Training Humans To Be Machines

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CISM, CISSP, CISA
• Input is based on the specific output
• Input is processed without choice
• Output demands stringent input
• Output determines if input stays the same or will change
• Output receives analysis or feedback
• Storage designed to make output more efficient
• Everything is stored
• Storage doesn’t change until input changes
Human Input/Output

• Input has nothing to do with output; output has nothing to do with input
• Input is only processed if a decision is made to process it
• Output requires no specific input
• Output will determine if input will be required again
• Output is reacted to
• Storage only happens if input is pleasant
• Only what is pleasant is stored
• Storage can change if input never changes
Learning Styles

- Visual (seeing)
- Aural (hearing, listening)
- Verbal (talking, reading)
- Physical (touching, doing)
- Logical (thinking, figuring out)
- Social (focus groups)
- Solitary (self-learning)
1. Visual
2. Aural
3. Verbal
4. Physical
5. Logical
6. Social
7. Solitary

Security Awareness & Training

Security-focused CULTURE

1. 1-hour computer-based training
2. 10 question test

Blame Culture
Don't Do Anything Stupid
Make your organization security aware

1. Create a Security Awareness & Training Policy
   • Define security awareness & training manager
   • Define minimum training requirements for all employees and special roles
   • Define minimum requirements for training
     • Automation
     • Require sign-in rosters
     • Require signatures at conclusion of training
   • Define reporting standards and timelines
   • Define key performance indicators
   • Define penalties for non-compliance
   • Define minimum training requirements for the organization
   • Require yearly read of policy with acknowledgement signature
     • Read policy in all training (or parts of it)

2. Communicate Reporting Metrics to Organization

Create a Security Awareness & Training Plan

1. Define your organization’s security lifecycle
2. Define training objectives
3. Define types of training
   • Preferably based on learning styles
4. Define training period
5. Identify success metrics and critical success factors
   • What will make training effective?
   • What must training possess to be effective?
   • How must training be conducted to be effective?
6. Identify Key Performance Indicators
   • Developed by expected results of training as an organization
   • What does training do or expected to do for the organization?
   • What are the indicators that training is successful?
7. Identify Reporting Metrics
   • Identify who receives what reports
   • Define information to be included in each report
Continuous Monitoring

Create

Track

Revise

Analyze Report(s)

Report
QUESTIONS?