Organisational Aspects of confidentiality protection and Privacy Concerns

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Evolution of Information Security

First Generation – Technology Focus
(1G)
Technology Focus
Firewalls, Anti-Virus, IPS

Second Generation – Process Focus
(2G)
Process Focus
ISO 27001, COBIT

Third Generation – Human Element
(3G)
Human Element
Focus on people that use the technology and processes
Business Need → Information Systems Design → Technology, Processes, People → Information Assurance / Security

Security Need → Information Systems Design → Technology, Processes, People → Information Assurance / Security
SOCIAL ENGINEERING
The clever manipulation of the natural human tendency to trust.
Weakest link
Challenges
Security Tradeoffs

- Risk of Security Trade-Off vs. Personal Inconvenience
- Risk of Security Trade-Off vs. Cost
  - Cost = Life, Career, Money, Time etc.
Strategies for Increasing Information Security Competence

• Step 1: Set Goals
• Step 2: Increase Security Perception by conveying Concepts
• Step 3: Increase Security Acceptance
• Step 4: Applying Security Skills
• Step 5: Linking Security with the organizations Goals
• Step 6: Continuous Measurement
Assessment and Audit

- Obtain an accurate understanding of your security and risk posture
- Comprehensive reporting, relevant to your organization and stakeholders
- Comply with industry regulations and information security best practices
Human Information Security

- Security Perception: Individual awareness of information security
- Security Acceptance: Accepts information security as an important work-habit in spite of personal inconvenience
- Applying Knowledge (Skills): Using security skills & ability to evaluate risks
- Commitment to organization: Follows security practices and procedures
Concepts behind information security practices

Culture + Organizational Eco-system + Individual behavioral drivers

Individual work practices

Information Security
Holistic approach
Education and Training