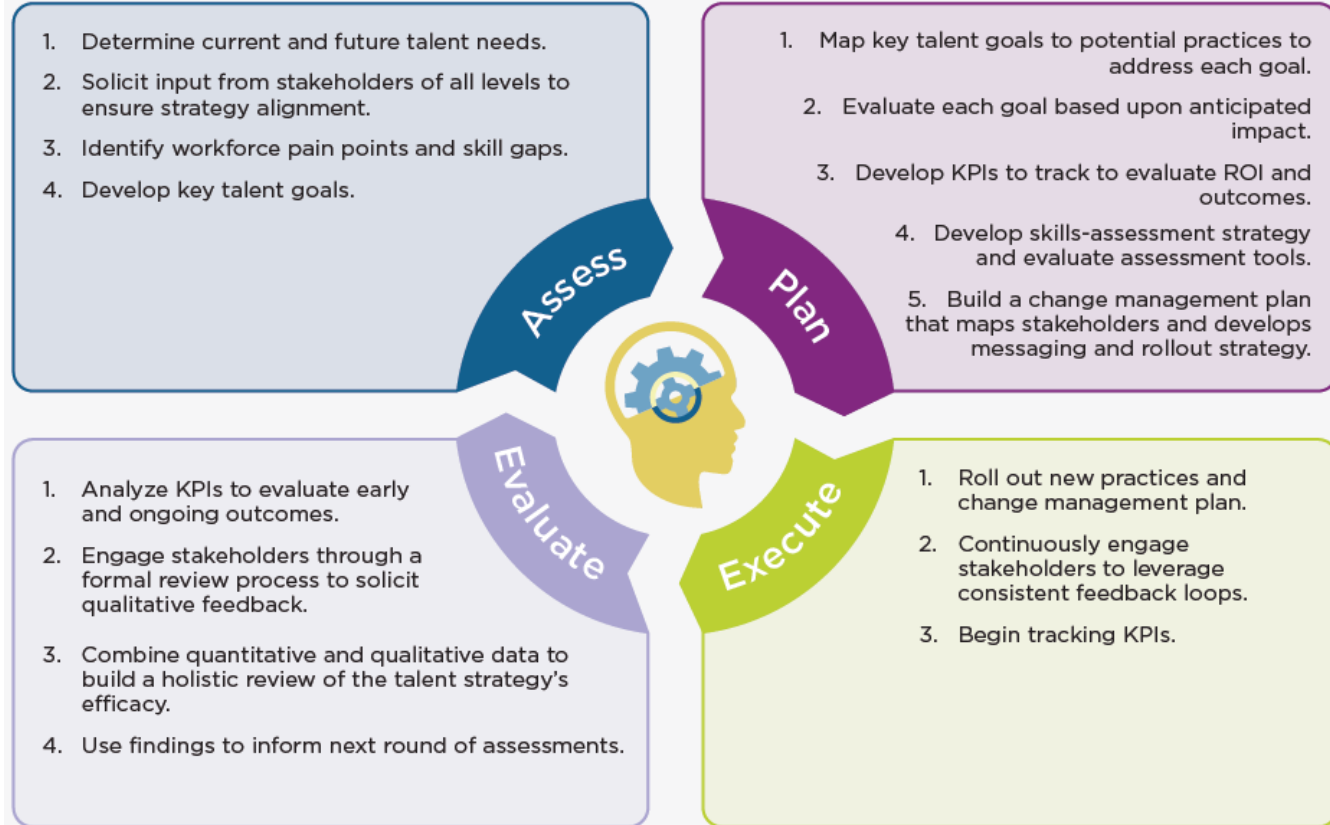


Employers Can Differentiate Their Talent Practices



Continuously Optimize Your Talent Strategy

Continuous Talent Optimization Framework



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