U.S. Department of State

Diplomatic Security

The Awareness Team

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“The secret to enforcement is prevention, and the key to prevention is education.”
R. Wallace Hale

What Is Security Awareness?

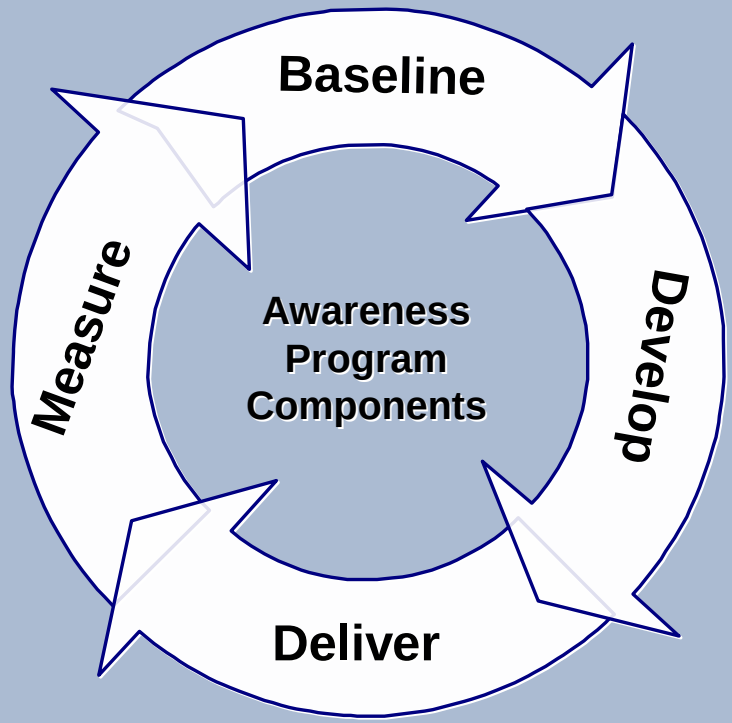
- Individual responsibility and sufficient understanding to comply with policies
- Another line of defense
- The best ROI for information security programs

Problems with Awareness Programs

- Not supported by management
- Do not stay current with the infrastructure
- They don’t leverage available delivery mechanisms
- They are not targeted to the appropriate audiences

Awareness Program Lifecycle

- **Baseline – Determining the current state**
- **Develop – Crafting and revising the program**
- **Deliver – Executing the program**
- **Measure Progress – Determining and reporting results**



Baseline

- Conduct a set of surveys
- Determine level of understanding of key issues, and what to do when faced with them
- Understand threats and vulnerabilities – current and future
- This process helps define scope and requirements of the program
- What are the goals for improvement?

Program Development and Delivery Areas

- **Who** – Communities of interest
- **What** – Content, based upon perceived and actual threats and vulnerabilities
- **How** – Delivery channels and frequency

Who and What?

- **Executives –** Return on investment, reduction of risk
- **Information Technology Staff–** Build security into applications, networks, and systems
- **Business Users –** Demonstrate the value of doing business securely
- **New Hires –** Basic fundamentals of a solid security mind-set and the expectations of them with regards to security

What?

- Awareness programs must be agile
  - **Policy is less dynamic however, new threats and vulnerabilities appear constantly**
- Content must align with policy needs and the realities of threats and vulnerabilities

Potential Vulnerabilities

#	Vulnerability	Easy to Fix?	Perceived Risk
1	E-mail abuse	No	High
2	Special access privileges and termination	No	High
3	ID and password sharing	No	High
4	Malicious code	No	High
5	Poor password development and misuse (writing passwords down, e.g.)	Yes	High
6	Employee lack of information security regard, overall	Yes	High
7	Poor work area (cubicle) security	Yes	Medium
8	Internet misuse (viewing unauthorized material, e.g.)	Yes	Medium
9	Software licensing misuse (Software Piracy)	No	Medium
10	Inappropriate hard-drive storage	Yes	Medium
11	Corporate espionage, social engineering	No	Medium
12	Poor workstation security	Yes	Medium
13	Poor laptop security	Yes	Medium
14	Misuse of customer or employee personal information	No	Low

Security Awareness Strategies

- Formal or Informal Briefings
- Security education bulletins and department notices
- Security Awareness Month
- Online Computer-based Tutorials
- Newsletters - The Logon
- Security Awareness Posters and Fliers

Summary of "Tried and True" Security Awareness Strategies

- Information Security Websites
  - Policy Guidelines
  - News
  - Frequently Asked Questions
  - Awareness Support E-mail Hotline
- Branded Promotional incentives and Giveaways
- Tip of the Day
- Security Calendars

Summary of "Tried and True" Security Awareness Strategies

- Learning Management System (LMS)
- Animated Security Awareness DVD's ,CD's, and online Video vignettes (shorts)
- Executive Briefings
- Eye-catching Security Awareness Posters, Fliers
- Branded Promotional incentives and Giveaways
- Webinars and/or Meetings "In a Box"
- Promotional Art Characters and Themes

Guiding Principles of Message Delivery

- Promote risk management, not security
- Emphasize the benefits
- Engage the audience
- Tell people what they can do to help
- Be dynamic
- Relate practices to employee work
- Encourage questions

Progress Measurement

- Develop metrics that track to improvements of the awareness baseline and with program goals
- Progress must be measured on two fronts simultaneously:
  - Improvement in security awareness
  - Relative value of content and delivery mechanisms

Program Roles and Responsibilities

- An important theme is the concept of “ownership” and each community member’s role in achieving program objectives
- A key success factor is the delivery of the right messages to the right people at the right time
- Training should be coordinated centrally, but must be supported deep inside each business unit through the use of training “champions”

Resources

Resources:

- **Easyi, Inc.**
  www.easyi.com
- **Security Awareness Company,**
  www.securityawarenesscompany.com
- **Techrepublic**
  www.rechrepublic
- **National Institute of Standards and Technology**
  www.itl.nist.com
- **The US Agency for International Development (US AID)**
  www.usaid.gov

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Questions?