

The systems theory

Managing Systems

Another way to look at the manager's job is from the perspective of managing systems.

System:

A system is a set of interrelated and interdependent parts arranged in a manner that produces a unified whole. It's a concept taken from the physical sciences and applied to organizations.

The two basic types of systems are

Closed systems are not influenced by and do not interact with their environment.

Open systems dynamically interact with their environment.

Today, when we call organization systems, we mean open systems, that is, an organization that constantly interacts with its environment.

1. The systems theory approach is based on the notion that organizations can be visualized as systems of interrelated parts or subsystems that operate as a whole in pursuit of common goals.

The major components of a system are:

a. Inputs: the various human, materials, financial, equipment, and informational resources required to produce goods and services.

b. Transformation processes: the organization's managerial and technological abilities that are applied to convert inputs into outputs.

c. Outputs: the products, services, and other outcomes produced by the organization.

d. Feedback: information about results and organizational status relative to its environment.

2. Open versus closed systems. These are terms indicating the relative degree with which a system interacts with its environment. While there are very few, if any, completely open or completely closed systems, we usually view open systems as those having continual interaction with its environment. Closed systems are those with little interaction and feedback from their environments.

3. Two major characteristics of open systems are:

a. Negative entropy is the ability of open systems to bring in new energy in the form of inputs and feedback from the environment in order for the organization to delay or to arrest entropy, the decaying process.

b. Synergy is the ability of the whole to equal more than the sum of its parts.

c. The systems viewpoint suggests that managers are likely to be more successful if they attempt to operate their units as open systems rather than as closed system.

