The Security Champion Framework

The Security Champion framework exists as a measuring stick and a roadmap. As a measuring stick, the framework allows leaders to measure how well their champions program performs. As a roadmap, the leader can use the measurements as input and build a plan to improve their program by applying updates towards a higher framework level.

Key terms to know

A security champion is a security-passionate person engaged with your security team, interested in expanding their knowledge and experience with security.

The security community is a virtual team of engaged developers, architects, software managers, testers, and similar roles (product adjacent) that extends the experience and knowledge of a central security team deeply into product/development teams.

What's in a name?

Various names apply to the people that make up a security champion program. For example, organizations use different naming schemes for Champions, Advocates, Guild Members, Ninjas, and Agents.

There is nothing in a name. Instead, call the people within your program by any of the monikers provided. Do call them something, but choosing the perfect phrase to describe the people does not define the success of your program.

For purposes of the framework, the word champion is universal.

The need for champions

Security champions are necessary because most security teams need more resources to meet security demands. The security department needs more time/energy/people to perform security for all. They have the knowledge and expertise but need scalability.

Each year, BSIMM asks their member companies how many developers and security team members they have. From BSIMM 12, the ratio was one security person to every one hundred and thirty-five developers. This ratio demonstrates the need for security champions. BSIMM members take security seriously enough to spend money on a consultant to analyze their stance. Non-BSIMM companies are likely at an even higher ratio. The higher percentage is why Security Champions are needed – there need to be more security team members to do all the work.

The successful champion

There are four facets to the successful champion experience.

First, consider foundational knowledge. Foundational is the knowledge about application security, from vocabulary to return on investment and the business case. Foundational knowledge answers the why of application security and the things everyone needs to understand.

Second, a spark of passion. A spark of security passion is vital. Rather than forcing a champion to volunteer, the best case is a champion that steps forward because they have a slight interest in security. The champion program can fan that little interest into a security flame.

Third, understand/acknowledge attacks. Champions must realize the depth of modern attacks and recognize that what they build is under attack.

Fourth, utilize tools and processes. Champions must follow the defined procedures to enhance security, like Secure Development Lifecycle, and be the eyes and ears that execute and interpret the results of the tools.

The value for the champion

Many security champion programs focus on the company's value instead of thinking about the champion. Flip the table and consider what's in it for your champions. Make it about them.

Here are some examples of items that can provide value for the champion:

- Advanced training + knowledge and degrees.
- Exclusive learning events.
- Management/Executive visibility and exposure to successful projects that improve security.
- Acknowledgement and recognition as someone who makes company products safer for Customers.
- Cross-organizational collaboration networking with other like-minded security people.
- Career advancement.
- Career pivot into security.

The company's return on a champion program

The company does receive many benefits from the program. Consider these ideas for the value provided to the organization.

- Specialized security resources without additional headcount investment.
- A population of employees is satisfied with a program dedicated to their interests.
- Integrated security coaches within functional teams.
- Contributes to security ROI.
- Visibility as an organization that takes security seriously.

Overview of the Security Champion Framework

Five high-level areas divide the framework, with one to four sub-areas within each area.

Area	Description
Planning	Planning includes the activities needed to scope and build a strategy.
People	People include recruiting, retaining, capturing commitment, and onboarding new champions.
Marketing	Marketing includes the branding of the program and communication plans.
Execution	Execution includes the program pillars, coaching, education, and globalization efforts.
Measurement	Measurement includes metrics for demonstrating the value generated by the program.

Other Security Champion Resources

• Security Champion Program Success Guide – https://securitychampionsuccessguide.org/

Contributors

• Chris Romeo, Project Leader

Scope

Short Description

Scope: how deep is the program?

Long Description

Blah

Overview

Level	Name	Validation
Maturity 0	Developers only	Blah validation
Maturity 1	Product adjacent (SCRUM, SRE,	Blah validation
	DevOps, Cloud, etc.)	
Maturity 2	Product managers	Blah validation
Maturity 3	Executives and Managers	Blah validation

Maturity 0 - Developers only

Activity

• Blah

Benefit

• Developers are the center and are a great start.

Maturity 1 - Product adjacent

Activity

• Blah

Benefit

• Expanding to the product adjacent lowers security friction.

Maturity 2 - Product Managers

Activity

• Blah

Benefit

• Product drives what we build, and when can drastically lower security friction by specifying that security is built in.

Maturity 3 - Executives and Managers

Activity

• Blah

Benefit

 \bullet When the leaders share best practices, the entire culture has changed.

Strategy

Short Description

Strategy answers the questions, "What do you want them to do?" and "What is the big-picture goal?"

Long Description

The Strategy sets the tone for your Security Champions program, identifying the shared vision and goals for participants. Participants want to know where the program is heading and how they can be a part of the solution. Providing this guidance motivates Security Champions to do their best within the program.

Overview

Level	Name	Validation
Maturity 0	No program	Nothing to validate
Maturity 1	Program objective	Review the program objective and determine if it is clear.
Maturity 2	Yearly goals, program vision, and an acceptance/tracking tool.	Review the goals and vision and test the tool.
Maturity 3	Executive Sponsor buy-in.	Meet with the Executive Sponsor and confirm what buy-in means in their words.

Maturity 0 - No Program

Activity

• Get on board and scope a program.

Benefit

• Read this framework to capture the benefits you'll experience by launching a Security Champion program.

Maturity 1 - Program Objective

Activity

• Define and publicize a program objective.

Benefit

• Communicates to everyone what we are trying to achieve.

Examples

- Individual Establish a growth path for developers to transform into security engineers.
- Organizational Serve as the leader and catalyst for secure product development using our SDL.
- Industry Industry-leading program to improve the corporate image as a security company, an organization full of leading security engineers.

Maturity 2 - Yearly goals, program vision, and an acceptance and tracking tool.

Activity

- Define and publicize yearly goals.
- Define and prioritize a program vision.
- Provide an acceptance and tracking tool for the Champion and Manager goals.

Benefit

- Yearly goals and opt-ins protect the Champion's resource commitments. Most of the time, Champions
 perform their security duties with a shared slice of their time. By setting yearly goals and facilitating
 an opt-in where Champions and the Manager acknowledge the signup, you prevent uncomfortable
 conversations. Things can be difficult if the Champion and manager are not in sync regarding resources.
- Represent how security champions are business enablers and partner with a strong Executive Sponsor that catches the Champion program vision.

Examples

- Participate in the Security Champion community via monthly meetings.
- Drive the adoption of our SDL.
- Attain a specific security education level.
- Focus on growing expertise in one area of our SDL (Security Controls, Threat Modeling, Static Analysis, Vulnerability Testing)

Maturity 3 - Executive Sponsor buy-in.

Activity

• Achieve Executive Sponsor buy-in for program vision.

Benefit

• When an Executive Sponsor is on board with the Champions program, they can assist with spreading awareness within the Executive Suite and help with any dedicated budget required to execute the program.

Commitment

Short Description

Commitment: how much time are your champions spending on security (average)?

Long Description

Blah

Overview

Level	Name	Validation
Maturity 0 Maturity 1 Maturity 2 Maturity 3	None. One. Two to Four. Eight.	Blah validation Blah validation Blah validation Blah validation

Maturity 0 - Blah

Activity

• Blah

Benefit

• Blah

Maturity 1 - Blah

Activity

• Blah

Benefit

• Blah

Maturity 2 - Blah

Activity

• Blah

Benefit

 \bullet Blah

Maturity 3 - Blah

Activity

• Blah

Benefit

• Blah

Onboarding

Short Description

Onboarding answers the question, "how are you going to get a new, inexperienced Champion embedded into the Champions Program so they feel at home?".

Long Description

When a new person becomes a Security Champion, they likely have no idea what to expect. If you only invite them to a monthly meeting, with no context for what they should expect, you are setting them up for failure. There is an opportunity with onboarding to welcome a new Champion and set them up for a long and successful time within the Program.

Overview

Level	Name	Validation
Maturity 0	No onboarding process.	Nothing to validate.
Maturity 1	Individual orientation.	Review the simple onboarding process.
Maturity 2	Team-focused orientation and training.	Review the training materials, and the champion buddy system.
Maturity 3	Certified Security Champion.	Review the certification process, and discuss the value generated with a selection of certified Champions.

Maturity 0 - No onboarding process.

Activity

• Blah

Benefit

• Blah

Maturity 1 - Individual orientation.

Activity

• Blah

Benefit

• Blah

Maturity 2 - Team-focused orientation and training.

Activity

• Blah

Benefit

• Blah

Maturity 3 - Certified Security Champion.

Activity

- Define and assemble the standard body of knowledge.
- Build a training curriculum to deliver the standard body of knowledge.
- Build a testing approach to validate that champions can demonstrate the standard body of knowledge.

Benefit

- A Champion certification provides value to the Champion as they can reference their status at promotion time and take the status with them if they switch companies.
- Certified Champions have proven that they have attained the standard body of knowledge you define for your program.

Recruitment

Short Description

Recruitment: how are you going to find and sign-up new champions?

Long Description

Blah

Overview

Level	Name	Validation
Maturity 0	None	Blah validation
Maturity 1	Rag tag crew.	Blah validation
Maturity 2	Mandatory assignment.	Blah validation
Maturity 3	Volunteer.	Blah validation

Maturity 0 - No active recruitment efforts.

Activity

• Blah

Benefit

• None.

Maturity 1 - Rag tag crew of security passionate people.

Activity

• Blah

Benefit

• You have a spark – the start of a strong security community.

Maturity 2 - Mandatory assignment.

Activity

• Blah

Benefit

• Voluntold – your numbers are growing.

Maturity 3 - Volunteer opt-in.

Activity

• Blah

Benefit

• Ideal, as people are chasing you to join your program.

Retention

Short Description

Retention: how are you going to keep them coming back for more?

Long Description

Blah

Retention ideas * Email / Slack / teams messages * Cash * Public recognition * Printed certificates * Lanyards * T-Shirts * Stickers

Overview

Level	Name	Validation
Maturity 0	No retention efforts.	Blah validation
Maturity 1	Simple retention efforts.	Blah validation
Maturity 2	Existing rewards and recognition.	Blah validation
Maturity 3	Specific budget for Champions.	Blah validation

Maturity 0 - No retention efforts

No retention efforts. ### Activity * Blah

Benefit

• Blah

Maturity 1 - Simple

Simple retention efforts, including e-mail and Slack/Teams messages. ### Activity * Blah

Benefit

• Everyone appreciates being recognized for what they accomplish; recognition breeds loyalty.

Maturity 2 - Existing rewards and recognition

Tapping into your existing company rewards and recognition. ### Activity * Blah

Benefit

• Rewards without new budget allocation.

Maturity 3 - Specific budget

Requesting and receiving special budget to retain and reward Security Champions. ### Activity * Blah

Benefit

• With budget, many new doors are open.

Branding

Short Description

Branding: how to best represent the group to the larger company?

Long Description

Branding is the effort of generating words or pictures that everyone inside the company will associate with security champions. A solid brand allows all the good will built by champions to accumulate inside a given mark, and provides residual value for years to come.

Overview

Level	Name	Validation
Maturity 0	No branding efforts.	None
Maturity 1	Name and tagline.	Review and confirm that the name and tagline exist and are in use.
Maturity 2	Logo and mascot.	Review and confirm that the logo and mascot exist and are in use.
Maturity 3	SWAG	Review the available SWAG and the distribution policy for champions.

Maturity 0 - No branding efforts

Activity

• Blah

Benefit

• Blah

Maturity 1 - Establish a name and tagline for your security community.

Activity

• Blah

Benefit

• Your brand is an advertisement and provides attribution for all the cool things the program does and achieves.

Maturity 2 - Build a visual look and a logo/mascot for your security community.

Activity

• Blah

Benefit

• Blah

Maturity 3 - Distribute SWAG.

Distribute SWAG to your Champions, allowing them to show their commitment and act as a billboard. * Souvenirs, Wearables, And Gifts * Stuff We All Get * T-shirts, laptop stickers, etc.

Activity

 \bullet Blah

Benefit

• Everyone loves SWAG.

Communication

Short Description

Communication: how are you going to keep the rest of the organization apprised of what the Champions are doing?

Long Description

Blah

Overview

Level	Name	Validation
Maturity 1 Maturity 2	No communication. Champions only. Direct Managers. Executives.	Blah validation Blah validation Blah validation Blah validation

Maturity 0 - No communication

Activity

• Blah

Benefit

• Blah

Maturity 1 - Champions only.

Activity

• Blah

Benefit

• Champions are in the loop on how they can participate more deeply in the community.

Maturity 2 - Direct Managers

Activity

• Blah

Benefit

• Communicating about the contributions your Champions make demonstrates the return on investment to the Manager for providing resources.

Maturity 3 - Executives

Activity

• Blah

Benefit

• Executives understand ROI.

Tips * Update direct managers about the impact of individual Champions – over-communicate. * Send a high-level report for Executive staff, highlighting the contributions of their Org's Champions. * Send a newsletter-style e-mail with updates. * Have a central Slack/Teams channel for questions

Coaching

Short Description

Coaching: how will you provide consulting and one too training?

Long Description

Security coaches are to developers, as life coaches are to health and wellness. A solid security coach works with a developer one-on-one or one too few for a short period, assisting and teaching one area or helping to resolve one challenge. Then the security coach moves on to another set of folks to work with and help succeed.

A coach could cover subjects such as threat modeling, using SAST or DAST, and advising on a tough security challenge.

To be a successful security coach, an individual must have a solid development background. Walking a mile in a developer's shoes goes a long way towards showing that developer that the coach cares enough to understand the subject for which they are providing consulting. The coach must also have a solid background in application and product security. The final piece for success is soft skills- communicating with a small group of developers and adapting communication and collaboration styles to make the group successful. Communication is crucial, and the best coaches connect with developers.

Overview

Level	Name	Validation
Maturity 0	No coaching.	None.
Maturity 1	Volunteer coaches.	Review the coach roster, and
		interview a few coaches to evaluate their efforts.
Maturity 2	Staff coaches.	Review the coach roster, and interview a few coaches to evaluate their efforts.
Maturity 3	Dedicated coaches.	Review the coach roster, and interview a few coaches to evaluate their efforts.

Maturity 0 - No coaching

No coaching occurs.

Activity

• Study and understand the value of beginning a security coaching practice.

Benefit

• A security coaching practice provides specialized consulting and training and extends the influence of a central security team across a development organization.

Maturity 1 - Volunteer coaches

Volunteer coaches are available. A volunteer coach is an existing Security Champion or security team member with other responsibilities beyond coaching. They find time in their busy schedules to provide coaching services.

Activity

- Write a job description for the Security Coach.
- Provide training sessions explaining successful approaches in coaching for those with a full scope of work in their day jobs.

Benefit

Voluntary coaching is better than no coaching at all. In addition, voluntary coaches can contribute on an as-available basis and positively impact a program.

Maturity 2 - Staff coaches

Staff coaches are available. A Staff Coach is a dedicated headcount resource, reporting to the Security Team. Their focus is to connect with developers and provide security consulting and teaching on a reliable basis.

Activity

• Determine the engagement model for Staff Coaches. How will developers connect with the Coaches if they make an inbound request?

Benefit

- A dedicated Staff Coach focuses on consulting and teaching developers about security. They have no tug of a day job, as this is their day job.
- A dedicated Staff Coach is more efficient and can better serve a larger contingent of developers.

Maturity 3 - Dedicated coaches

Coaches are dedicated and assigned to specific business areas.

Activity

- Determine the breakdown of Coaches to business areas.
- Staff accordingly to provide a standard level of service across the business areas.

Benefit

• Assigned coaches provide more time and coverage for the entire team.

Education

Short Description

Education: how will you train the community at scale?

Long Description

Security education is the approach, tools, and techniques to educate security champions about the most critical pieces of security.

Security education consists of different modalities. The two most popular approaches are online security education platforms and in-person classroom training. Both of these modalities have their advantages and disadvantages. Platforms provide a solution to impact a large percentage of the Champions, no matter their global distribution. Classroom training provides a personal touch, with closer instruction on the finer points, but is expensive to provide for a large organization, both in resource time and cost.

Overview

Level	Name	Validation
Maturity 0	No Security Education.	Nothing to validate.
Maturity 1	Ad hoc security training.	Review training plans and feedback.
Maturity 2	Regular training.	Review training plans and feedback.
Maturity 3	Creative training.	Review training plans and feedback; interview a cross-section of those trained.

Maturity 0 - No security education.

No security education for Champions.

Activity

• Start an education program for your champions.

Benefit

• Security education lays a foundation for a strong security champion. When the champion learns the essential pieces of security, from fundamentals to deep dives to secure coding, they design and implement more secure applications.

Maturity 1 - Ad hoc security training

Ad hoc security training occurs with no regular schedule. For example, this training could be a short webinar on the OWASP Top 10, a classroom session, or a pointer to an online course. The point of ad hoc is that no regular schedule applies to the champions.

Activity

- Scope an ad hoc training, find a teacher, and advertise it to your champions.
- Execute the training.

Benefit

• Some training is occurring, but we aren't catching everyone. There is a baseline set for all champions.

Maturity 2 - Regular training

Regular security training for all champions sets the baseline of knowledge for all.

Activity

- Evaluate various training offerings, and choose a solution that fits your budget and will touch all the developers.
- Choose a training offering and build a programmatic approach to roll it out.

Benefit

• Spreading education across the community provides base levels of knowledge and experience.

Maturity 3 - Creative training

Creative training goes beyond regular, utilizing techniques such as Hack-a-thons and build/break/fix contests.

Activity

• Brainstorm creative ideas throughout the year that are creative and beyond your regular training.

Benefit

• Collaborative experiences allow champions to learn from each other.

Globalization

Short Description

Globalization: how do you build a program if you're a worldwide company?

Long Description

Globalization is a hurdle that you must clear as you build up your program. Most large companies have offices all over the world. Globalization provides opportunities to engage your global community, providing programmatic efforts aimed at their local time zone. Instead of thinking of champions as only mattering in your local time zone, engage your champions worldwide with a solid globalization strategy.

Overview

Level	Name	Validation
Maturity 0	No consideration for globalization. Comfortable schedule.	Nothing Paview the meeting schedule and
Maturity 1	Connortable schedule.	Review the meeting schedule, and confirm that meetings are in a reasonable time zone for global citizens.
Maturity 2	Local events across the globe.	Review the meeting schedule, and confirm that there are separate events across the globe. Attend a global event to confirm its format and popularity.
Maturity 3	Boots on the ground.	Meet with the local security champion team members around the globe and confirm their scope and efforts.

Maturity 0 - No consideration

There needs to be a consideration for different parts of the globe.

Activity

• Interview various global champions, and understand the impact on them personally for working with a champions program pointing to your local time zone.

Benefit

• By creating a globalization strategy, the global champion citizens will stay as champions for a longer time, as they will feel more appreciated that you are creating a program that fits into their local time zone.

Maturity 1 - Comfortable schedule.

Create your meeting and activity schedule comfortable for global citizens.

Activity

• Inventory global champion citizens, and know the time zones that require coverage.

Benefit

• Allows the global team to participate as a single community.

Maturity 2 - Local events across the globe.

Create special global events that encompass the local time zones of your international champion citizens.

Activity

• Schedule global events, and realize you'll likely be staying late in your local time zone. It's okay; you're sacrificing for your global champion citizens.

Benefit

• Demonstrates the importance of global champions.

Maturity 3 - Boots on the ground

Install local security team members in global locations that can provide local events, coaching, and instruction.

Activity

• Hire new security team members to run your global champion group. Search within your global champions for candidates.

Benefit

• Local security team members can more easily pour into the local champions around the globe.

Program

Short Description

Program: what do the champions receive?

Long Description

The program is the core component of the effort. The program includes all the pieces that provide value for the champion experience. From simple things like monthly meetings to advanced training or internal champion conferences, the program drives the value proposition for the champions.

Overview

Level	Name	Validation
Maturity 0	Nothing.	None
Maturity 1	Monthly training.	Review the recent and future monthly training meetings, and review participation statistics.
Maturity 2	Special events.	Review the list of special events and meet with a cross-section of champions to understand the events' value.
Maturity 3	Deep effort.	Review the list of deep events and meet with a cross-section of champions to understand the value the events provide.

Maturity 0 - Nothing

No programmatic elements; everything is ad hoc.

Activity

• Start planning a monthly training session to move to maturity level one.

Benefit

• Ad hoc champion programs are chaos for the participants and cause people to drift away. Build an agenda to breed stability in your environment.

Maturity 1 - Monthly training

Monthly training is the core piece of the program. It provides an environment for learning and connection amongst the champion population.

Activity

- Plan monthly meetings up to twelve months in advance, and add them to champion calendars.
- Provide a mechanism for champions to sign up to speak at a future monthly meeting.
- Reach out to various industry folks and invite them to join a monthly meeting to deliver a talk they have in the bag.

Benefit

• Monthly training builds a cadence within the community and provides champion learning.

Maturity 2 - Special events

Develop special training webinars, internal CTFs, and security days.

Activity

- Scope and schedule special, champion-only training webinars.
- Create internal capture-the-flag experiences only for the champions.
- Schedule and execute security days, as champion only four or eight-hour events.

Benefit

• Special events grow the knowledge and connection of the community.

Maturity 3 - Deep effort

Profound events provide value to the champions that allow them to advance their careers.

Activity

- Schedule and execute multi-day internal champion security conferences.
- Pay for and provide special champion certification training. The ISC2 CSSLP is a nice companion
 certification for champions. To provide true value, ensure the champion does not pay anything out of
 pocket for the class or the certification exam.
- Send a selection of champions to a regional or national security conference, covering all expenses.
- Develop an advanced degree focusing on cybersecurity, and provide this to your champions with no out-of-pocket expense.

Benefit

• Provides true rewards to those that dedicate their time to building a security community.

Metrics

Short Description

Metrics and measurement: how do you demonstrate program ROI?

Long Description

Blah

Overview

Level	Name	Validation
Maturity 0	No metrics.	Blah validation
Maturity 1	Basic metrics.	Blah validation
Maturity 2	Intermediate metrics.	Blah validation
Maturity 3	Action-based metrics.	Blah validation

Maturity 0 - No metrics

Activity

• Blah

Benefit

• Blah

Maturity 1 - Basic metrics

Basic — total count, business unit/product distribution, education levels, and Champion flaw density. ### Activity * Blah

Benefit

• Basic measurement shows program impact.

Maturity 2 - Intermediate metrics

Intermediate - Champion/Employee NPS (eNPS). ### Activity * Blah

Benefit

• Being able to demonstrate the impact the community is having on the Champions themselves.

Maturity 3 - Action-based metrics

Action-based — improve security using the results of Champion metrics and measurement. ### Activity * Blah

Benefit

• Taking action to improve Security as a result of the community improves the organization.

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