

Link 11.1 Differences Between Systems, Information Systems and IT Systems

Part I explained the relationship between a system, an information system, and an information technology (IT) system:

- A *system* has a purpose, accepts input from outside the system, conducts some processes on the input received, and produces an output that relates to the defined purpose of the system. A system comprises a number of components to accept the inputs, conduct the processes, and produce the desired outputs.
- An *information system* has a purpose, accepts information as input from outside the system, conducts some processing on the information received, and produces information as outputs from the system, which relate to the purpose of the information system. An information system comprises a number of components to accept the information, process the information, and produce the required information as output from the system.

The difference between:

- A *system* and *information system* is that a system can take a range of objects as input and produce a range of outputs. For example, Amy's candle-making system will take resources such as wax and wicks as input to the system. The output of the candle-making system will be the completed candles. In contrast, Amy will have information systems to capture customer orders, manage her stock, and order her raw materials from suppliers.
- An *information system* and an *IT system* is that an information system includes both human and physical elements, which may include some IT resources; an IT system only considers the integration of the IT elements needed to implement the information system. For example, the IT system to support the capturing of orders for candles includes Internet devices, databases, and networks. The information system defines the processes needed to perform the objective of the system (capture orders), and specifies the flow of information between the processes, but does not specify how the processes are implemented (that is, whether an order is stored in a paper file or a computer database).