

Motivation for Controls

- ❖ It is very important to ensure the reliability of reports produced by an information system
- ❖ If unreliability is seen by users the entire credibility of the system is lost
- ❖ Ensuring reliability is not difficult for small systems but when a system has to handle massive data it is a challenge
- ❖ Systematic controls are thus essential when a system is designed

Motivation for Audits

- ❖ Many organizations are now entirely dependent on computer based information system
- ❖ These information systems contain financial data and other critical procedures
- ❖ It is essential to protect the systems against frauds and ensure that sound accounting practices are followed
- ❖ It is necessary to trace the origin and fix responsibilities when frauds occur
- ❖ Audit methods primary purpose is to ensure this.

Motivation for Testing

- ❖ Systems contain many individual subsystems
- ❖ Usually sub-systems and programs are individually tested
- ❖ However when a whole system is integrated unforeseen errors may be seen
- ❖ Thus before releasing a system the entire operational system should be tested for correctness and completeness

Motivation for Security

- ❖ Systems contain sensitive data about the organization and also about persons working in the organization
- ❖ Sensitive data should be protected from spies, thieves or disgruntled employees.
- ❖ Thus access should be carefully controlled and provided only on a need to know basis
- ❖ When computers are networked corruption/erasure may take place due to viruses
- ❖ Services may be disrupted due to denial of service attacks
- ❖ Thus systems should be designed with appropriate security measures.

Motivation for Disaster Recovery

- ❖ Organizations depend on Information systems for their entire operations
- ❖ It is thus essential to ensure continuity of service when unforeseen situations such as disk crashes, fires, floods and such disasters take place.
- ❖ Thus it is essential to ensure quick recovery from disasters and ensure continuity of service.