

The Open-systems Approach in Organizational Design

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An open system is one where the organization has contact with the environment, its flows, interactions, and information. Scott (2003) defines it as “congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resource and institutional environments”. Supporters of this approach deem those external relationships more important than the internal ones.

This definition entices a relation of dependence between the organization and the factors that surround it. Emirbayer’s relational definition also contributes to the understanding of open systems: “the units involved in a transaction derive their meaning, significance, and identity from the (changing) functional roles they play within that transaction” (Emirbayer, 1997, p. 287). Emirbayer (1997) proposes an underlying concept of dynamism in open systems, where all the agents in the system are in constant change.

#### *Characteristics of open systems*

In a nutshell, Scott (2003, p. 89-91) proposes the following characteristics of open systems:

1. Self-maintenance: agents in the system take resources from the environment to survive.
2. Protection: Systems do not have to protect from the environment, they have to use it as a source of information
3. Boundaries: Open systems do have boundaries, which are difficult to define.
4. Sub-systems: Systems have subsystems that are linked in dynamic interaction

5. Negentropy: energy that turns into work (opposite of entropy which never turns into work). Open systems take the energy from the environment and they recreate themselves

6. Morphostasis and Morphogenesis: Morphostasis are the processes that sustain the system (e.g. socialization and control activities); morphogenesis are the processes that change the system (learning, growth, differentiation)

7. Law of limited variety: The variety in a system will be not more than the variety of the environment.

*An scholarly approach to Open systems*

Open systems are analyzed by different schools: Systems design (Meintzberg, 1979; Levy, 1994), contingency theory (Galbraith, 1973; Lawrence and Lorsch, 1967), and Weick's model of organizing.

Organizational designers use the concept of open systems to construct the best organization possible. To this end, designers have to consider (Scott, 2003, p. 94) the levels of system complexity, normal accidents and reliability, synergy and information flows.

Given its open character, some theorists purport that the environment impacts differently to the distinct units of an organization. These will react differently depending on their level of readiness. Scott cites Simon to explain that the level of cognition of the members of the organization will influence the impact of the environment on them.

Galbraith (as cited by Scott, 2003) a contingent theorist, points out the challenges of organizations to try to fit best to their environment. His main contribution is the acknowledgement of information systems as the tool to reduce the environmental uncertainty or open systems (Scott, 2003, p. 97).

Based on the prescriptions of the contingency theory, the design of an organization depends on the environment the firm operates. Lawrence (1993, as cited by Scott, p. 96) proposes an elaboration of nine contingent factors in the design of an organization: size or scale, technology, geography, uncertainty, individual predisposition of participants, resource dependency, national or cultural differences, scope, and organizational life cycle.

#### *Implications of Open Systems for Managers*

Managers need to understand the open systems approach in order to construct support systems for those participants of the organization with lower levels of readiness, or cognition. Examples of changes in practices of Japanese firms with operations abroad, are examples of the adaptation that organizations have to exercise to respond to the demands of the open system.

The coalignment of the organization depends on learning about (1) the structural features of each unit within and (2) differentiation and integration necessary for the organization to adapt to complex environments (Scott, 2003). This means that firms need to watch their customer needs, their employees needs, the needs of the community. In international ventures, understanding the local culture and relying on the network of relationships created in that subsystem will be keys to increase their success.

In Ecuador -my native country- many transnational organizations (Coca Cola Co., Procter and Gamble, Johnson & Johnson) launch marketing campaigns that are specifically targeted to our audience and culture. Most of the marketing pieces are produced in Argentina and Chile, and they have local voice-overs to reproduce the Ecuadorian Spanish accent. Another example of how organizations that do not understand the culture, may fail occurred in 1982, when Sears Roebuck Co, opened its first retail store in one of the newest malls of a Coastal city. The

opening was a great event, and the motto of "Your satisfaction or we refund your money" had never been heard. In less than 6 months, Sears closed their operations due to the overwhelming amount of returns and exchanges from customers, who would peruse the articles and would return them for full refunds. Had Sears researched more about it, they would have found out that "exchange policies" are unseen in my country.

Reference

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