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Security and Privacy of Information Technology Management Systems

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Synonyms

Data protection

Definition

Information security is usually defined as a feature of information systems management which involves three main aspects, named confidentiality, integrity, and availability (Lov om behandling 2000; ISO/IEC 27002:2005 2005; ISO/IEC 27000:2009 2009). Usually, quality is included as a fourth aspect of information security, although it can be considered as overlapping with integrity. The following is a brief definition of these items: (a) Confidentiality is the guarantee that information is not made available or disclosed to unauthorized persons, entities, or processes; (b) integrity relates to the trustworthiness of the information, thus assuring that data has not been deliberately tampered with, nor accidentally changed; (c) availability means that information is accessible and can be utilized upon demand by an authorized entity; and (d) quality refers to the information being correct and not misleading. Among the aforementioned aspects, confidentiality is particularly important because of the sensitivity of personal information. Associated with security, privacy emerges as an issue because of the right to privacy with respect to the processing of personal data. In this way, regarding the relationship between security and privacy, the latter could be defined as the right of the client and the former the duty of the service provider (Henriksen et al. 2013).

Security

Introduction

The security of information technology (IT) is a matter of great importance for organizations. One important reason is the continued use of IT by different stakeholders and the large amount of information stored, sometimes critical to the organization or its customers. Education centers are not oblivious to this type of problem, with the main characteristic being that the clients, in this case, are the students who study at the center, and the sensitive information is of a mainly personal nature (Culhane et al. 2018). Thus, the management of education centers is faced with a problem for which they are responsible as top management of the organization but for which they have often not received training. Many of the aspects related to the assurance of information security are

A. Tatnall (ed.), *Encyclopedia of Education and Information Technologies*,
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security protocols to safeguard people's right to privacy. For this reason, educational managers must assume this responsibility as part of their work. For this, they can rely on qualified personnel and on the wide range of recommendations and guides developed by national and international companies and organizations on information security and IT infrastructure. Each education center, according to its circumstances, must elaborate and comply with a security policy which is known to all the people who work at or have a relationship with the center and which includes coherent and practicable security measures.

Cross-References

- ▶ Ethics
- ▶ Human, Social and Ethical Aspects of IT Management Systems
- ▶ Online Safety

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