

Certifications Help Drive Security ROI

Close the Cybersecurity Knowledge Gap Through
Demonstrated Knowledge, Skills, and Expertise

The State of Cybersecurity

The gap between the number of cybersecurity professionals and the number of jobs available has not diminished. According to a 2021 (ISC)² cybersecurity study, “... the Cybersecurity Workforce Estimate and Cybersecurity Workforce Gap suggest the global cybersecurity workforce needs to grow 65% to effectively defend organizations’ critical assets.”¹

It’s not news that since COVID-19 hit, there has been an increase in the number and types of attacks. According to **Help Net Security**, malware increased by 358% in 2020,² and there is little evidence that it’s slowing down. The Palo Alto Networks **Unit 42 Ransomware Threat Report, 1H 2021 Update** highlights ransomware as the most significant cyberthreat to companies.

Facing higher levels of risk, companies are focusing on improving their cybersecurity posture more than ever. However this is only amplifying the already expanding gap between requirements for cybersecurity professionals and the number of available candidates. From those just getting started or seasoned professionals, the companies are feeling the pinch.

A survey conducted by IDG, “Cybersecurity at a Crossroads: The Insight 2021 Report, examined the impact of the distributed IT landscape and the pandemic-related transition to a remote workforce on IT security. The survey found that 78% lack confidence in their company’s IT security posture and believe improvements are needed.³ Respondents expressed the least confidence in their organization’s security roadmap (32%), security-related technology and tools (30%), and internal teams and skill sets (27%).⁴

While 27% might not seem high, it doesn’t address the overall gap. This gap impacts all companies who want to hire knowledgeable, skilled, and experienced personnel to help protect their company and customers. What does all this mean for you?

Global Knowledge’s “2020 IT Skills and Salary Report” points out the inadequacy of development programs alone to properly skill companies: “The rate of technology change exceeding skills development programs is a leading cause of organizational skill gaps.”⁵

“The average ransomware payment climbed 82% since 2020 to a record \$570,000 in the first half of 2021, as cybercriminals employed increasingly aggressive tactics to coerce organizations into paying larger ransoms.”

–Unit 42 Ransomware Threat Report, 1H 2021 Update

Security Concerns

78%	Security posture
32%	Security roadmap
30%	Technology and tools
27%	Internal skill sets

Develop Your Cybersecurity Experts

Employees are often your best armor when confronting a cybersecurity knowledge gap. Becoming a cybersecurity expert doesn’t happen overnight though. Specific product training and certifications provide the precise learning journey towards demonstrating your employees’ knowledge and skills for stopping cyberthreats. A recent report from Pearson VUE, a leader in online certification examination proctoring, the “2021 Value of IT Certification Report,” highlights how certifications can lead to a better security posture by enabling your employees to increase their knowledge and value to the company.⁶

IT Certification Increases ROI for Learners and Their Employers

Give your first line of defense the education and certifications they need to respond to any security incident, protect confidential and sensitive data, and keep your organization and customers free from criminal minds. Empowering your employees from entry-level to senior engineers through certification ensures the investment you made achieves your business goals—preparing your organization for whatever comes at you. Certifications benefit employers and employees, experiencing benefits such as increased quality of work, productivity, efficiency, and the employees’ ability to mentor others.

1. A Resilient Cybersecurity Profession Charts the Path Forward, (ISC)², 2021, <https://www.isc2.org/Research/Workforce-Study>.

2. Malware increased by 358% in 2020, Help Net Security, February 17, 2021, <https://www.helpnetsecurity.com/2021/02/17/malware-2020/>.

3. Cybersecurity at a Crossroads: The Insight 2021 Report, IDG Connect, 2021, <https://www.idgconnect.com/resources/219333/cybersecurity-at-a-crossroads-the-insight-2021-report>.

4. Ibid.

5. 2021 IT Skills and Salary Report, Global Knowledge, November 2021, <https://www.globalknowledge.com/us-en/content/salary-report/it-skills-and-salary-report/#gref>.

6. 2021 Value of IT Certification Report, Pearson Vue, 2021, <https://home.pearsonvue.com/voc/2021-report>.

Benefits of Employing Certified Professionals

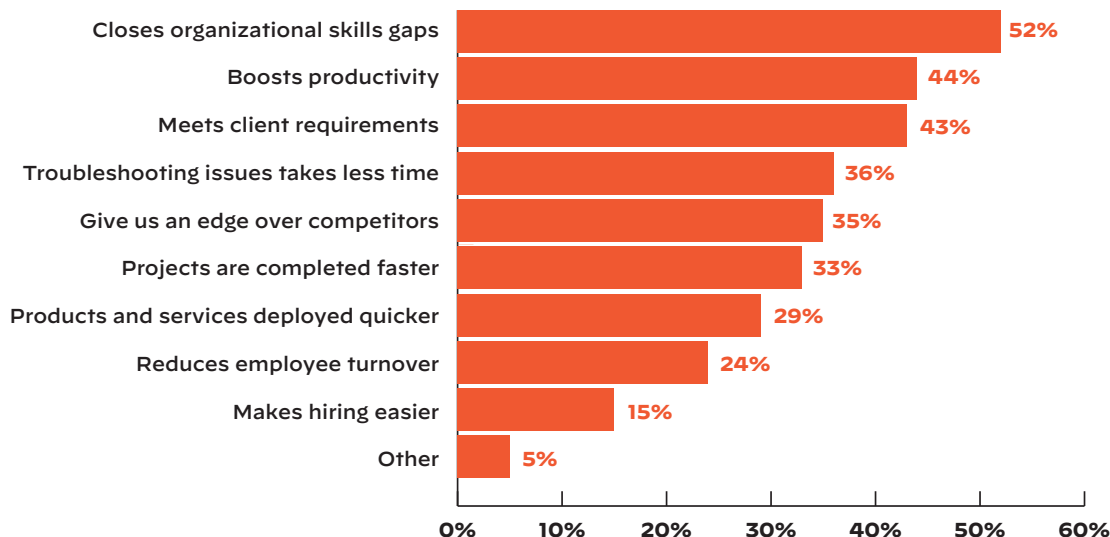
The (ISC)² study highlights the following advantages of hiring and retaining certified individuals to create opportunities for the entire team. The top benefits realized from employing professionals with cybersecurity certifications include stronger knowledge in key cybersecurity areas (38%), increased confidence in the team's handling of security challenges (30%), higher-level personnel in house with security expertise (27%), and staying up to date on the latest security and privacy trends (27%).⁷

Your employees who obtain certifications demonstrate the skills and the know-how necessary to thwart bad actors, protect valuable data, help meet compliance requirements, and the ability to provide your business with accurate security recommendations. Employees find certifications beneficial to their job performance. Seventy-three percent pursued IT certification to obtain necessary skills and enhance job performance.⁸ According to Pearson VUE's report, this drive has increased the demand for IT certifications.⁹ Eighty-six percent of candidates are looking to pursue a certification or additional certifications.¹⁰

More than ever, the value of IT certifications cannot be understated. The rapid adoption of cloud and wireless networking technologies throughout the past year revealed the need for more nimble, skilled IT teams—and many organizations found they were lacking.

Top Benefits Realized

- 86%** of candidates are looking to pursue a certification or additional certificates
- 73%** Pursued IT certification to obtain necessary skills and enhance job performance
- 38%** Stronger knowledge in key cybersecurity areas
- 30%** Increased confidence in the team's handling of security challenges
- 27%** Higher-level personnel in-house with security expertise
- 27%** Staying up to date on the latest security and privacy trends



(C) 2021 Pearson VUE Value if IT Certification report.

Figure 1: IT certification benefits for you and your employer

7. Resilient Cybersecurity Profession Charts Path Forward, (ISC)².

8. Ibid.

9. 2021 Value of IT Certification Report, Pearson Vue.

10. Resilient Cybersecurity Profession Charts Path Forward, (ISC)².

Employer Investments in Upskilling Retain Talent

When employers covered the costs for certification, employees were less likely to seek new opportunities outside of the company (74% compared to 87%). When knowledgeable employees remain with the company, the decreased employee turnover reduces your financial burden.

Additionally, there are direct benefits to work processes and people, which ultimately impact business profitability. For example, according to Global Knowledge's "2021 IT Skills and Salary Report", IT decision-makers estimated the **return on investment is about \$10,000 per credentialed employee**.¹² Employers reap the benefits of certification by gaining employees with increased quality of work, higher productivity, greater efficiency, and improved mentoring skills.

Businesses Reap the Benefits

- 75%** Increased efficiency
- 72%** Produced more in less time
- 71%** Increased productivity
- 81%** Increased quality and value of worker contributions

Palo Alto Networks Certifications Matter to Your Business and Customers

When you partner with Palo Alto Networks, you're partnering with the leader in cybersecurity. You know that Palo Alto Networks products help your organization increase its security posture. However, to ensure you get the optimal return on investment, don't wait until a cyberattack happens to validate your employees' knowledge and expertise in preventing a security breach.

Cybersecurity professionals are in high demand. Keep your employees longer by helping them get the specific certifications for your Palo Alto Networks products. Employees who pursue ongoing certifications are known to take on more responsibility and exhibit improved work quality, productivity, efficiency, and innovation towards optimal security outcomes.

[Unit 4.2 states in their Ransomware Threat Report, 1H 2021 Update](#) that the most effective forms of protection from ransomware are the following deployed to all enterprise environments and devices:

- Endpoint security
- URL filtering or web protection
- Advanced threat prevention (unknown threats/sandboxing)
- Anti-phishing solutions

While these won't guarantee prevention outright, they will drastically reduce the risk of infection from common variants and provide stopgap measures, allowing one technology to offer a line of enforcement when another may not be effective. Keeping your cybersecurity professionals' skills versed in the latest technology is the goal of Palo Alto Networks certifications. Ensure that your organization is well-equipped to keep your security landscape free from unwanted attacks.

Table 1: Available Palo Alto Networks Certifications

Certification Title	Product	Audience
PCCET: Palo Alto Networks Cybersecurity Entry-Level Technician	Fundamental cybersecurity knowledge for network security	Student Technical professional Non-technical individuals
PCDRA: Palo Alto Networks Detection and Remediation Analyst	Cortex XDR (extended detection and response)	System Engineer Systems Integrator Support Engineer
PCSAE: Palo Alto Networks Security Automation Engineer	Cortex XSOAR (extended security orchestration, automation, and response)	System Engineer Systems Analyst Systems Administrator

11. 2021 Value of IT Certification Report, Pearson Vue.

12. 2021 IT Skills and Salary Report, Global Knowledge.

Table 1: Available Palo Alto Networks Certifications (continued)

Certification Title	Product	Audience
PCNSA: Palo Alto Networks Network Security Administrator	Network Security	Security Administrator
PCNSE: Palo Alto Networks Network Security Engineer	Next-Generation Firewalls (NGFWs)	System Engineer Systems Integrator Support Engineer
PCCSE: Palo Alto Networks Cloud Security Engineer	Prisma Cloud technology	Application Security (APPSEC) Engineer Cybersecurity Architect Professional Services
PMRuA: Palo Alto Networks Microcredential Remote user Administrator	Secure access service edge (SASE)	Security Administrators Analysts: Security Analysts Cyber Defense Analysts Associates: Technical Support Associates Network Security Associates
PMRnA: Palo Alto Networks Microcredential Remote network Administrator	Secure access service edge (SASE) SD-WAN	Security Administrators Analysts: Security Analysts Cyber Defense Analysts Associates: Technical Support Associates Network Security Associates

You and your employees get the most value when our experts help your experts validate the hard-earned knowledge, expertise, and skills acquired. Even now, as the world begins to recover from the COVID-19 crisis, it appears that remote working, learning, and connecting are here to stay—at least in part. Certification holders will continue to be in demand for their skills, knowledge, and influence.

The Pearson VUE survey found that individuals in the 2021 IT field see these trends as well, they realize the value of certification, and they're poised to meet both the challenge and the need. It wasn't just the individuals who felt the positive impacts either. Employers reaped the benefits of certification by gaining employees with increased quality of work, higher productivity, greater efficiency, and stronger mentoring skills.

We are confident that these are long-term trends and that the relevance and demonstrated value of certification will grow even stronger.

Visit the Palo Alto Networks certifications [homepage](#) to learn more.



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