NIST

Exploring Government Security Awareness Programs: A Mixed-Methods Approach

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Methodology

Exploratory Sequential Mixed Methods qual → QUAN	Conducted 8 Focus Groups	3 Types of Government Organizations	Focus Groups Informed a Future Survey

Organizational security awareness training seeks to help employees recognize and appropriately respond to security issues.
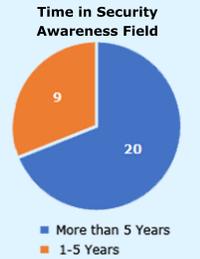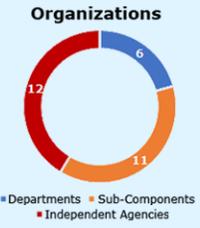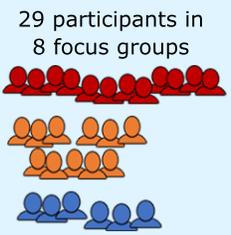
Problem
- Security awareness programs are often underfunded and rely on part-time professionals who may lack adequate knowledge, skills, or tools to implement an effective program.
- Sectors, like the U.S. Government, that mandate training may measure program success by completion rates rather than attitude or behavioral change.
- No prior research has explored security awareness training in the U.S. Government.

Purpose
To better understand the needs, challenges, practices, and necessary competencies of U.S. Government security awareness programs.

Focus Group Participants

29 participants in 8 focus groups

Organizations

- Departments — 6
- Sub-Components — 11
- Independent Agencies — 12

Time in Security Awareness Field

- More than 5 Years — 20
- 1-5 Years — 9

Position

- Program Lead — 22
- Team Member — 3
- CISOs — 4

Preliminary Results

Required Annual Training
- Annual training may be considered a "check-the-box" activity.
- Enforcement of training completion may be challenging.

"[Executives] are the ones who are more than likely not to have taken the training in a timely manner, and we can't exactly lock them out." (S03)

Approaches
- Awareness information disseminated throughout the year
- Incentive programs can be valuable
- Challenges in developing awareness training content and learning about new approaches

Security Awareness Content
- Challenges in developing awareness training content and learning about new approaches
- Desire for government-wide course and content repository and a real-time sharing platform

"If there was a central repository...of various trainings and awareness pamphlets, flyers, presentations...I think that would definitely better help us make use of what limited resources we do have." (S01)

Future Work
- Focus Groups informed the design of an online, anonymous survey that will be sent to a broader population of government organizations.
- Synthesize focus group and survey data

Measures of Effectiveness
- Little consistency in how organizations attempt to measure program success
- Struggle to move beyond compliance metrics to instead gauge impact on attitudes and behaviors

"We run security awareness campaigns and...we really have no idea how much is absorbed." (S04)

Team Knowledge & Skills
- Security knowledge and non-technical skills important for the security awareness role
- Benefits in building multi-disciplinary teams and collaborating with other organizational groups

"I have people who can design, are very artful, creative people. I have people who can run a learning management system...I have good project managers. I have cybersecurity professionals." (D01)

Anticipated Contributions

Inform the creation of resources: successful practices & lessons learned, repositories & sharing forums.	Contribute to update of U.S. Government guidance on security awareness programs.	Findings may be transferable to other sectors.