

# Chapter 14

## Information Architecture in Practice

**José Poças Rascão**

*Polytechnic Institute of Setúbal, Portugal*

**Antonio-Juan Briones-Peñalver**

*Polytechnic University of Cartagena, Spain*

### ABSTRACT

*The concept of architecture has been widely used in the context of information and communication technologies (ICT's). It is associated with such diverse terms, such as, business architecture, architecture of knowledge, strategic architecture, governance architecture, information architecture, architecture of competence, ICT's architecture, network architecture, computer architecture, data architecture, and many other examples one could give. Why the term is used in this way? What sets them apart? May it be replaced by a simpler and less catchy term, such as structure? Information architecture is a design methodology (concept) that is applied to any environments, being understood as an area located within a given context, consisting of content in streams that serves a community of managers/decision makers/users. The model can be to any informational environments of any area of knowledge, regardless of media, format, content or type of information that constitutes it, since a traditional library to a complex organization. It is not coupled to people, to the organizational structure or any technology.*

### INTRODUCTION

According to Rosenfeld and Morville (2002) designing information architecture of a library presents a series of challenges, but a library is a well-defined informational environment. There are then some examples that illustrate the levels of application of Generic information architecture model, its different Sciences and informational environments. In the scheme of representation are

illustrated informational cycle processes, since the essence of information architecture does not change, what changes is the context, the content and the people

Information architecture is a design methodology (concept) that applies to any informational environment, this being understood as an area located within a given context, consisting of flow content that serves a community of managers/decision makers/users.

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The model presented is applied to any kind, regardless of media, format, content or type of information that constitute it, since a traditional library to a complex organization. It is not coupled to people, to the organizational structure or any technology.

The basic differences between the WEB and the informational environment of a traditional library are in the first primary and secondary sources (meta-information) which share the same support-digital, being recovered through the *links*. In the second system the reference documents are in paper form or in multimedia, stored in a physical space.

## KNOWLEDGE OF DOMAIN OF ARCHITECTURE

The information can be seen both from the functional point of view and in terms of use and or decision-making. In functional terms are the day-to-day operations that contribute to the performance of the organizations as a whole. The physical elements such as books, parts, components, and subassemblies, are parts which ultimately implement the required functions [Ulrich and Eppinger, 1995].

The physical elements are typically fun grouped by blocks that implement the functions inherent to them. The architecture is the manner in which the functionality is grouped by physical blocks. Thus the architecture of the information about the physical blocks can be modular or integral (for functions):

- **Integral/Architecture for Functions:** Is when the functional elements are implemented using more than a block, or a block implements several functions. The interactions between the blocks are not well defined. It is designed for high performance and the border between the blocks is difficult to identify, if it does not exist.

- **Modular Architecture:** Is when their physical blocks implement one or few functional elements and their interactions are well-defined and generally essential for the primary functions of the use/management/decision-making. The modular architecture allows the change of project/business unit, an independently, i.e. without the need for change in other modules.

Rarely, an informational unit can be classified strictly modular or integral, being classified according to its degree of modularity [Ulrich and Eppinger, 1995]. The type of architecture of informational unit (Organization/enterprise) is decided throughout its development and this setting will affect its performance.

The modular architecture allows different groups to work independently in their development since working with a more limited number and known interactions with other modules. An organization (informational unit) with an integral architecture requires a very large involvement and coordination among groups.

The information architecture of an organization can either be set as an integral architecture, if we consider that the same function is dispersed by different physical blocks. The modular architecture of the information can be understood as a set of modules, components and subsystems with specific functions defined (informational units/business units).

Henderson and Clark, [1990] define the architecture of knowledge as the knowledge of how the different components are integrated to form a coherent whole, an integrated information system and not simply a set of components.

According to Fixson and Sako, [2001] the definition of information architecture is directly related to the capacity of the Organization to identify the different information needs of users/managers/decision-makers allocating these requirements in modules that make up the information system as a whole (of the organization/company).

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