Security Awareness Summit

August 3, 2017

Getting It Right the First Time; Avoiding the Costs of a Bad Cybersecurity Hire

sans.org/cybertalent
Increasing Demand for Talent

3X Faster Growth
Job postings for cybersecurity openings have grown three times as fast as openings for IT jobs overall.

Increase in Number of Cybersecurity Positions over last 5 years
+137% Finance  +121% Health Care  +89% Retail

348,975 Job Vacancies
Cybersecurity jobs went unfilled in 2016
More Time Needed to Find Talent

9-12 Months
Average time required to hire a senior InfoSec executive

8% Longer Than Any Other IT Job
Cybersecurity job postings took 8% longer to fill than IT job postings overall
Harder To Find Skilled Talent

52% More Likely to Require Certification
35% of cybersecurity positions call for certification versus only 23% of IT jobs.

Up to 3:1 Certification Gap
More than 3 Job postings requiring certification for every certification holder, overall

84% Require at Least a Bachelor’s Degree
83% require at least 3 years of experience, with an average of 5.4 years.
Bad hires = breaches
No awareness = breaches

More Expensive to Hire Talent

9% Salary Premium
Cybersecurity postings advertise a 9% salary premium over IT jobs

Higher Average Salary Levels
$77,810 System Administrator
$90,120 InfoSec Analyst
$204,000 CISO

Bad hires hurt:
• Cost of $27,000+ for Security Analysts
The (Lack of) People Problem

- 82% of organizations with a shortage of cybersecurity skills
- 71% say talent deficit hurting organization
- 25% blame shortage directly for data loss and reputational damage
Great Vulnerability

1. **Growing** threats (e.g. actors, sophistication)

   +

2. The **shortage** of skilled talent and awareness

   =

   *Urgent need for innovative programs*
# CyberTalent Assessments

## PIPELINE
- InfoSec Aptitude
- CyberTalent Enhanced (CTE)

## SKILLS
- Cyber Defense
- Penetration Testing
- Application Security
- Digital Forensics

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**Image 1:** Illustration of a cyber security assessment process.

**Image 2:** Representation of a cyber security professional at work.

**Image 3:** A high-angle view of an office, indicating a collaborative workspace.

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The Pipeline includes InfoSec Aptitude and CyberTalent Enhanced (CTE) assessments. The Skills focus on Cyber Defense, Penetration Testing, Application Security, and Digital Forensics.
## Case Studies

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<th>Hiring</th>
<th>Aptitude</th>
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<td><strong>Large Network Security Company:</strong> Cyber Defense</td>
<td><strong>Large Software Company:</strong> Identifying potential talent from non-technical roles</td>
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<td><strong>Regional Bank:</strong> CTE for entry level talent</td>
<td><strong>U.S. Military:</strong> Finding those with aptitude for cyber warrior programs</td>
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Innovative Solutions for New Talent

- SANS CyberTalent Immersion Academies
- Cisco Global Cybersecurity Scholarship
- Microsoft Software and Systems Academy
- Cyberjutsu Girls Academy
- Raytheon Women’s Scholarship
- CyberCorps (R): Scholarship For Service

The VetSuccess program provides transitioning US military veterans with advanced technical training, certifications, and connections to high-paying jobs in cybersecurity.
“Completing the VetSuccess Academy not only influenced my career plans, it defined them. The education and certifications opened doors that were inaccessible to me otherwise, short of winning the lottery. In fact, being selected into the inaugural cohort was a “hitting the jackpot” moment for me.”

- USAF Senior Master Sergeant
- Retired after 26 years of active duty service

Currently
Quality Assurance Program Manager
NTT Security
“We’ve been thrilled with the opportunity to participate in the VetSuccess Academy. It provides a new source of talent to help fill the gap. Graduates we have hired with GIAC certifications have the skills and can apply them right away.”

-Arlin Halstead,
Strategic HR Business Partner, US
Immersion Academies: New Talent in the Field

127 SANS Academy Graduates

“They are both quickly becoming my top performers”

Eldon Myers, TYSYS Information Security
What can YOU do?

1. Increase *awareness* of security concerns AND talent shortage

2. Build *partnerships* with HR

3. Work with HR to get more *qualified* people hired

4. Build an awareness program that *emphasizes value of security AND everyone’s role* in it
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