SOC Summit 2017

June 6, 2017

Strengthening Capacity in Cyber Talent

sans.org/cybertalent
“Cyber threats to U.S. national and economic security are increasing in frequency, scale, sophistication, and severity of impact...The ranges of cyber threat actors, methods of attack, targeted systems, and victims are also expanding.”

James Clapper
Former Director of National Intelligence
Retired Lt Gen, US Air Force
Cybersecurity: The Current State

Skills Mismatch
Emphasis on theory over practice
- Education focus on theoretical over applied knowledge
- Lack of real-world skills
- 95% of security incidents involve human error

Increasing Risk & Cost
- Increasing data breaches
- Increasing vulnerabilities

Yahoo: $350 million

Threat Proliferation
Outpacing ability to respond
- “97% of Fortune 500 companies have been hacked. The other 3% have too, they just don’t know it”
- Average annualized cost of cyber incidents for U.S. companies is $15.4 million

Talent Crisis
Severe shortage of skills
- 348,000+ open positions over 12 months
- Est. to grow to 1-1.5 million by 2020
- 91% increase in 5 years (2010-2014)
- Fast growth across industry verticals
- Only 11% female

Undervalued
in the organization
- C-suite understanding remains weak
- “Rarely has something been so important and so talked about with less clarity and less understanding”
Challenges

- New Technology Fronts: Mobility to Cloud, IoT
- Motivated Threat Actors
- Increased Sophistication of Threats
- Exponential Increase in Number of Attacks

**Advanced Threats in the Cyber Security Landscape require an Advanced Skill Set to Compete**

- Emerging Skill Set
- Education and Certification
- Training and Development
- Experience
- Motivations
- Immediate Impact

- A recent study conducted by the Center for Strategic and International Studies (CSIS) and Intel found that 82% of respondents reported a shortage of cybersecurity skills at their organization.

- Seventy-one percent say the talent deficit has hurt their organization.

- One in four blame it directly for data loss and reputational damage.
CyberTalent Issues for the SOC

**SOC Management**
- Innovative ways to build your cyber talent pipeline
- Retention – why is it so difficult? What can you do to mitigate issues?
- Working with HR to ensure human capital and corporate culture drive cybersecurity goals
- From Cyber Team: HR doesn’t understand our business.

**Hiring Managers/Talent Acquisition**
- How do you create and maintain a culture of cybersecurity?
- What is the role of HR in aligning workforce management with cybersecurity strategy?
- Common Challenges
- Best Practices
What has to change?

Get more *qualified* people into the field

1. Accelerate Skilled Candidates into Workforce
2. Attract High Potential Candidates
3. Provide Training, Education and Certification
4. Provide Innovative Pathways to Jobs
Create diverse, constant talent pipelines

Time-to-market sensitive, immersive training is needed to develop information security talent NOW for employers. Innovative solutions in cybersecurity right now include:

- SANS CyberTalent Immersion Academies
- NTT Security-SANS VetSuccess Academy
- Cisco Global Cybersecurity Scholarship
- Microsoft Software and Systems Academy (MSSA)
- Onward to Opportunity (O2O)
- Warriors to Cyber Warriors (W2CW)
- Cyberjutsu Girls Academy
- Raytheon Women’s Cybersecurity Scholarship
- CyberCorps (R): Scholarship For Service (SFS)
- VetsInTech/Palo Alto Networks
- Evolve & SecureSet Cybersecurity Academies
- Rackspace Open Cloud Academy
VetSuccess

The VetSuccess program provides transitioning US military veterans with advanced technical training, certifications, and connections to high-paying jobs in cybersecurity.
Women: Bringing Diversity to Cybersecurity

Academy Goals

• Provide educational opportunities to women interested in cybersecurity fields
• Increase gender diversity in the information security work force (11% female)
• Meet needs of critical national infrastructure firms, industry, law enforcement, and intelligence agencies
• Match talented, employment-ready women with top cybersecurity employers
Fast Track: Three steps to a cybersecurity career

1. Qualify
   Individuals take the qualifying exam, complete the application process, and interview with the admissions committee.

2. Train & Certify
   Cohort members develop practical, hands-on skills by completing world-class SANS training courses and earning GIAC certifications.

3. Employ
   Cohort members can earn guaranteed employment opportunities at Sponsored Academies, or pursue multiple opportunities at Open Academies.
We’ve been thrilled with the opportunity to participate in the VetSuccess Academy. I can’t say enough about the cooperation and tireless efforts by SANS to make this program successful for both veterans and employers."

-Arlin Halstead, VP, Human Resources

118 SANS VetSuccess Cohort Members

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12 in VS Academy process – 2016 cohorts
24 in VS Academy process – 2017 cohorts
Talent Acquisition Strategy

EMPLOYER BRANDING

EVP
- Drives Employer Brand
- Exec build culture
- Built inside out

Social Media
- Dynamic & Integrated
- Relevant content for demographics & audience
- One message across platforms

Mobile
- Dynamic & ease of use
- Flexible
- Connected anywhere anyhow

Selection Process
- Digital Interviewing
- Psychometrics
- Values based interviewing
- Time saving

Live Talks
- Guest Speaking
- Conferences
- Careers Fairs
Talent Acquisition Strategy

Building the Talent Pipeline

Key Success Factors
- Highly Educated
- Highly Experienced
- Highly Trained
- Industry Certifications
- Analytical / Critical Thinking
- Hybrid Jobs (IT Sec + Financial/Healthcare)
- “People” Skills
- Customer Service Skills
TALENT ACQUISITION STRATEGY

VETERAN PROGRAMS = 18% TTL HIRES

VetSuccess Program
- Well Trained
- Educated
- Engaged
- Skill Ready
- Immediate Impact
- Industry Certifications
- Built In Retention

Other Veteran Programs
- Support Our Veterans
- Hire Our Heroes
- Wounded Warriors
- Joining Forces
- FortiVet

GOAL = 20% TTL EE’s
Keys to Successful Talent Acquisition Strategies

Work Closely With Leadership

Build and Present Business Case

Aggressively Market Programs

Develop and Grow Partner Relationships

Prepare Readiness of Stakeholders

Quality Assessment and Selection
Max Shuftan: mshuftan@sans.org
Arlin Halstead: Arlin.Halstead@nttsecurity.com