

THE STRUCTURE OF INFORMATION PROCESSING AND THE ADAPTABILITY OF ORGANIZATIONS.

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Due to the uncertainty of the environment they face, modern organizations must be built with the necessary adaptability. In order to cope effectively with the uncertainty of its environment, an organization must be adaptive: It must be able to continue functioning despite certain degree of environmental change. In order to contribute to the adaptability of its parent organization, the information system must help the organization to respond properly to its current environment, as well as to change its response as required by environmental changes. To summarize, a computer-based information system must provide effective support to the functions of an organization and contribute to its adaptability.

In order to provide effective function support, however, an information system must be compatible with the structure and dynamics of the organization it serves [Kampfner, 1997]. A key structural aspect is the degree of centralization/decentralization of control and information processing that an organization can afford if it is to be able to cope with the uncertainty of its environment. Key aspects of its dynamics are the user interface and the modes of information processing used for the support of specific functions. In this paper we discuss important requirements that the need of compatibility with the structure and dynamics of organizations imposes on the architecture of information systems. We focus on key aspects of the structure and dynamics of information processing in goal-oriented organizations and suggest criteria for the evaluation of the compatibility of their supporting computer-based information systems and the nature of their contribution to adaptability.

REFERENCES

Kampfner, Roberto R. "Function Support as an Information Systems Development Paradigm," *WorldFutures*, Vol. 50, pp. 689-792, 1997.