

MINDSHARE

2025 10-11 SEP

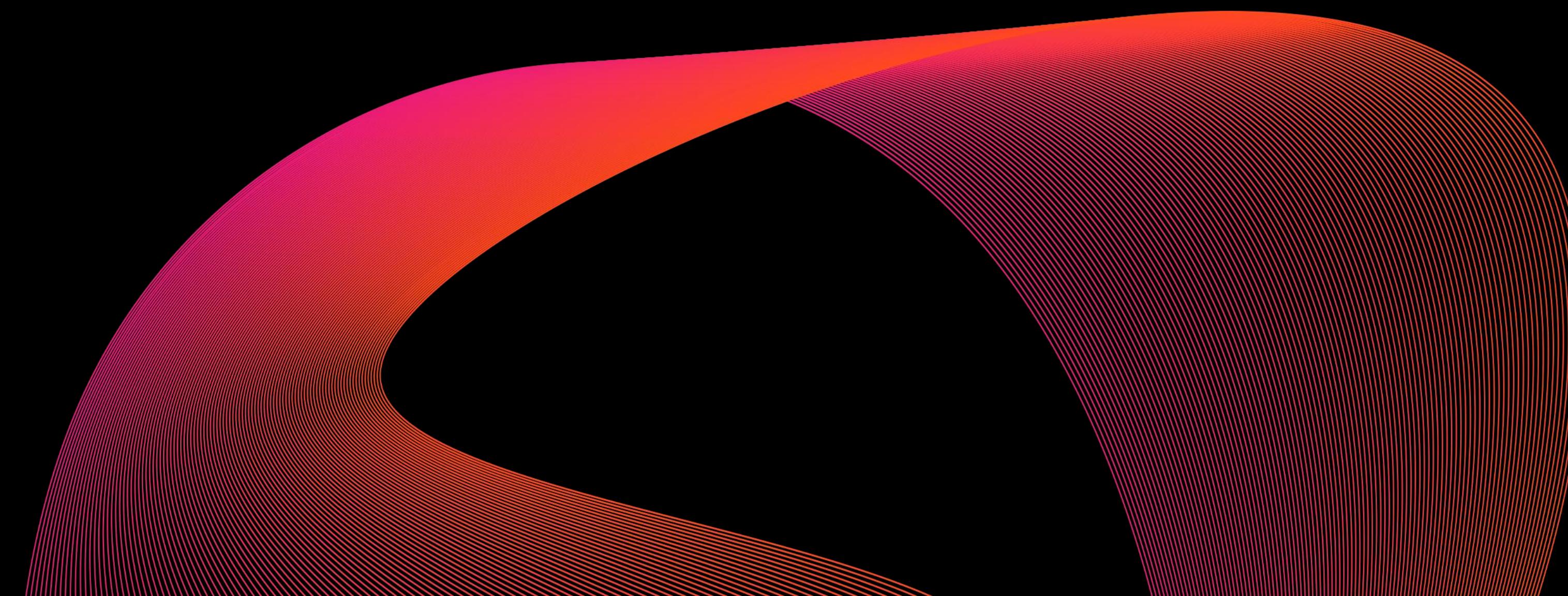
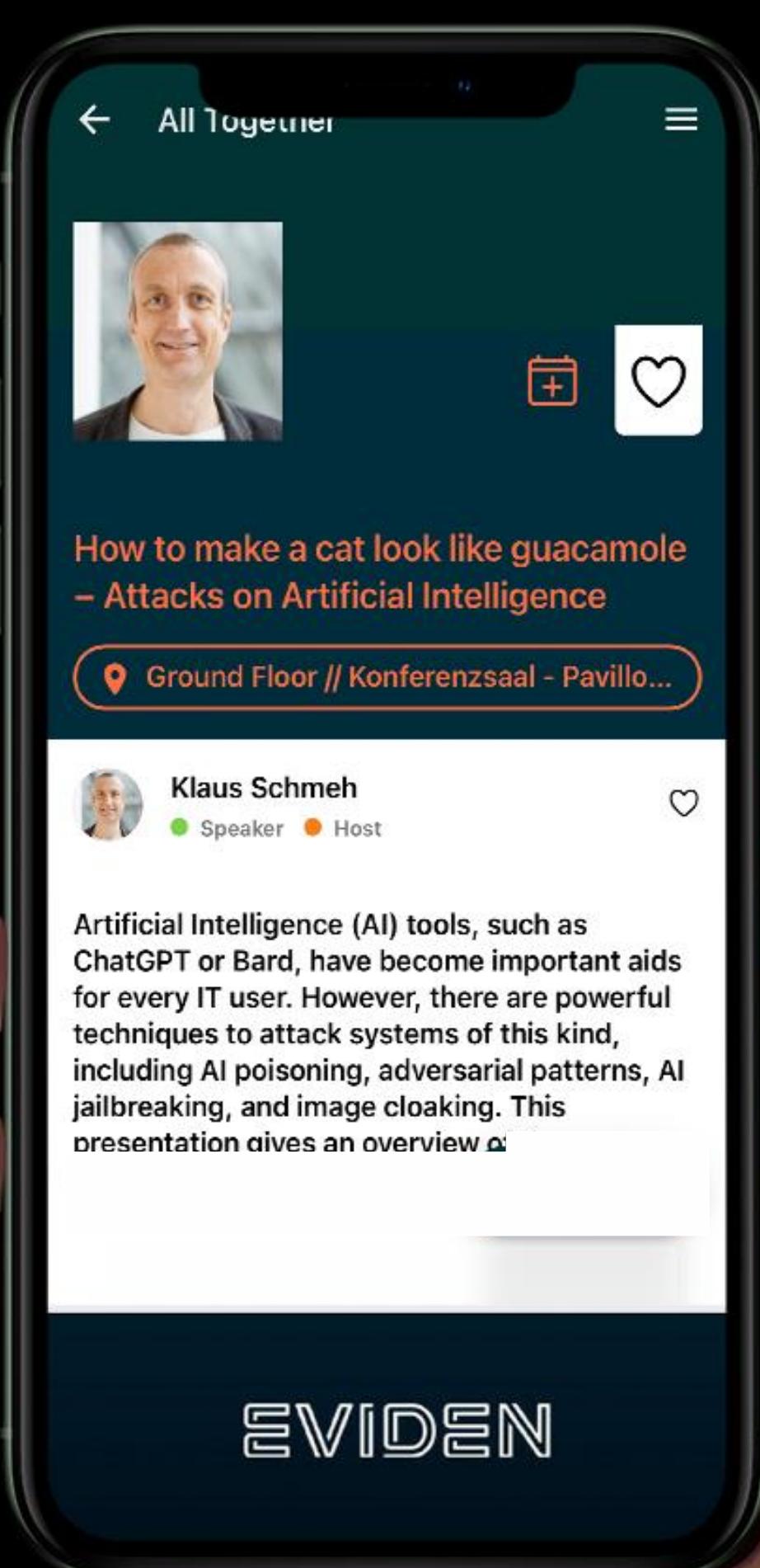
Securing
Identity for
our Digital
Future

CYBERSECURITY
LEADERSHIP FORUM

MINDSHARE AGENDA



GET APP



MINDSHARE

2025 10-11 SEP

CYBERSECURITY
LEADERSHIP FORUM

Securing
Identity for
our Digital
Future

CASA

CYBER SECURITY IN THE AGE
OF LARGE-SCALE ADVERSARIES



Jens Opdenbusch,
Ruhr University Bochum

Enabling Security
Champions – Heroes of
Secure Software
Development



About Me

PhD Student @ Ruhr University Bochum



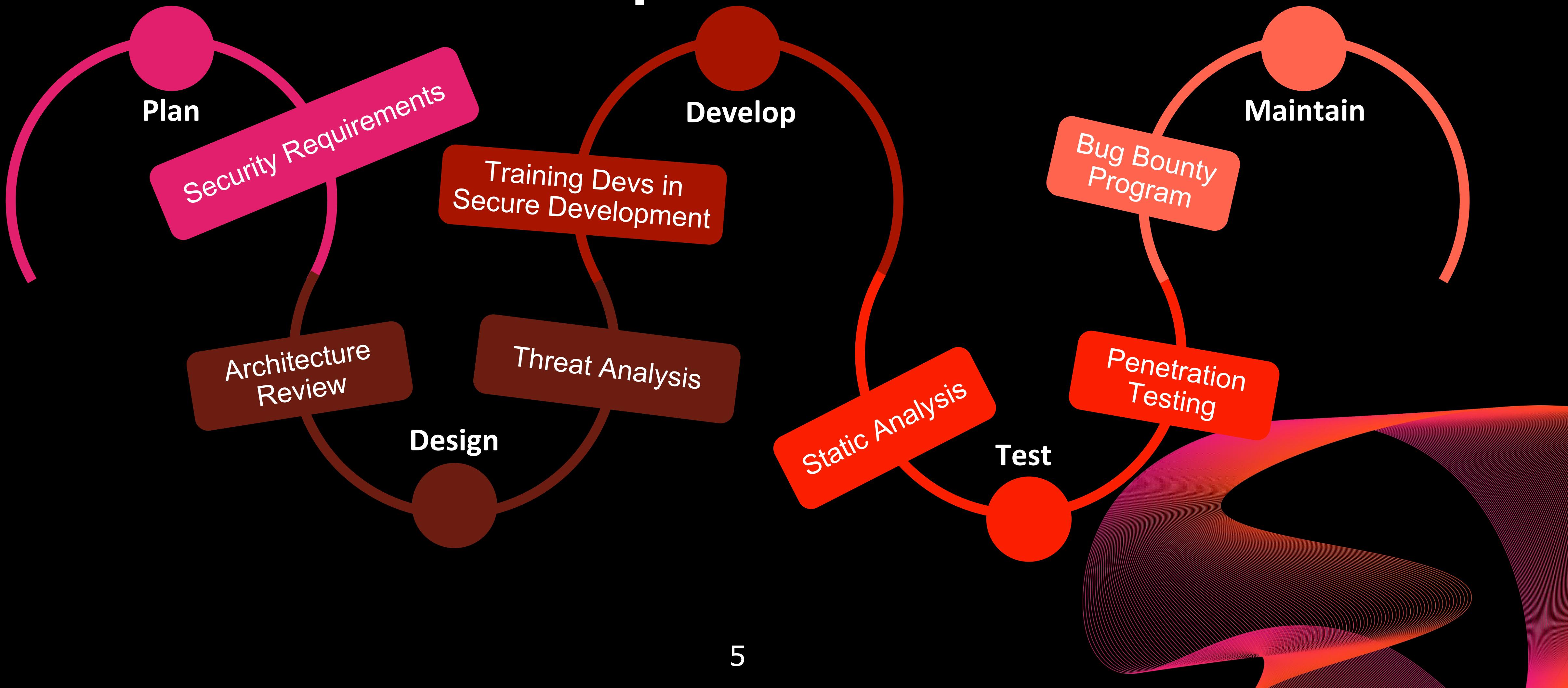
- B. Sc. And M. Sc. In IT-Security
 - Industry Experience (e.g., Audit & Compliance)
- Research Focus on Challenges for IT-Security Practitioners in Organizations and Economics of IT-Security
- Doing (Almost) Exclusively Research with Industry Partners
- Part of an Interdisciplinary Team

The Challenge:

Secure Software Development

The Challenge:

Secure Software Development





The Challenge:

Secure Software Development

- Lots of (Potential) Security Tasks in the Development Life Cycle
- Limited Security Knowledge in Development Teams
- Limited Security Personnel in Security Organization
- Two Options:
 - **Hire more Security Staff**
 - **Enable Developers to Have a “First Glance” Through the **Security Lens****



Security Champions

Finding Security Champions in Blends of Organisational Culture

Care and Feeding of Your Security Champion

Martin Gilje Jaatun and Daniela Soare
Software Engineering, Safety and Security
 SINTEF Digital
 Trondheim, Norway
martin.g.jaatun.daniela.s@sintef.no

Thrifty Guardians: Overcoming the Budget

Hannes Salin
School of Information and Engineering
 Dalarna University
 Borlänge, Sweden
hassa@du.se

Security Champions Without Support: Results from a Case Study with OWASP SAMM in a Large-Scale E-Commerce Enterprise

Marco Gutfleisch
 Ruhr University Bochum, Germany
marco.gutfleisch@rub.de

Markus Schöps
 Ruhr University Bochum, Germany
markus.schoeps@rub.de

Stefan Albert Horstmann
 Ruhr University Bochum, Germany
stefan-albert.horstmann@rub.de

Daniel Wichmann
 Ruhr University Bochum, Germany
daniel.wichmann@mailbox.org

M. Angela Sasse
 Ruhr University Bochum, Germany
angela.sasse@rub.de

large devel
easier said

ZERO TO HERO: A ESTABLISHING A S PROGRAM

+ Unternehmenssicherheit: Security Champions als Wächter der Sicherheit

Security Champions sorgen mit bewährten Tools und Methoden für die Softwareentwicklung dafür, dass Sicherheit von Anfang an im Produkt integriert ist.



PROJECTS CHAPTERS EVENTS ABOUT

OWASP Security Culture

Home > V10 > 4-Security Champions

Security Champions

It can be hard to introduce security and compliance into an organization. Information Security people do not see themselves as champions, but as enforcers.

SAFECode

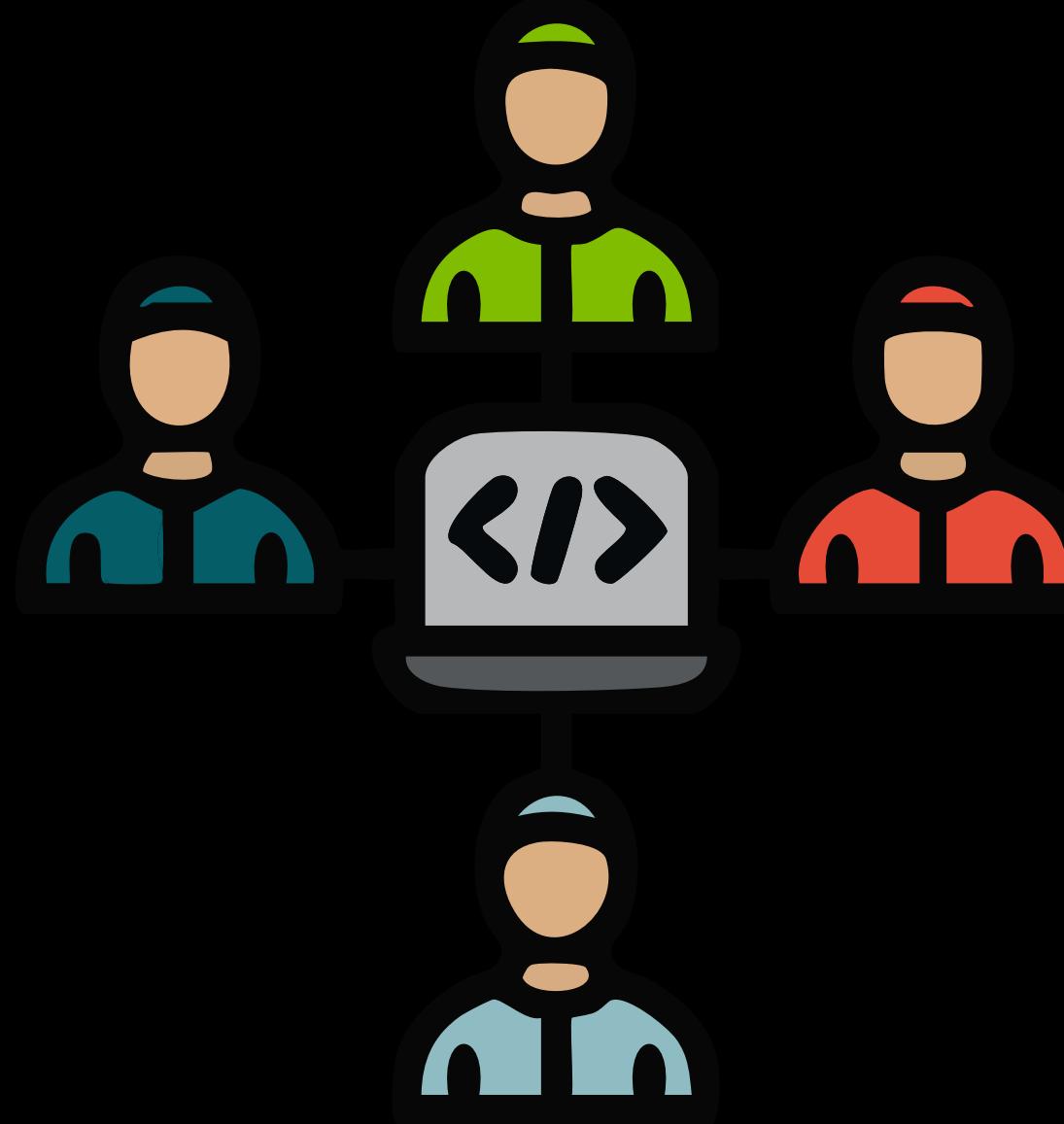
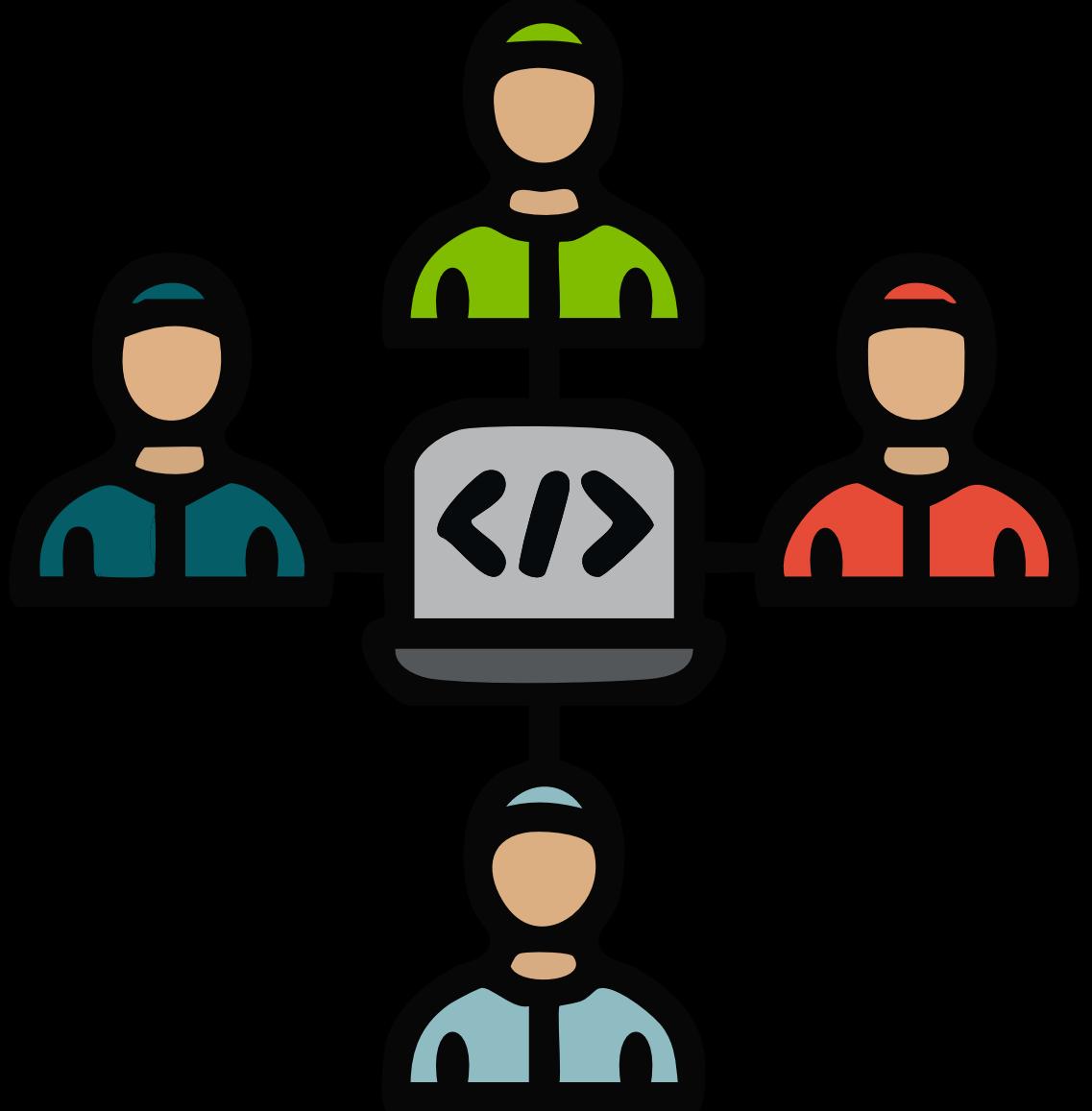
Software Assurance Forum for Excellence in Code
 Driving Security and Integrity

Software Security Takes a Champion

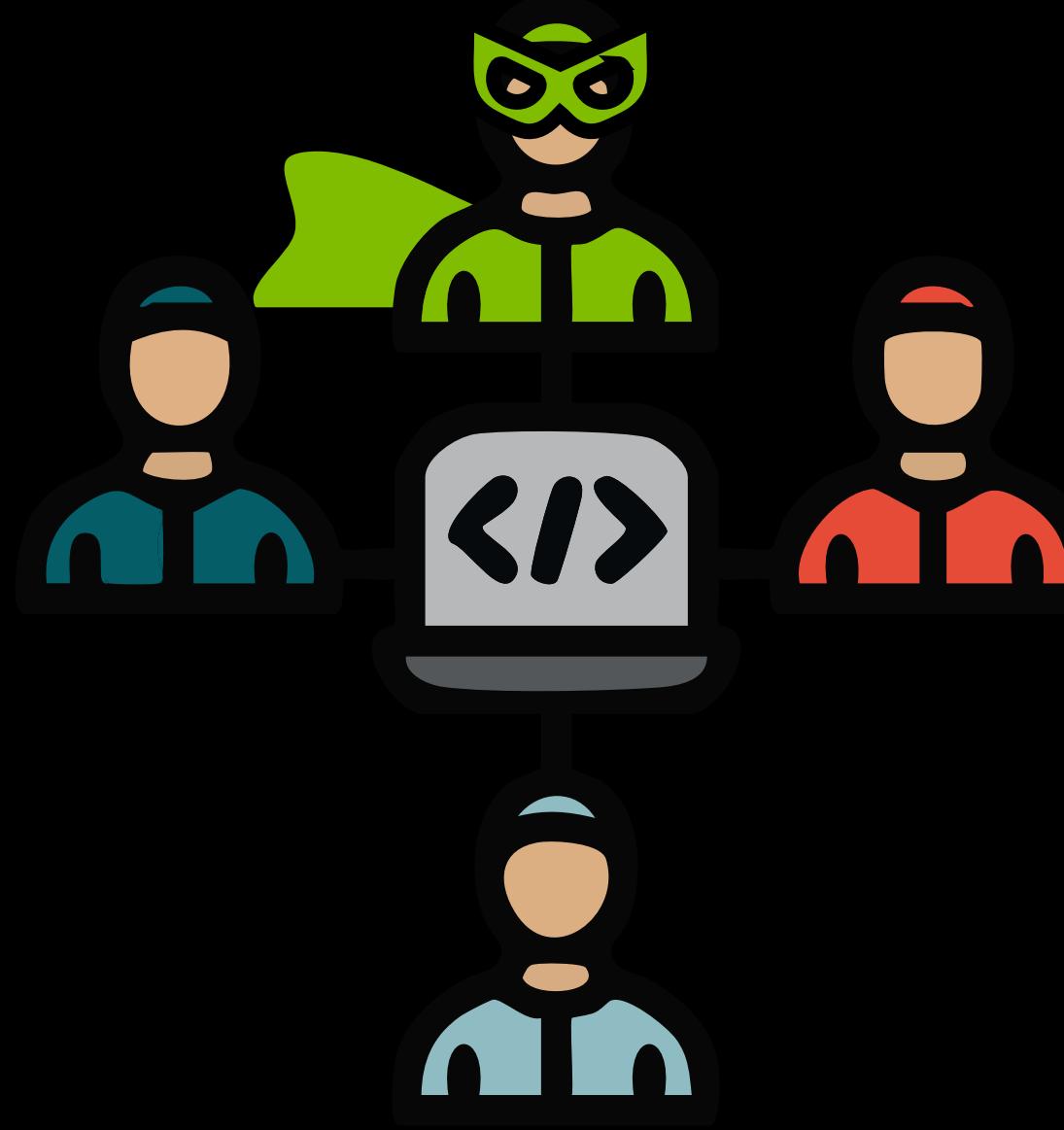
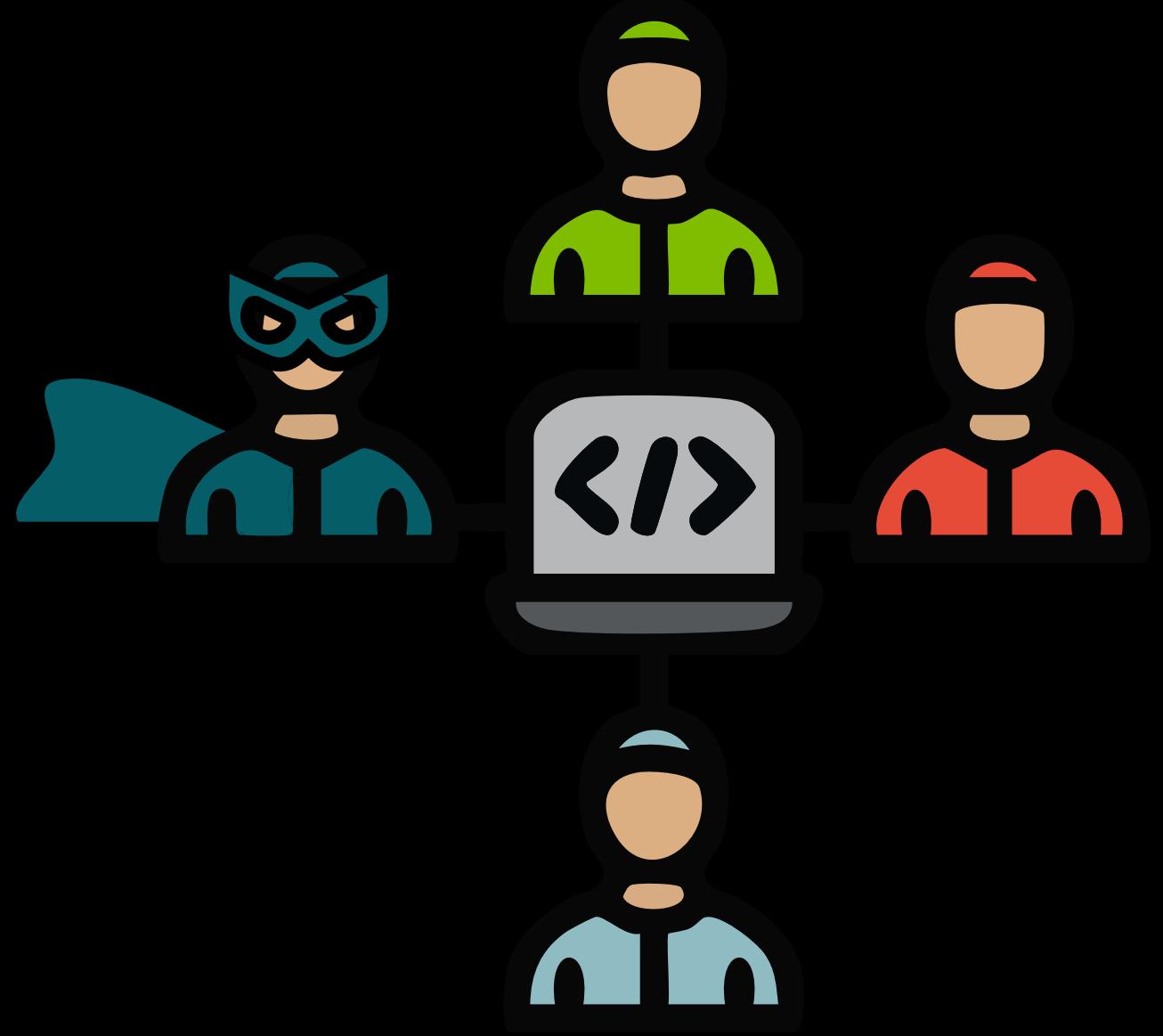
A Short Guide on Building and Sustaining a Successful Security Champions Program

January 2019

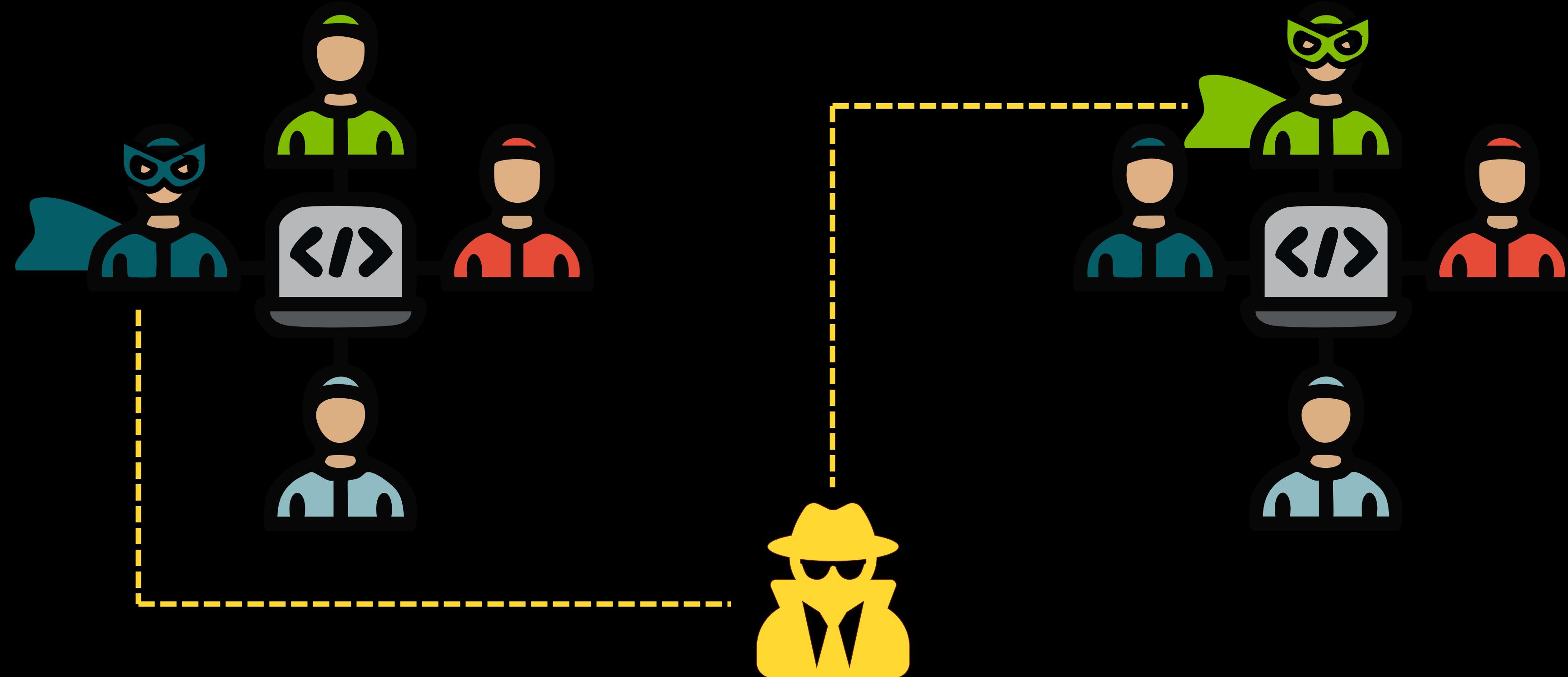
What is the Concept of Security Champions?



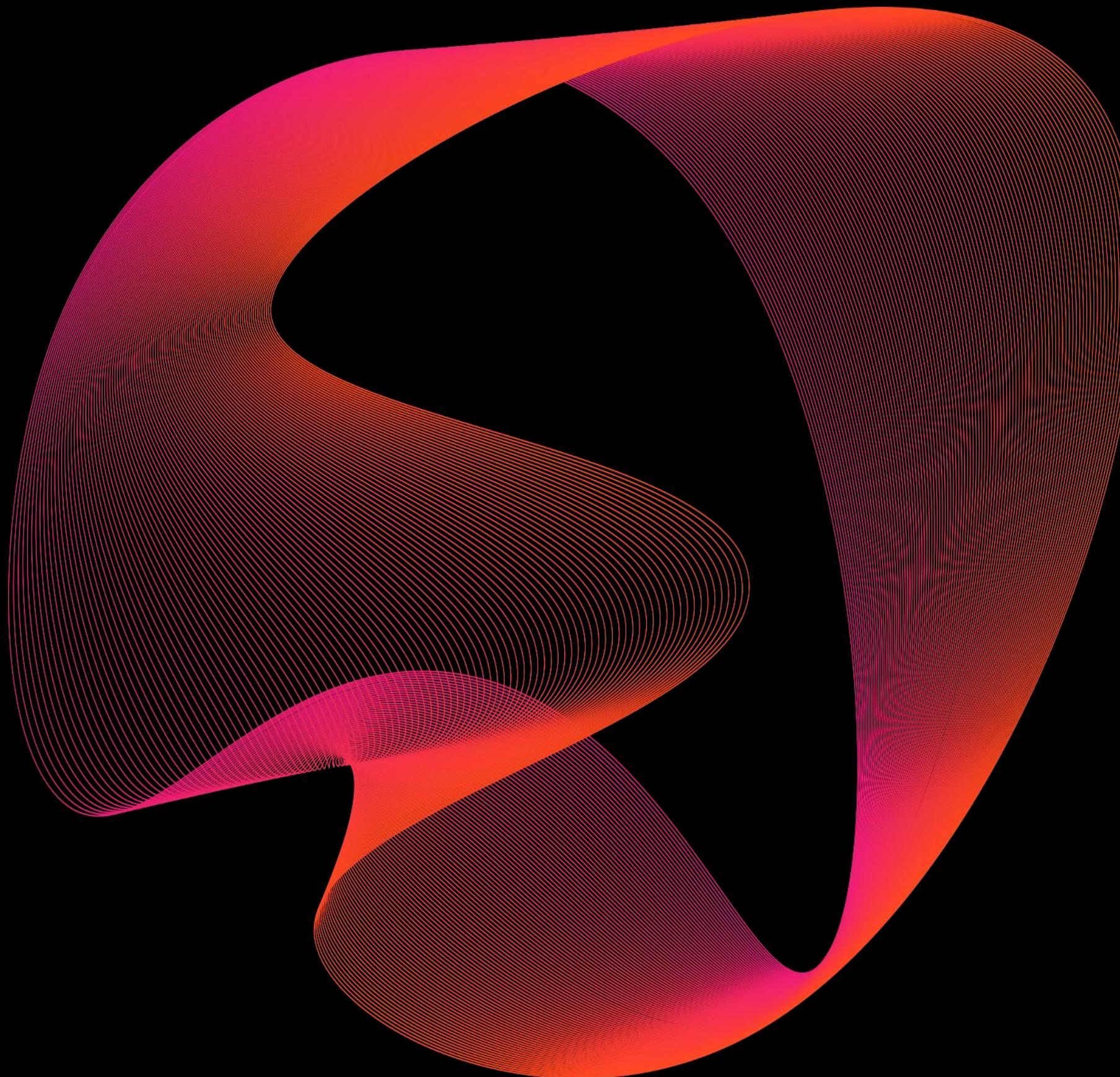
What is the Concept of Security Champions?



What is the Concept of Security Champions?



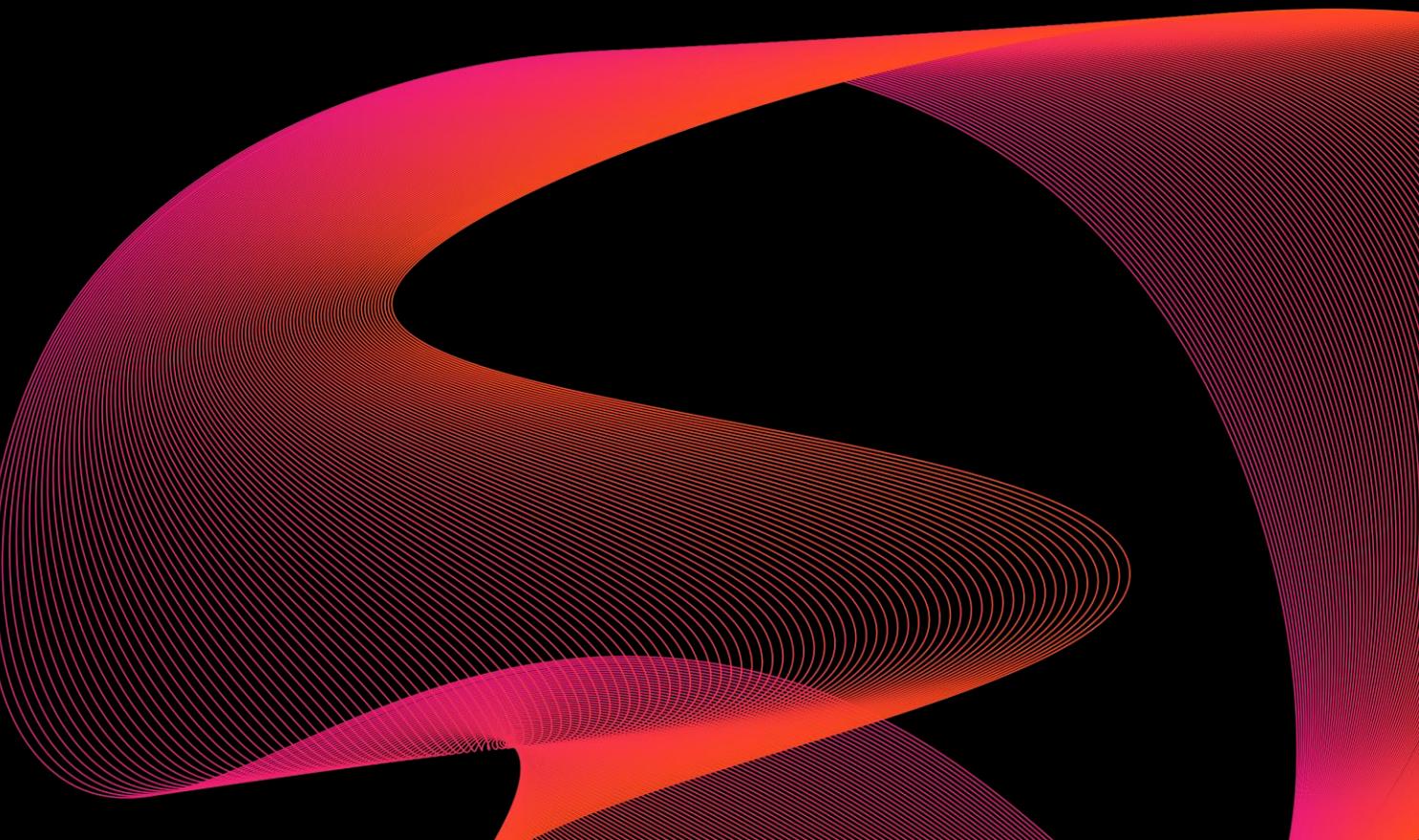
Security Champions in a Nutshell



- Developers Interested in IT-Security
- Connected to the IT-Security Department
 - **Regular Exchange**
- Security Training:
 - E.g., Threat Modeling, Vulnerability Assessment, Pen-Testing, Secure Secret Management, ...



What Could go Wrong?

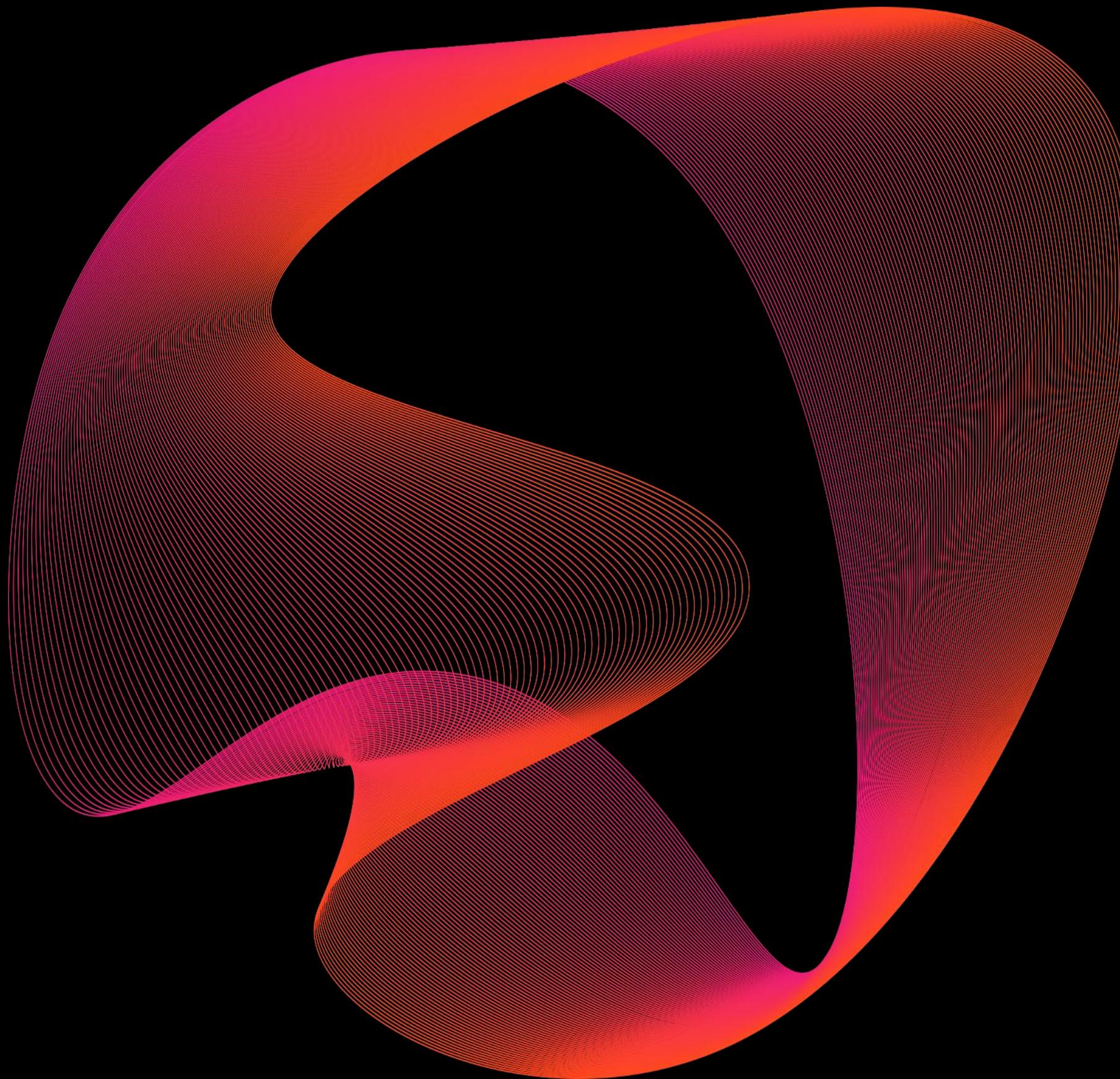




Obstacles Identified by Research

- **Missing Management Support and Guidance for Security Champions**
 - Conflicting Responsibilities and Lack of Time
- **Missing Communication Channels Between Security Champions**
- **Differing Required Security Skills for Different Business Divisions**
 - Finding Suitable Training for Security Champions
- **Achieving Equal Motivation (and Skills) Across Security Champions**
- **Missing Security Strategy & Goals**

Security Champions Guide by OWASP



THE SECURITY CHAMPIONS MANIFESTO



OWASP SECURITY CHAMPIONS GUIDE

Our Most Recent Case Study

Enabling Security Champions With Breakout Action Groups – A Longitudinal Study

Jens Christian Opdenbusch
Ruhr University
Bochum, Germany
jens.opdenbusch@ruhr-uni-bochum.de

M. Angela Sasse
Ruhr University
Bochum, Germany
martina.sasse@ruhr-uni-bochum.de

Sangavi Shanthakumar
Ruhr University
Bochum, Germany
sangavi.shanthakumar@ruhr-uni-bochum.de

Marco Gutfleisch
Ruhr University
Bochum, Germany
marco.gutfleisch@ruhr-uni-bochum.de

Currently Under
Submission at
Top 4 Security
Conference

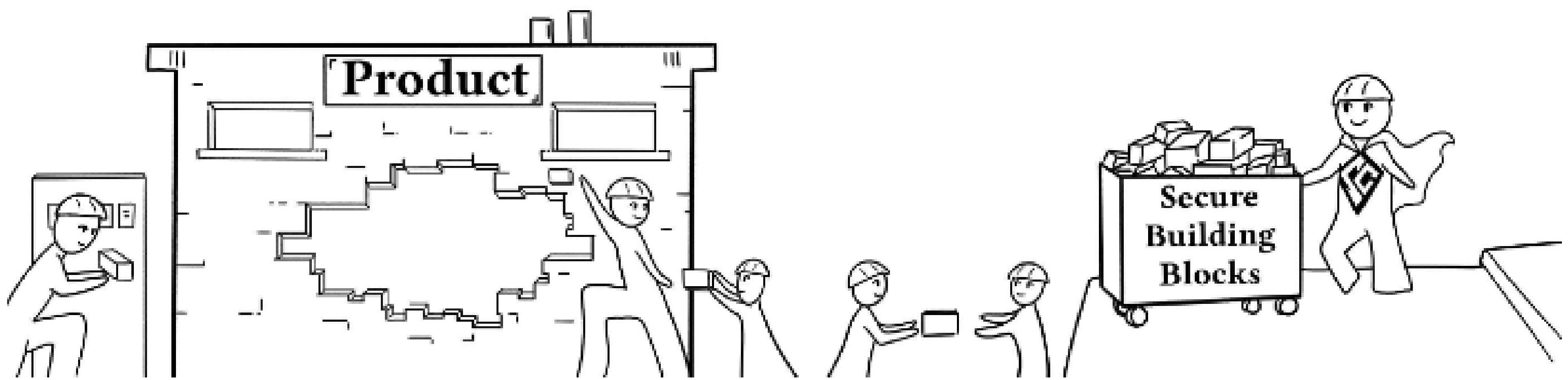


Figure 1: A Security Champion Bringing the Missing Secure Building Blocks for the Product Development Team's Product.

Our Most Recent Case Study

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



Our Most Recent Case Study

- Familiarized Ourselves with the Company, Development Process, and Security Champion Program

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



Our Most Recent Case Study

- Familiarized Ourselves with the Company, Development Process, and Security Champion Program

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



Our Most Recent Case Study

- Familiarized Ourselves with the Company, Development Process, and Security Champion Program
- Attended Bi-Weekly Meetings of Security Champions
 - Very Speaker-Heavy
 - Only Few Questions Asked or Discussions

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes



Our Most Recent Case Study

- Retrospective to Gather Feedback

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

Our Most Recent Case Study

- Retrospective to Gather Feedback
- Vision Workshop
 - **Mission Statement and Goal**

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

Our Most Recent Case Study

- Retrospective to Gather Feedback
- Vision Workshop
 - **Mission Statement and Goal**
- Secure Coding Workshop (5 Days)
 - On-Premise (3 Days)

OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes

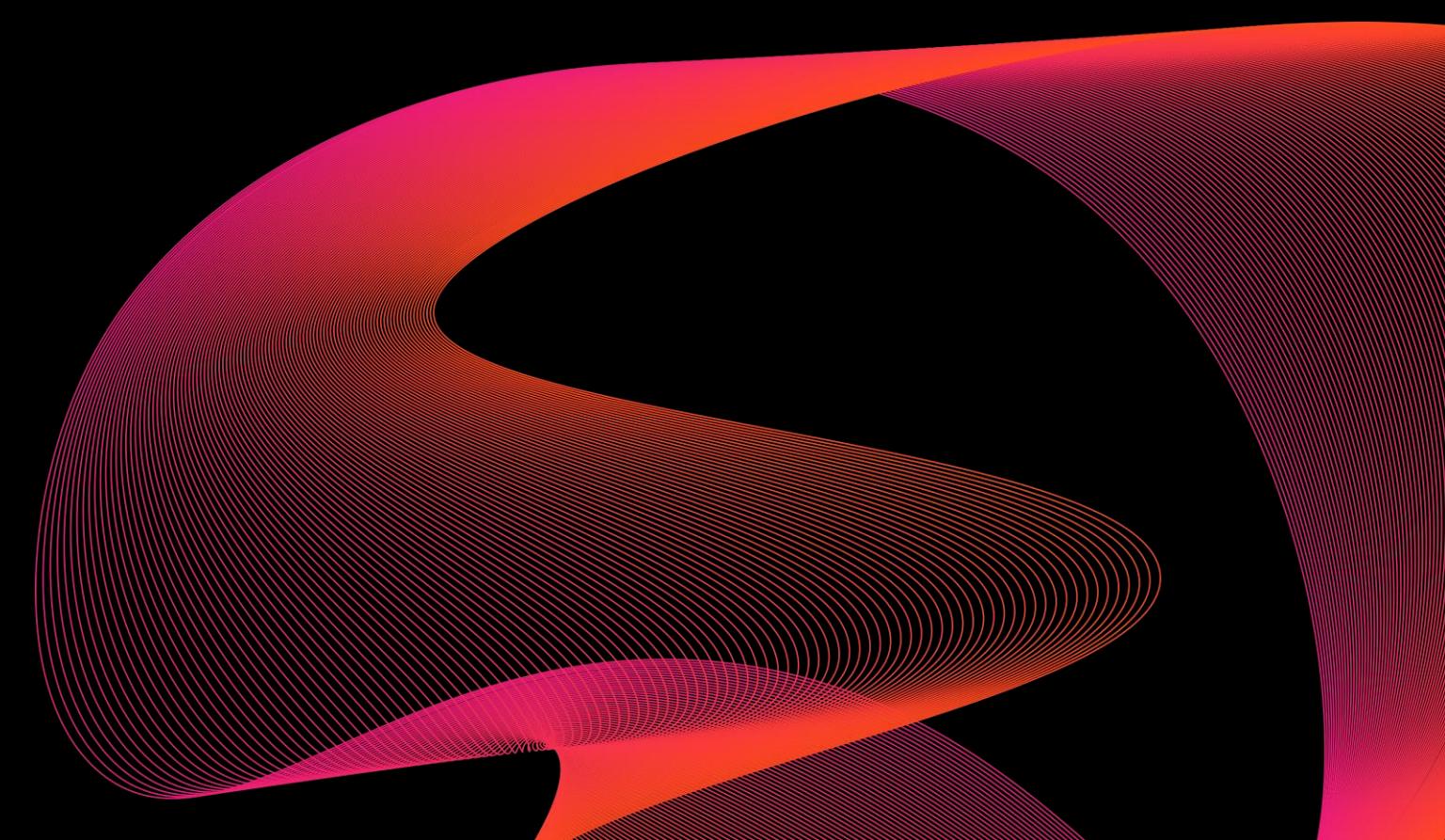


Our Most Recent Case Study

- Biggest Change: Format
 - **Smaller Project Groups Working Independently on Lighthouse-Projects**
 - **From Bi-Weekly**
 - **To Every 4 Weeks to Check-In on Progress and Update the Other Groups**

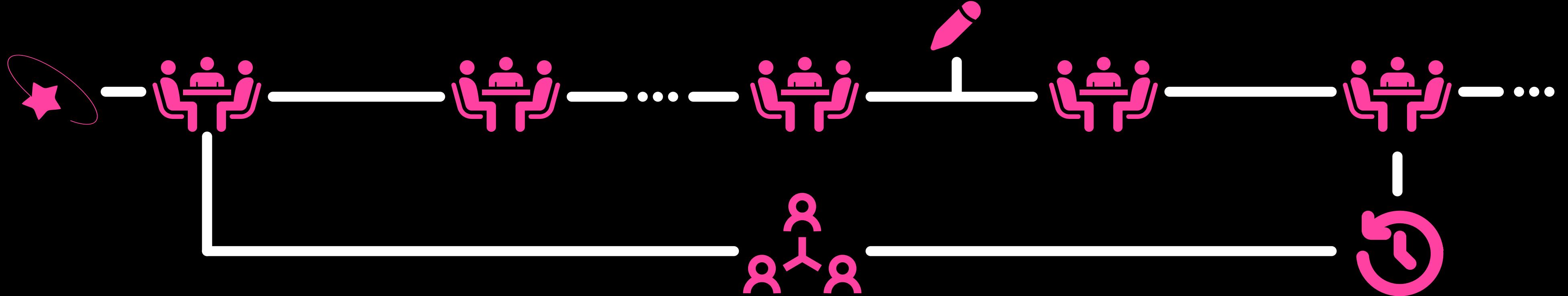
OWASP Key Principles

Passionate About Security	Start With a Clear Vision	Secure Management Support	Nominate a Dedicated Captain	Trust Your Champions
Create a Community	Promote Knowledge Sharing	Reward Responsibility	Invest in Your Champions	Anticipate Personnel Changes





Concrete Recommendation



- ★ Start with a Vision
- ☛ Meet (Less) Regularly With All Security Champions
- ☛ Small Independent Project Teams – Breakout Action Groups
- ☛ Workshops
- ☛ Retros

MINDSHARE

2025 10-11 SEP

CYBERSECURITY
LEADERSHIP FORUM

Securing
Identity for
our Digital
Future

CASA

CYBER SECURITY IN THE AGE
OF LARGE-SCALE ADVERSARIES



Questions

Jens Opdenbusch
Ruhr University Bochum
Jens.Opdenbusch@rub.de

MINDSHARE

2025 10-11 SEP

Securing
Identity for
our Digital
Future

CYBERSECURITY
LEADERSHIP FORUM

TAKE A MINUTE AND GIVE US FEEDBACK

