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Tackling the talent shortage problem

An honest look at challenges related to finding and retaining information security talent

Evan Francen, CEO
FRSecure and SecurityStudio
Tackling the talent shortage problem

Introduction

• So, I’m told that we have a talent shortage problem in our industry.
• I don’t trust everything I hear, and neither should you.
• Do we actually have a talent shortage problem?
• Regardless, what are we going to do about it?

Before we dive in, let me introduce myself and who I work for. Don’t worry, there’s no sales pitch.
Tackling the talent shortage problem

ME: Evan Francen, CEO & Founder of FRSecure and SecurityStudio
I do a lot of security stuff…

• Co-inventor of SecurityStudio®, S²Score, S²Org, S²Vendor, S²Team, and S²Me these are “simple buttons” (because “easy buttons don’t exist).
• 25+ years of “practical” information security experience (started as a Cisco Engineer in the early 90s – 1st security gig was cleaning boot sector viruses from Windows 3.1 systems)
• Worked as CISO and vCISO for hundreds of companies.
• Developed the FRSecure Mentor Program; 6 students in 2010/530+ in 2019
• Advised legal counsel in very public breaches (Target, Blue Cross/Blue Shield, etc.)
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Me. I look better as a cartoon.
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UNSECURITY: Information Security Is Failing. Breaches Are Epidemic. How Can We Fix This Broken Industry?

Chapter 10: Too Many Few Experts – The information security industry is broken because we have too many “experts” but not enough experts.
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ME: Evan Francen, CEO & Founder of FRSecure and SecurityStudio

Just prepping you...

• I’m a binary thinker.
• Things I appreciate:
  – Logic.
  – Simplicity.
  – Truth.

If you like these things too, we’ll have fun here (and maybe we should do some work together too).
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Who I work for
FRSecure & Security Studio

This is best explained in a diagram…
Who I work for

I work here!
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OK, now let’s dive in.
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The subtitle for this presentation is “An **honest** look at challenges related to finding and retaining information security talent”.

- The keyword is “honest”, I think
- Other important words are “finding” and “retaining”.
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Honesty

• If you read the news, you’d think that we have nobody to do security work, but is this true?
• To answer the question, “Do we have a talent shortage problem?” we need to examine from (at least) three different perspectives:
  – The industry itself - We need talent.
  – Those who are hiring - You need talent.
  – Those who are seeking - You are talent.
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We need talent. – The problem(s)

• Security Magazine – The Cybersecurity Talent Gap = an Industry Crisis
  – By one estimate, there will be 3.5 million unfilled cybersecurity jobs by 2021.
  – Lack of qualified staff.
  – Using under skilled practitioners.
  – Security tool sprawl.
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We need talent. – The problem(s)

• Security Boulevard – The Great Cyber Security Talent Shortage Continues

• According to a November, 2018 ISACA study, more than 1,500 cyber security professionals:
  – 69% cyber security teams are understaffed.
  – 58% have unfilled cyber security positions.
  – 60% cyber security budget is underfunded
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We need talent. – The problem(s)

• CSOonline – The cybersecurity skills shortage is getting worse

• More than 1/2 of organizations report a “problematic shortage” of security skills
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We need talent. – The problem(s)

The cybersecurity skills shortage is getting worse

More than half of organizations report a “problematic shortage” of cybersecurity skills, and there is no end in sight.
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We need talent. - The problem(s)

It’s no wonder our business leaders want to do this.
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We need talent.

How bad is it really?

• It’s bad, but you have some options (coming later).
• Everyone in this industry has a motive, usually to sell you something.
  – The 3.5 million number was from Cybersecurity Ventures, they get more coverage and more clicks from sensational numbers. This was a prediction ONLY.
  – The ISACA study was a survey of “cyber security professionals”.
  – The scary title “The Cybersecurity Skill Shortage Epidemic” came from Deep Instinct and they sell stuff (endpoint protection, mobile security, etc.)
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We need talent. – You can help.

• It’s hard to change a whole industry.
• Focus on you and your area of influence.
• What we need:
  – More education everywhere (home, school, work, etc.)
  – Awareness of the opportunities
  – Make mentorship everywhere.

What you can do to help?
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We need talent. – You can help.

Some ideas:

• FRSecure’s CISSP Mentor Program - [https://frsecure.com/cissp-mentor-program/](https://frsecure.com/cissp-mentor-program/)
• SANS Mentor - [https://www.sans.org/mentor/](https://www.sans.org/mentor/)
• Start your own “mentor program”
• Volunteer somewhere
  • [https://www.safeandsecureonline.org/s/volunteers](https://www.safeandsecureonline.org/s/volunteers)
  • [https://www.educause.edu/focus-areas-and-initiatives/policy-and-security/cybersecurity-program/community](https://www.educause.edu/focus-areas-and-initiatives/policy-and-security/cybersecurity-program/community)
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We need talent. – You can help.

Some ideas:

• Focus on you and your area of influence.
• Got kids? Talk to them. Talk to teachers.
• Free training & awareness stuff:
  • https://www.commonsensemedia.org/
  • https://staysafeonline.org/
  • https://s2me.io

Start somewhere.
Tackling the talent shortage problem

We need talent. – You can help.

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Start somewhere.

So, we know we have a talent shortage problem.

What does this mean to you if you’re in the market for information security talent?
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You need talent. What does this mean to you?

So, we have a supply vs. demand issue.

• Demand is high, supply is low.
• This means you pay more, one way or another.
• Unless you have an unlimited budget, this means you better get it right, meaning:
  – You identify the right needs.
  – You get the right person (or people).
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You need talent. What does this mean to you?

The right needs.

• What you need depends on what you want to accomplish. Makes sense.

• If you’re in business to make money, what you want to accomplish must be aligned with that. Right?

• Define your information security roles and responsibilities first, before you hire. Need help? Get help.

• Get your expectations inline with your needs.
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- Define your information security roles and responsibilities first, before you hire. Need help? Get help.
- Get your expectations inline with your needs.

DO NOT:

- Hire just because you were told you should.
- Hire just because others are.
- Copy a job description from someone else.
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You need talent. What does this mean to you?

OK, so you’ve decided that you need someone.

1. Why do I need someone in the first place?
2. What needs will the person/people serve (specifically)?
3. What are my expectations?

Before you go there, answer three questions and write it down.
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You need talent. What does this mean to you?

OK, so you’ve decided that you need someone.

1. Why do I need someone in the first place?

2. What needs will the person/people serve (specifically)?

3. What are my expectations?

What you’ve written is the start of your job description.
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You need talent. What does this mean to you? Now you sort of know what you want. How are you going to get it?

You have three options:

1. Buy
2. Build
3. Outsource

Each option has pros and cons.
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You need talent. What does this mean to you?

Option #1 - Buy your talent

- **Pros**
  - Verifiable experience.
  - Less wasted time/effort.

- **Cons**
  - Expensive.
  - Unlearning.
  - More than you need.

If you buy talent, culture fit must be #1.
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You need talent. What does this mean to you?

Option #2 - Build your talent

• **Pros**
  – Custom fit.
  – Loyalty.
  – Cheaper.

• **Cons**
  – Patience.
  – They leave.
  – Hard.

If you build talent, take your time. Support is key.
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You need talent. What does this mean to you?

Option #3 - Outsource

• Pros
  – Custom fit.
  – Only buy what you need.
  – Experience.

• Cons
  – No in-house IP.
  – Motives/bias.
  – Accountability

If you outsource talent:
1. Make sure there’s mutual accountability.
2. Measurement is important.
3. Use someone who’s product agnostic.
Tackling the talent shortage problem

You need talent. What does this mean to you?

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Tackling the talent shortage problem

You need talent. What does this mean to you?
Now you sort of know what you want. How are you going to get it?
You have three options:

1. Buy
2. Build
3. Outsource

Whatever option you choose, choose the option that’s best for you!
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You need talent. – Most common problems.

Do you fit one or more of the following?

• Wrong motivations.
• Misaligned needs.
• Poor expectations.
• Can’t afford talent.
• Good talent vs. not so good talent.

Go back to:

1. Why do I need someone in the first place?
2. What needs will the person/people serve (specifically)?
3. What are my expectations?
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You are talent. Keep at it.

Many of our talent seekers claim there isn't a talent shortage problem.

- They’re trying to get their 1st job in the industry and can’t.
- They’re very experienced and can’t get hired again.
- Expectations misalignment.
Tackling the talent shortage problem

You are talent. Keep at it.
They’re trying to get their 1st job in the industry and can’t.

“You Want to Get into Security”
Short (34 page), free e-book.
Tackling the talent shortage problem

You are talent. Keep at it.
They’re very experienced and can’t get hired again.

• My heart goes out to these people.
  – Ageism.
  – Stuck in your ways. Open your mind to new approaches while figuring out new ways to communicate the fundamentals.

• Hire one if you can get one. The wisdom alone is worth it.
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You are talent. Keep at it.

Expectations misalignment.
• An education experience for all.
• Job seekers.
  – You might not be worth as much as you think you are.
  – Take a cut, career path is more important.
• Hiring people.
  – Make sure you asking for what you really need.
  – All those letters look good, but do you really need them all?
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You are talent.

The short eBook, five chapters:

2. The Right Person.
3. Landing Your First Job.
4. Becoming Good.
5. Staying Healthy.

Read it. Share it. Give me feedback. It’s free!
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That’s it! Thank you!

• Email: efrancen@frsecure.com
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  #S2Roadshow
• Blog - https://evanfrancen.com
• Podcast (The UNSECURITY Podcast)

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LET’S WORK TOGETHER!