OWASP October 2019

The Softer Side of Security

About Allison Professionally

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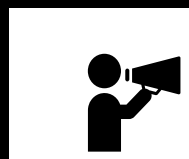
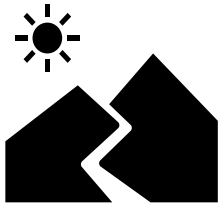
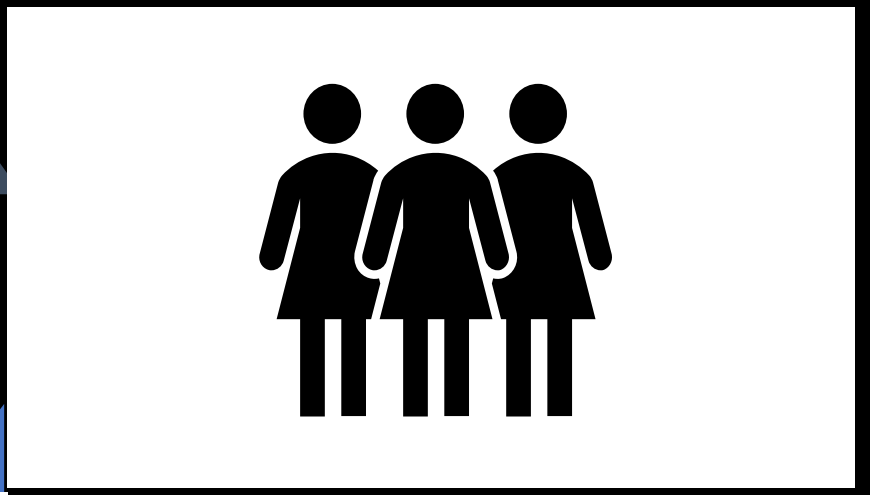
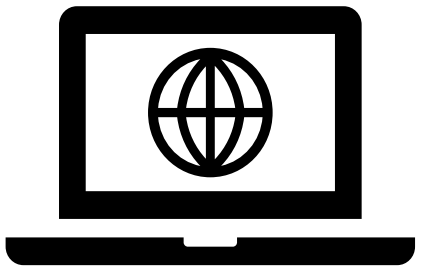
- Over 19 years in IT
  - J2EE development
  - .net development
- Over 12 years in Information security
  - Focus on application security
  - Security architecture
  - Risk management
- CISSP and CSSLP certified
  - SME for ISC2 for Both the CISSP and CSSLP (I help write exam questions and determine the cut scores for passing the exams).
- Serve on the paper review selection committee for appsecEU and appsec Global (last 3 years)





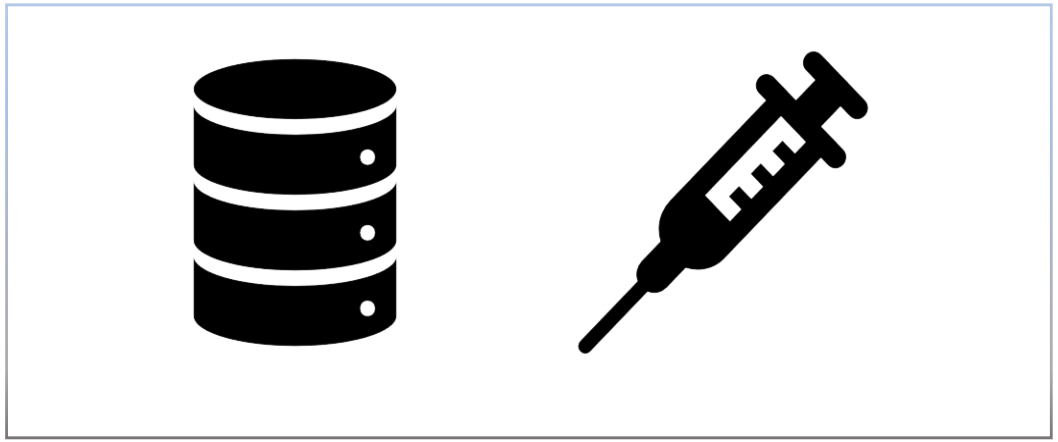




Agenda

- Hard/Soft Skills
- Big picture thinking
  - Strategy
  - Roadmaps
- Communication
  - Planning
- Collaboration

Hard Skills



- Certifications
  - CEH
  - CISSP
  - CSSLP
  - GCIH
  - CISA……
- OWASP top 10
- Threat Modelling
- Encryption/PKI
- SAML
- IDAM
- SIEM
- J2EE, .net, python,Git…….

Big Picture Thinking

- Not a technical skill
- Partially Based on experience
- Partially dependent on your temperament (you need to be open minded)
    - Can’t get bogged down in the weeds, but the weeds should influence the strategy
- Think about what the current strengths and weaknesses of the appsec program are today, including tools and people – Develop your vision
    - Ask yourself what works and what doesn’t
    - Ask yourself what would you change and why
    - Map out how you would change it

SWOT

Strengths

- What is it that the Software Security Group does well?
  - Do you automate well
  - Do you have good application coverage
  - Does your testing methodology produce good results
  - Are you able to provide security requirements repeatably
  - Do you have skilled and knowledgeable staff
  - Does the group hold any patents

Weaknesses

- What does the Software Security Group do poorly
  - Are processes documented or followed and repeatable
  - Do you have resource limitations
  - Are you reporting to many false positives
  - Are your metrics accurate
  - Do you have adequate budget

Opportunities

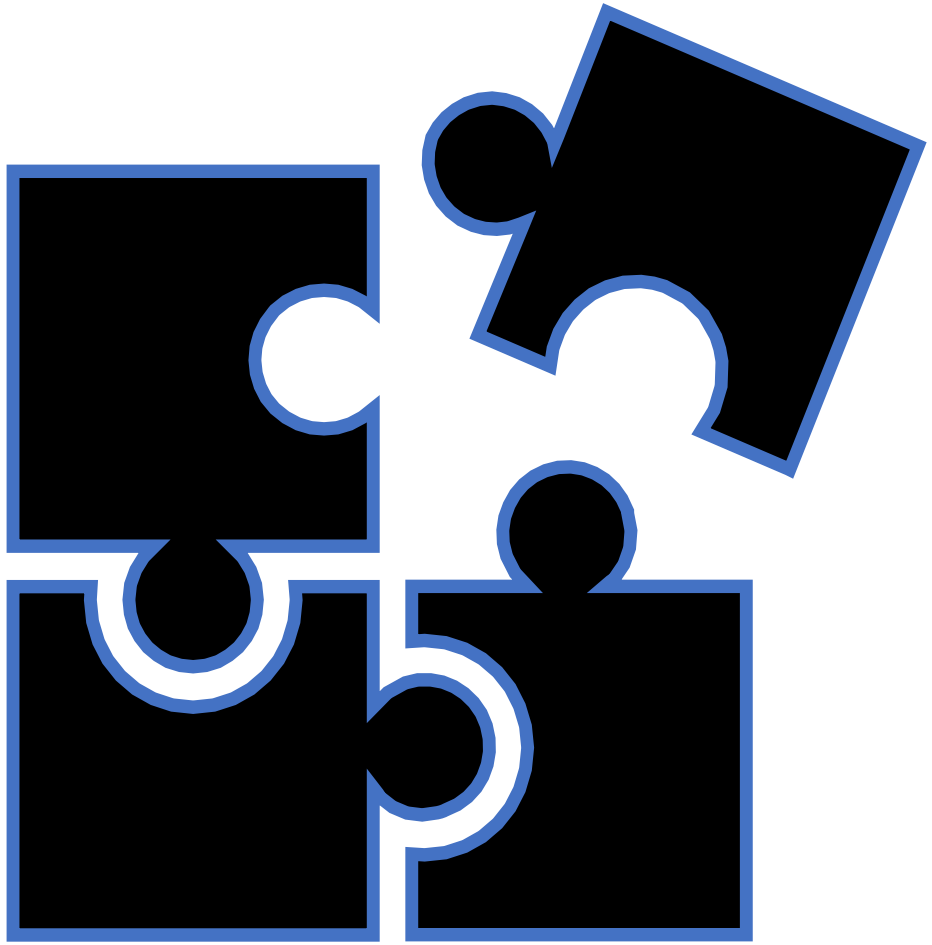
- What are the intangible opportunities that will impact the Software Security Group
  - Is there a new CISO/CIO/CTO who has a new found support for the security organization
  - Will there be a increase in budget
  - Increase in headcount
  - New training budget

Threats

- What Challenges will the Software Security Group encounter in the next several years?
  - Is there impending legislation/regulations that will hamper/impede/change the direction of the software security group
  - Has there been a recent SIRT that impacts the software security group

Putting It Altogether……

Creating a Vision, Strategy, and Roadmap



Example SWOT

Strengths

- Documented repeatable process
- Skilled talented employees in the software security group

Weaknesses

- Resource limitations
- Slow response
- False positives
- Late involvement

Opportunities

- Increased budget
- Regulatory requirements for software security

Threats

- Employee turnover is high

Vision

- Organically create a culture of security by building security into our products by default

Strategy

Tools, Technology, and Automation

People

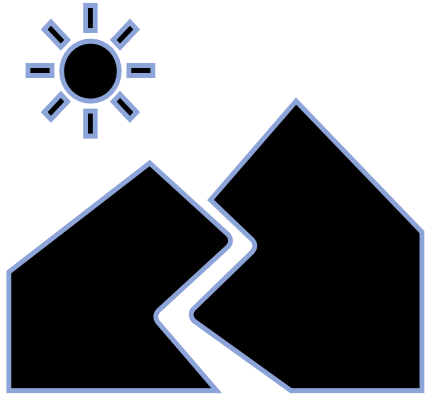
Governance, Metrics, and Standards

Training and Awareness

Process

Roadmaps…

- Outlines several years activities
- Align to your vision and strategy
- Complement the SWOT analysis



Roadmap

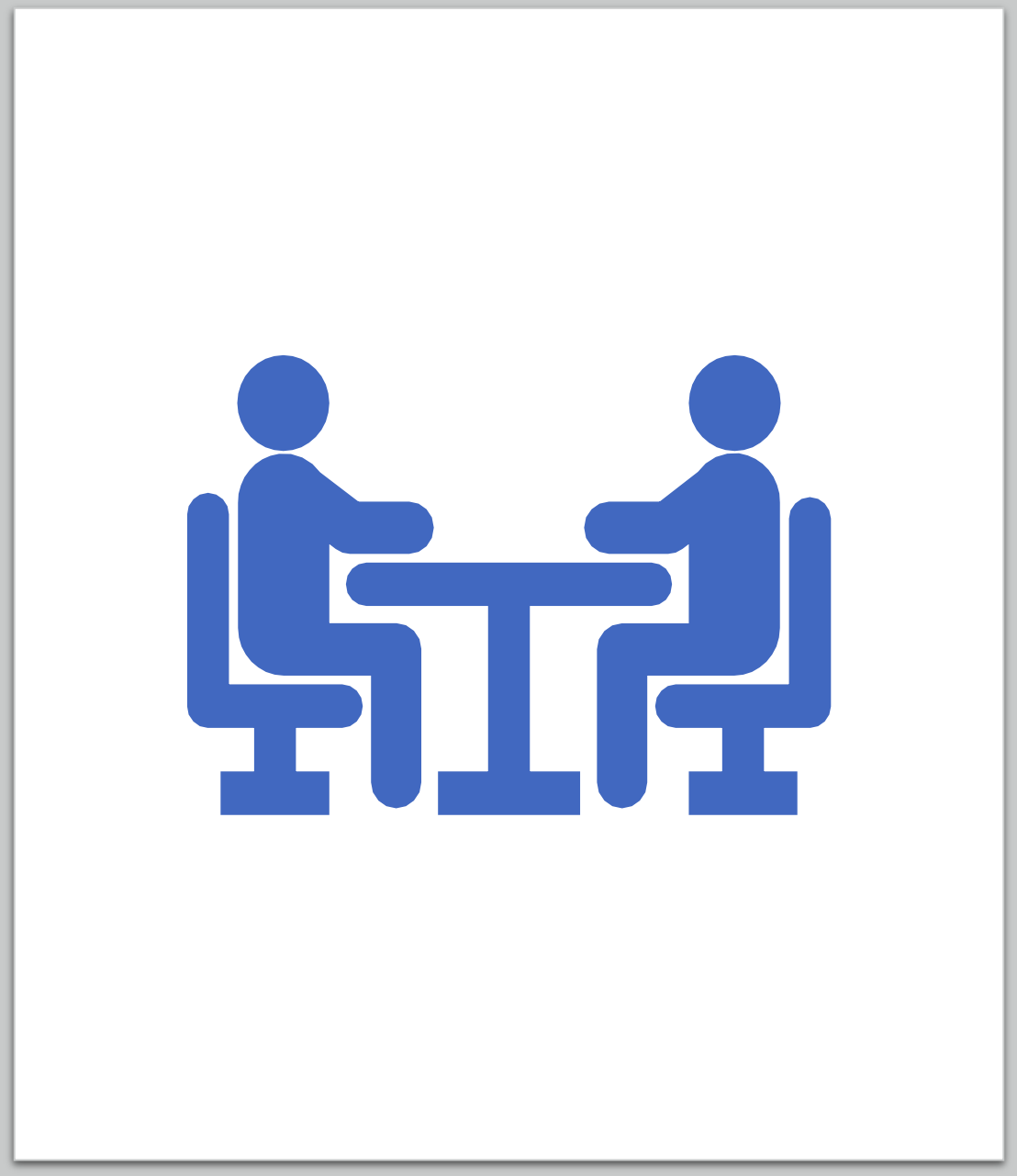
	Year 1	Year 2	Year 3
Governance	• Establish mandatory training requirements and dates by which training must complete	• Measure completion rate against required date • Mature Metrics	• Measure completion rate against required date • Mature Metrics
Training and Awareness	• Establish a training curriculum (all roles in the SSDLC) • Roll out training	• Review and update curriculum • Update required classes	• Review and update curriculum • Update required classes
Process	• Create security User Stories • Introduce security into the code reviews	• Introduce Threat Modelling	• Conduct a BSIMM (Building Security In Maturity Model) to measure progress and inform the strategy and roadmap for the next three years.
Tools,	• Deploy and engineer SAST solution	• Engineer an integrate SCA into CI/CD pipeline	• RASP (Runtime Application Self Protection)
People	• Hire engineers to implement tools and engineer Integrations	• Cross train staff	• Cross Train Staff

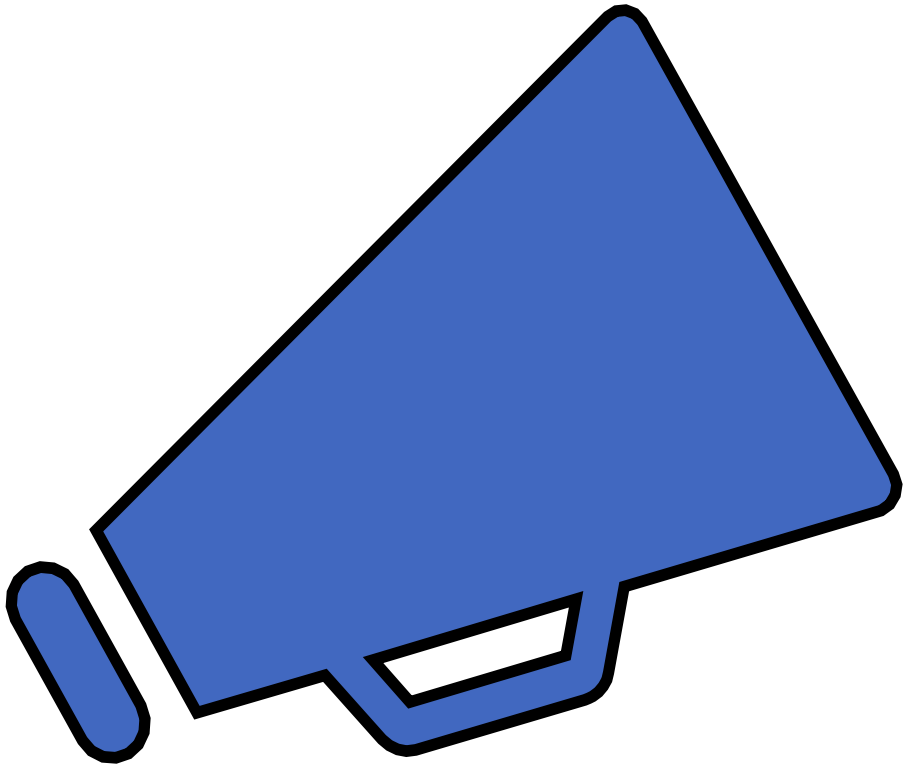
Collaboration

- Arguably the most important
- We are dependent on others to get our jobs done
  - Requires buy in from others
  - Folks who won’t collaborate or compromise or always say No
    - Negative Nancy
- Lead by Example

Collaboration

- A little Psychology goes a long way
  - Buy in
    - work with your business partners to understand their goals and objectives.
    - Help them understand yours
    - Point out where you both can help each other
    - Ultimately people will be more willing to help if they feel they have been consulted and their feedback included
  - The person who always says no
    - If you still keep getting “no, go away”, then try to empathize with the person. We all have a boss and priorities
      - “Please help, my boss will string me up by my toenails if I don’t get this done” They know what you mean and how you feel.
      - Don’t shoot the messenger
      - Explain how this can be a win win situation. Explain how they can include this as a feather in their cap
      - If all else fails bake them some cookies ☺





Communication

- Not the same as collaboration
- Great so you have buy in, but now what?
- Communicate, communicate, communicate
  - There is nothing worse than just dropping a new standard, policy, process on the internal website
  - Announce new major initiatives on company communication channels
  - Establish a communications plan

Communications Plan

- Define your process
  - Who has to approve any communications
  - Define what communication mediums you will use (email, collaboration channels, meetings/trainings, video, etc.)
    - Define your target audience
    - Define what you want to tell them (i.e. what is the problem)
    - Define why you are doing this
    - Define what actions, if any they will need to take
    - Define when it will happen

Questions?