Why we invite our community to play

Security Awareness and Game Design

Cornelia Puhze, Security Awareness Specialist, SWITCH
→ Security awareness: why and how

→ Security awareness and game design: opportunities, challenges and tips

→ 5 years of SWITCH Security Awareness Adventures
IT Security Awareness
Why Awareness?

Verizon, 2021 Data Breach Investigations report

Figure 7. Select action varieties (n=4,073)

Figure 10. “Have you ever been a victim of harmful cyber activities online that have resulted in the loss of money or data?”

Figure 14. Participants’ levels of agreement to four cybersecurity statements.

CybSafe and National Cybersecurity Alliance,
OH, BEHAVE! THE ANNUAL CYBERSECURITY ATTITUDES AND BEHAVIORS REPORT 2021
IT Security

- attachments
- passwords
- social media
- shoulder surfing
- links
- data leaks
- data privacy
- social engineering
- data classification
TRAINING
Learning and training (new) skills

AWARENESS
Raising awareness of and interest in a special topic

EDUCATION
Learning new skills and the theory behind them
Security Awareness and Game Design
Gamification vs. Game Design

https://en.wikipedia.org/wiki/Gamification
https://en.wikipedia.org/wiki/Game_design
Advantage of Game Design in Trainings

→ Have some fun
→ Freedom to fail
→ Satisfaction of solving the problem
# Game Design in training – a balancing act

<table>
<thead>
<tr>
<th>Game</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game objective</td>
<td>Training objective</td>
</tr>
<tr>
<td>Pretending</td>
<td>Relevance for reality</td>
</tr>
<tr>
<td>Challenge</td>
<td>Frustration</td>
</tr>
</tbody>
</table>
Tips for game design in training

→ Use existing games
→ Every task/question needs to be relevant for the game
→ Involve ALL players
Training in 3 steps

1. Learn
2. Apply
3. Recall
SWITCH Security Awareness Adventures

Hack The Hacker – the escape room

Duration: ca. 2 h

Training topics:
• Password security
• Backups
• Dumpster diving
• Brute force methods
• Social engineering
• Phishing
• Encryption

Participants: max. 6 pers.

Target group: employees of all fields

https://swit.ch/hack-the-hacker
Hack The Hacker - Objectives

Game:

→ Find decryption key
→ Save the organisation

Training:

The participants understand risk of poor security measures and importance of strong passwords.
SWITCH Security Awareness Adventures Adventures

Track The Hacker – the outdoor quest

Duration: ca. 3 h
Training topics:

- Data Security
- Data Privacy
- Social engineering

Participants: max. 6 pers.
Target group: employees of all fields

https://swit.ch/track-the-hacker
Track The Hacker - Objectives

Game:

→ Recover data
→ Save the organisation

Training:

The participants learn how to deal consciously with personal data online.
SWITCH Security Awareness Adventures

Piece of Cake – the role playing game

Duration: ca. 2 h
Training topics:

- Social engineering
- Data privacy
- Data security

Participants: max. 5 pers.
Target group: employees of all fields

https://swit.ch/piece-of-cake
Piece of Cake - Objectives

Game:
→ Find recipe
→ Save bakery

Training:
The participants learn how to detect and react to Social Engineering attacks.
SWITCH Security Awareness Adventures

**AWARENESS**
Increase awareness and interest in a specific topic

**EDUCATION**
Teaching new skills and the theory behind them

**TRAINING**
Teaching and practicing (new) skills
What we can do
→ Raise (long term) interest in security
→ Encourage users to deal with IT related topics
→ Improve the reputation of the security department
→ Improve teamwork
What we can’t do

→ Train a high number of employees in a cost-effective way
→ Optimise it to a cost-effective training tool
→ Quickly adapt to new topics
Questions?

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SWITCH Security Awareness Day 2022
26th October in Berne (hybrid)
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