

## System Environment

The external component which interacts with the system and produces necessary changes for are said to constitute the system environment. In modeling systems it is necessary to decide on the boundary between the system and its environment. This decision may depend on the purpose of the study.

**Example:** In a factory system the factory controlling arrival of order may be considered to be outside the factory but yet a part of the system environment when we consider the demand and supply of good there is any relationship between the factory output and arrived off orders. The relationship is considered as an activity of the system.

**Endogenous System:** The term ingenious is used to describe events and activities which are occurring within the system.

**Ex.** Drawing cash in a bank

**Exogenous System:** The term exogenous is used in the field of modeling and simulation to describe the activities and events in the environment that affect the system.

**Ex.** Arrived of customers

**Closed system:** A system for which there is no exogenous activities and event this type of system is said to be a Closed System.

**Ex.** Water is an insulated flask

**Open system:** A system for which there is exogenous activity and event exists that type of system is called an Open System.

**Ex.** Bank system