Information system

An **information system** (**IS**) is any organized system for the collection, organization, storage and communication of information. More specifically, it is the study of complementary networks that people and organizations use to **collect**, **filter**, **process**, **create** and **distribute data**.

"An information system (IS) is a group of components that interact to produce information."[1]

A computer information system is a system composed of people and computers that processes or interprets information.[2][3][4][5] The term is also sometimes used in more restricted senses to refer to only the software used to run a computerized database or to refer to only a computer system.

Information systems is an academic study of systems with a specific reference to information and the complementary networks of hardware and software that people and organizations use to collect, filter, process, create and also distribute data. An emphasis is placed on an information system having a definitive boundary, users, processors, storage, inputs, outputs and the aforementioned communication networks.[6]

Any specific information system aims to support operations, management and decision-making.[7][8] An information system is the information and communication technology (ICT) that an organization uses, and also the way in which people interact with this technology in support of business processes.[9]

Some authors make a clear distinction between information systems, computer systems, and business processes. Information systems typically include an ICT component but are not purely concerned with ICT, focusing instead on the end use of information technology. Information systems are also different from business processes. Information systems help to control the performance of business processes.[10]

Alter[11][12] argues for advantages of viewing an information system as a special type of work system. A work system is a system in which humans or machines perform processes and activities using resources to produce specific products or services for customers. An information system is a work system whose activities are devoted to capturing, transmitting, storing, retrieving, manipulating and displaying information.[13]

As such, information systems inter-relate with data systems on the one hand and activity systems on the other. An information system is a form of communication system in which data represent and are processed as a form of social memory. An information system can also be considered a semi-formal language which supports human decision making and action.