9TH INTERNATIONAL STUDENT CONFERENCE ON LOCAL SAFETY AND SECURITY

University of Maribor

Faculty of
Criminal Justice and Security

PARUL UNIVERSITY

Erasmus+

Slovenian Research and Innovation Agency

STRENGTHENING RESILIENCE FOR CYBERSECURITY IN LOCAL COMMUNITIES

Bizjak Mark & Vrhunc Nejc

Why is this important?

Affects everyone

- Cybersecurity is not only an IT issue, but a concern for all users

Vulnerable groups

- Different age, different risks

Human factor

- Habits play a key role

Community resilience

- Importance of connection and mutual support

Key Concepts

Cyber security

Protection of networks, systems and users from digital threats

Resilience

The ability to recover from cyberattacks and learn from experiences

Self-efficacy

An individual's confidence in their ability to behave securely

Individual Cyber Resilience

Personal characteristics

Self-efficacy

Active problem-solving

Ability to learn from mistakes

Awareness of risks

Environmental factors

Reliable social network

Support from surroundings

Access to trustworthy information

Structured environment

Community Approach to Security

Knowledge sharing

Community members exchange experiences and warnings

Peer support

Trained peers help others with risks

Security advocates

CyberGuardians as intermediaries of knowledge in the community

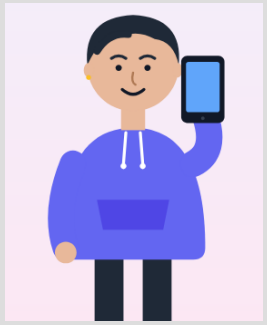
Shared norms

Common practices and a culture of secure digital behaviour

Cybersecurity is not only an individual responsibility — it is the responsibility of the entire community

Generational Differences in the Digital Environment

Gen Z & Y (18–45 years)



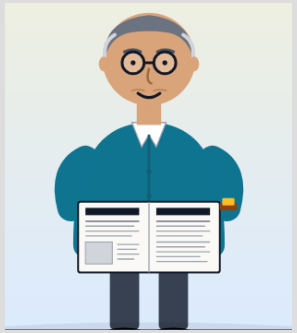
✓ Technically skilled

✗ Overconfidence

✗ Passive protection

✗ Data sharing

Gen X & Boomers (45–65 years)



✓ Aware of risks

✓ Experience with threats

✗ Excessive trust in banks

~ Medium digital competencies

Older adults (65+ years)

✓ More cautious with passwords

✗ Low digital competencies

✗ Social isolation

✗ Fear of mistakes

Age itself is not a decisive factor — knowledge, support, and attitudes toward technology are of great importance.

Younger Generation (Gen Y & Z)

High self-confidence

- They trust their abilities but overestimate their security

Risky behaviour

- They share personal data and neglect updates

Passive protection

- They rely on automated solutions and do not verify themselves

Key findings:
Digital literacy ≠ cybersecurity awareness.
Technological skill does not guarantee secure behaviour

Older Generation

Vulnerabilites

- More frequent victims of attacks
- Low digital self-confidence
- Fear of making mistakes
- Digital exclusion

Causes

- Lower digital competencies
- Loss of social networks after retirement
- Passive use of technology
- Inadequate policies and solutions

People aged 60+ are among the most frequent victims of cybercrime (FBI, 2022)

Cyber Threats by Generation

Generation	*Most Common Threats*	*Cause of Vulnerability*
Older adults (60+)	Phishing, romance scams, grandparent scams	Social isolation, low digital competencies
Middle generation (Gen X, Boomers)	Identity theft, email breaches	Excessive trust in banking systems
Younger (Gen Y, Z)	Data theft, privacy misuse	Overconfidence, uncritical data sharing

Approaches to Strengthening Resilience

Approaches for younger people

- Developing critical thinking
- Realistic assessment of personal exposure
- Peer learning and collaboration
- Confronting real-life risk scenarios

Approaches for older people

- Gradual, practically oriented learning
- Concrete everyday-life examples
- Strengthening confidence and trust
- Community programs and social support

Common principle: Strengthening confidence + knowledge + social support = greater resilience

Intergenerational Cooperation

Younger contribute

- Technical skills
- Knowledge
- Digital skills
- Knowledge of platforms

Exchange

- Mutual support
- Knowledge transfer
- Joint learning

Older contribute

- Experience
- Critical judgment
- Caution

Cybersecurity Advocates (CyberGuardians)
Trained community members who act as intermediaries of knowledge and support — teachers, peers, family members

Key Findings

1. Cybersecurity is not only a technical issue, but also a social one

2. Generations have different vulnerabilities — universal approaches do not work

3. Community-based approach with intergenerational cooperation strengthens resilience for all

4. Knowledge, confidence, and social support are key — not age itself