IT Security Procedures

คร. ธนัญชัย ตรีภาค

หลักการสำคัญของ Security คืออะไร ??

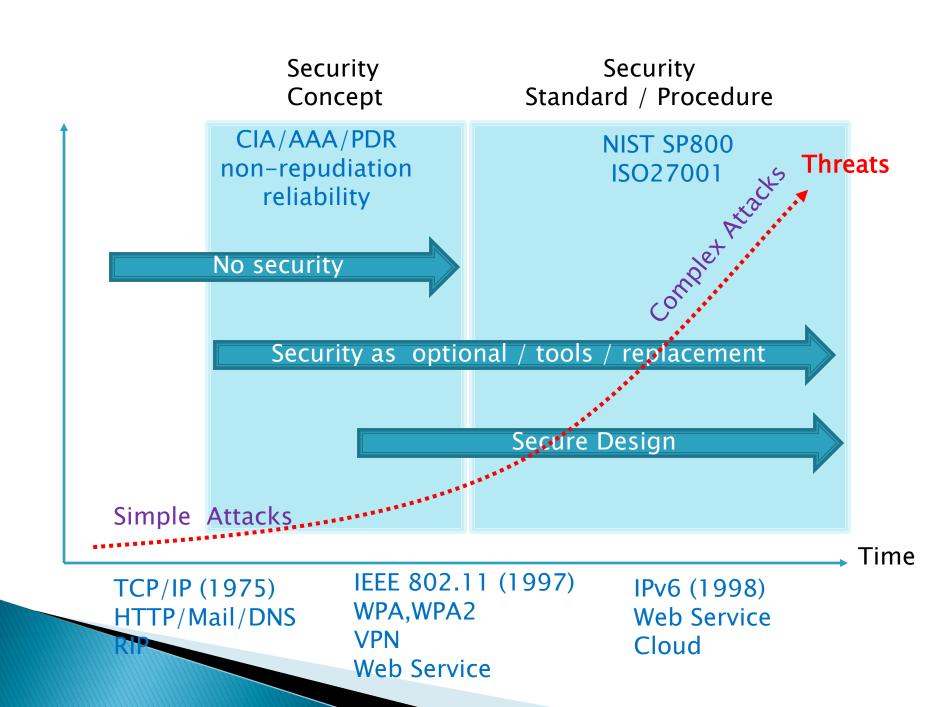


Tools

Process

ให้นักศึกษารวบรวม กิจกรรม / โครงการ ทั้งหมด ที่ทำให้ระบบสารสนเทศมีความปลอดภัย





Structure of 27000 series

27000 Fundamentals & Vocabulary

27005

Risk Management 27001:ISMS

27002 Code of Practice for ISM

27003 Implementation Guidance

27004 Metrics & Measurement

27006 Guidelines on ISMS accreditation

รายละเอียดสำคัญ ของ ISO27000:2005 (Annex A)

- 1. Security policy (5)
- 2. Organization of information security (6)
- 3. Asset management(7)
- 4. Human resources security (8)
- 5. Physical and environmental security (9)
- 6. Communications and operations management (10)
- 7. Access control (11)
- 8. Information systems acquisition, development and maintenance (12)
- 9. Information security incident management (13)
- 10. Business continuity management (14)
- 11. Compliance (15)

1. Security Policy

- Objective:
 - Information security policy.
- Covers:
 - Information security policy document
 - Review of Informational Security Policy

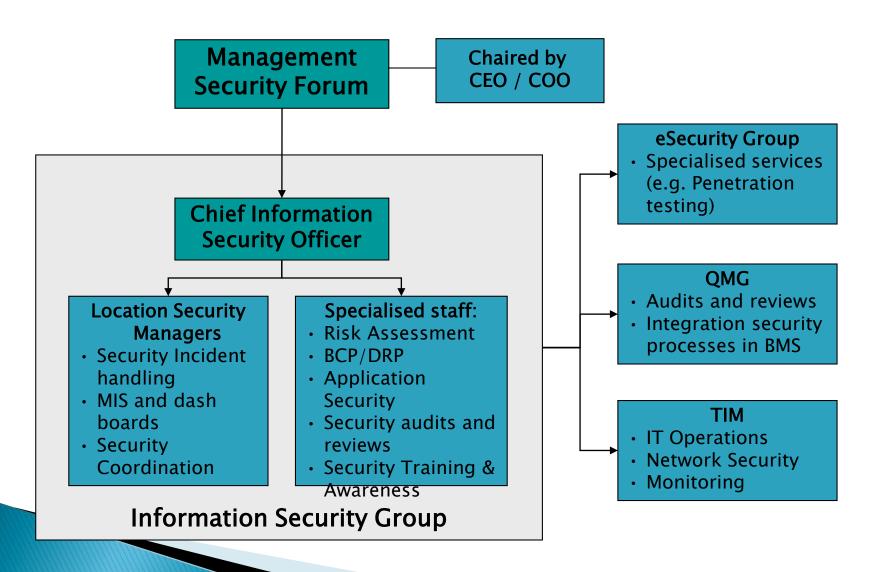
2. Organization of information security

Objective:

- Internal Organization
- External Parties

- Management commitment to information security
- Information security coordination
- Allocation of information security responsibilities
- Authorization process for information processing facilities
- Confidentiality agreements
- Contact with authorities
- Contact with special interest groups
- Independent review of information security
- Identification of risks related to external parties
- Addressing security when dealing with customers
- Addressing Security in third party agreements

2. Organization of information security – Example

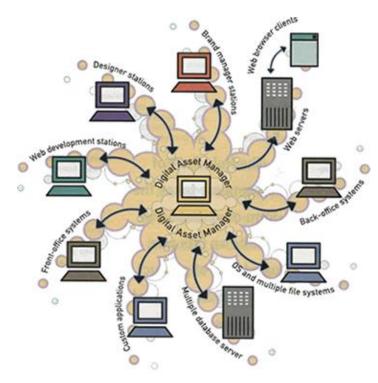


3. Asset Management

Objective:

- Responsibility for assets
- Information classification

- Inventory of assets
- Ownership of assets
- Acceptable use of assets
- Classification guidelines
- Information labelling and handling



4. Human Resource Security

Objective:

- Prior to employment
- During employment
- Termination or change of employment

- Roles and responsibilities
- Screening
- Terms and conditions of employment
- Management responsibilities
- Information security awareness, education and training
- Disciplinary process
- Termination responsibilities
- Return of assets
- Removal of access rights

5. Physical and Environmental Security

Objective:

- Secure Areas
- Equipment Security

- Physical Security Perimeter
- Physical entry Controls
- Securing Offices, rooms and facilities
- Protecting against external and environmental threats
- Working in Secure Areas
- Public access delivery and loading areas
- Cabling Security
- Equipment Maintenance
- Securing of equipment off-premises
- Secure disposal or re–use of equipment
- Removal of property

6. Communications & Operations Management

Objective:

- Operational Procedures and responsibilities
- Third party service delivery management
- System planning and acceptance
- Protection against malicious and mobile code
- Backup
- Network Security Management
- Media handling
- Exchange of Information
- Electronic Commerce Services
- Monitoring

- Documented Operating procedures
- Change management
- Segregation of duties

6. Communications & Operations Management (contd..)

- Separation of development, test and operational facilities
- Service delivery
- Monitoring and review of third party services
- Managing changes to third party services
- Capacity Management
- System acceptance
- Controls against malicious code
- Controls against mobile code
- Information backup
- Network Controls
- Security of network services
- Management of removable media
- Disposal of Media
- Information handling procedures
- Security of system documentation
- Information exchange policies and procedures
- Exchange agreements

6. Communications & Operations Management (contd..)

- Exchange agreements
- Electronic Messaging
- Business information systems
- Electronic Commerce
- On-Line Transactions
- Publicly available information
- Audit logging
- Monitoring system use
- Protection of log information
- Administrator and operator logs
 - Fault logging
 - Clocksmchronisation

7. Access Controls

Objective:

- Business Requirement for Access Control
- User Access Management
- User Responsibilities
- Network Access Control
- Operating system access control
- Application and Information Access Control
- Mobile Computing and teleworking

- Access Control Policy
- User Registration
- Privilege Management
- User Password Management
- Review of user access rights
 - Password use

7. Access Controls (contd..)

- Unattended user equipment
- Clear desk and clear screen policy
- Policy on use of network services
- User authentication for external connections
- Equipment identification in networks
- Remote diagnostic and configuration port protection
- Segregation in networks
- Network connection control
- Network routing control
- Secure log-on procedures
- User identification and authentication
- Password management system
- Use of system utilities
- Session time-out
- Limitation of connection time
- Information access restriction
- Sensitive system isolation
- Mobile computing and communications
- Teleworking

8. Information systems acquisition, development and maintenance

Objective:

- Security requirements of information systems
- Correct processing in applications
- Cryptographic controls
- Security of system files
- Security in development and support processes
- Technical Vulnerability Management

- Security requirements analysis and specification
- Input data validation
- Control of internal processing
- Message integrity
- Output data validation
- Policy on use of cryptographic controls
- Key management
- Control of operational software Protection of system test data

8. Information systems acquisition, development and maintenance (contd)

- Access Control to program source code
- Change control procedures
- Technical review of applications after operating system changes
- Restriction on changes to software packages
- Information leakage
- Outsourced software development
- Control of technical vulnerabilities

9. Information Security Incident Management

Objective:

- Reporting information security events and weaknesses
- Management of information security incidents and improvements

- Reporting information security events
- Reporting security weaknesses
- Responsibilities and procedures
- Learning from information security incidents
- Collection of evidence

10. Business Continuity Management

Objective:

Information security aspects of business continuity management

- Including information security in the business continuity management process
- Business continuity and risk assessment
- Developing and implementing continuity plans including information security
- Business continuity planning framework
- Testing, maintaining and re-assessing business continuity plans

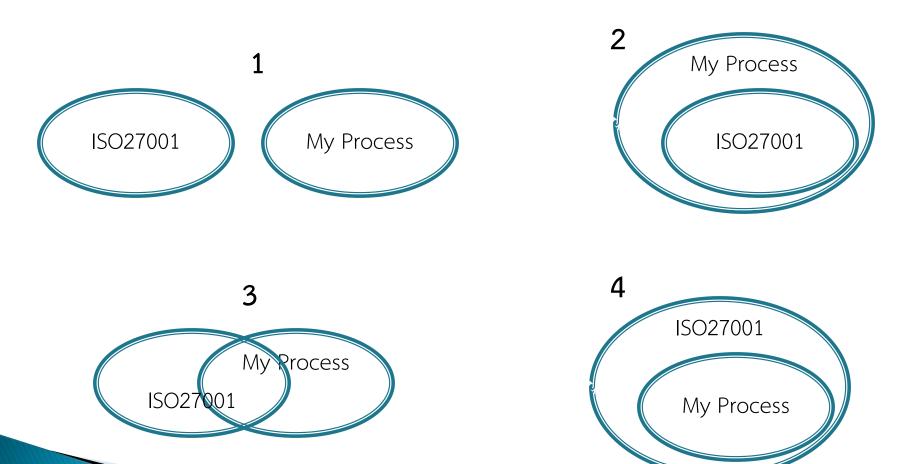
11. Compliance

Objective

- Compliance with legal requirements
- Compliance with security policies and standards, and technical compliance
- Information Systems audit considerations

- Identification of applicable legislation
- Intellectual property rights (IPR)
- Protection of organizational records
- Data protection and privacy of personal information
- Prevention of misuse of information processing facilities
- Regulation of cryptographic controls
- Compliance with security policies and standards
- Technical compliance checking
- Information systems audit controls
- Protection of information system audit tools

เปรียบเทียบการทำงานที่นักศึกษากำหนด กับ ISO27001 แล้ว เป็นแบบไหน ???



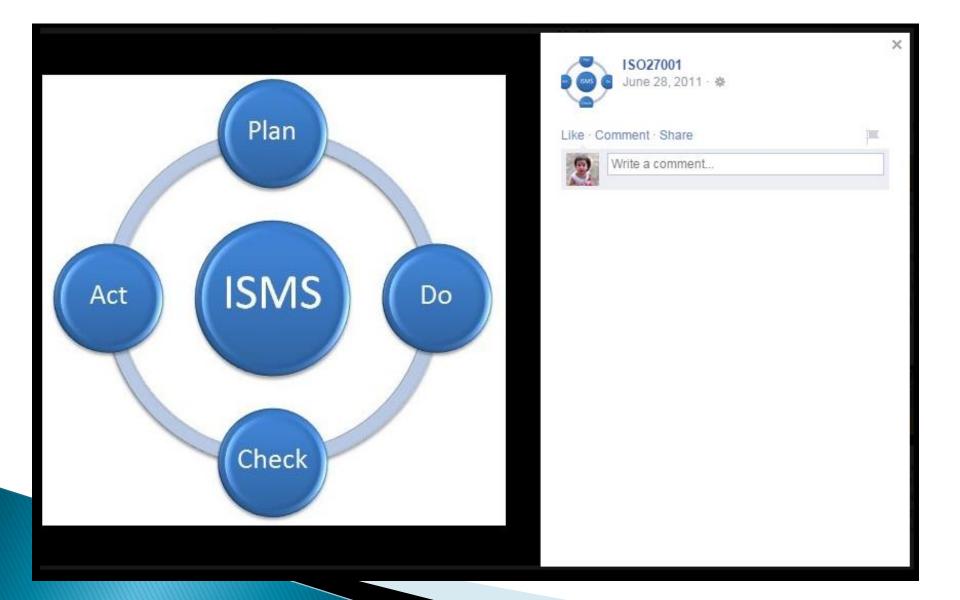
นักศึกษาคิดว่าถ้าดำเนินการตาม ISO27001 แล้วจะมีความ มั่นใจในความปลอดภัยกี่ %



อะไรคือความเสี่ยงที่ยังหลงเหลืออยู่ของการใช้ ISO27001



ISO27001 FB's Profile Picture



สรุป / ผลลัพธ์ที่ได้