

# Chapter XI

## Levels of Organizational Interoperability

### 1. LEVELS OF ORGANIZATIONAL INTEROPERABILITY

The most challenging of all interoperability issues seems to be related to organizational interoperability. While technical interoperability certainly represents challenges of stretching current technology and waiting for more advanced technology in the future, we know that technology can be managed, and we know that technology enjoys steady progress. Efforts at technical inter-connectivity have been enhanced by significant developments in connectivity capabilities during the past decade, such as increased availability of integrated technological solutions and favorable cost-performance trends. While Semantic interoperability might be a little more complicated, as it involves political and practical debates where stakeholders have different agendas, we nevertheless expect continuous progress in this area as well.

We start this chapter by discussing four levels of organizational interoperability – business process interoperability, knowledge management interoperability, value configuration interoperability, and strategy position interoperability. Then, we continue suggesting theory-based as well as general benchmark variables for measuring organizational interoperability. Based on the levels of growth model with benchmark variables, we are suggesting a stage hypothesis at the end of the chapter.

## **1.1 Level 1: Business Process Interoperability**

Business process integration and interoperability are among the most significant factors driving electronic government today. In addressing the manifold technology challenges of integration and interoperability, new standardization efforts aim at improving the interoperability of businesses by moving toward a classification and specification of businesses processes, that is, one which describes alternative business processes and what each process does (Koehler, Hauser, Sendall, & Wahler, 2005).

A business process is a collection of interrelated tasks, which solve a particular work assignment. A business process is a structured, measured set of activities designed to produce a specific output for a particular function or client. It implies a strong emphasis on how work is done within an organization. A process is a specific ordering of work activities across time and space, where activities occur both in sequence and in parallel. A business process has a beginning and an end, and clearly defined inputs and outputs. It uses one or more resources and creates a result of value for the receiver in the organization or the client outside the organization. Activities in the business process are primarily important to the extent that they contribute to complete the process, i.e. that the business process delivers expected results in the form of governance and services.

This definition represents certain characteristics for a process. These characteristics focus on the business logic of the process (how work is done), such as having clearly defined boundaries, input and output, as well as activities ordered in time and space. Business processes are concerned with how work is organized, coordinated, staffed and focused on producing outputs. Business processes are workflows in the form of materials and information. Hence, business processes are collections of activities. Furthermore, business processes are the very special way the organization has chosen to coordinate work and knowledge, and the way management chooses to coordinate all production of services. Business processes do normally move across departmental borders. They may involve several levels in the hierarchy as well.

In an organization, many business processes take place at the same time. These processes are often dependent on each other, as they produce services through process interactions. The organization also interacts with its environment. The environment includes everything and everyone influencing the organization.

Today, executives are interested in identifying and improving business processes. This interest has emerged as executives realize that organizational success is dependent on the ability to deliver services at low costs, with high quality and professional performance. This interest has also emerged as more and more business processes have important interactions with the environment.

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