

What is ISMS, CIA Triad

Information Security Management System (ISMS)

Information Security Management System (ISMS) is a management system made of multiple interacting components.

What is information?

As per ISO/IEC 27000:

“Information (knowledge or data) is an asset which, like other important business assets, is of value to an organization and consequently needs to be suitably protected”.

Information can be:

- Created, Stored
- Modified, Destroyed
- Processed, Transmitted
- Used, Lost, Corrupted

Information Security: Preservation of Confidentiality, Integrity and Availability (CIA) of information. In addition, other properties, such as authenticity, accountability, non-repudiation, and reliability can also be involved.

CIA Triad

Confidentiality is the degree to which access to information is restricted to a defined group authorized to have this access.

Integrity is the degree to which the information is up to date and without errors (Correctness & Completeness)

Availability is the degree to which information is Available for the user and for the information system that is in operation the moment the organization requires it.

Information Security – Is it Management or Technology?

80% Management i.e. IS-Policy, Processes etc.

and

20% Technology i.e. Tools, Firewall, Servers, Components etc.

The goal of an ISMS is to achieve Information security objectives (and manage information security risks) of the Organization in a structured and effective way.

By designing, implementing, managing, and maintaining an ISMS, organizations can protect their confidential, personal, and sensitive data from being compromised.

The components that constitute ISMS includes:

- Policies
- Processes
- Procedures
- Roles & Responsibilities

Why the need for ISMS?

- Senior Management – Wants to know the status of Information Security in their Organization in hand.
- Security Incidents – Nature of threats are changing and Security Incidents are growing day-by-day. Hence it is important to protect the business from threats.
- Marketing – Gives competitive edge in marketing of products/service with security
- Clients / Stakeholders – Requirements for contracts/condition for RFP