

Chapter 3

Modeling Architecture of Information

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ABSTRACT

Information Architecture is a design methodology (design) that is applied to any information environment, this being understood as a space located in a particular context, consisting of content streams in serving a community of managers / decision makers / users. In this chapter a generic model is proposed to systematize the concept of Information Architecture with multiple views to illustrate how the epistemological and scientific implications affect its practical dimension. The epistemological bases can be applied to the solution of practical problems that arise in any informational environments, i.e., the space that integrates the context, content and users / managers / decision makers. The model is general and can be applied as such any information space in whichever form, format, content or type of information that constitute it, since a traditional library to a complex organization. Is not tied to people, organizational structure or any technology.

INTRODUCTION

According to Rosenfeld and Morville (2002), to devise information architecture of a library presents a number of challenges, but a library is a well-defined information environment. There are few examples that illustrate the levels of application of the Generic Model of Information Architecture to different sciences and information environments. In the representation scheme are illustrated processes the information cycle, whereas

the essence of the Information Architecture does not change, what changes is the context, content and people (managers / users / decision makers).

The basic differences between the web and the information environment of a traditional library are at the first primary and secondary (meta- information) sources. The first, share the same media - digital, being recovered through the links while the second refers to the system documents which are in paper or multimedia, stored in a physical space.

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FROM CONCEPT TO STRUCTURAL MEANING OF CONCEPT

The concept of architecture is widely used in the context of information and communication (ICT) technologies. It is associated with terms as diverse such as architecture business, knowledge architecture, strategic architecture, architecture governance, information architecture, cityscape racing, architecture of ICT, network architecture, architecture of the computer, and many other examples. Why the term is used in this way? What does it add? May be replaced by a simpler and less voiced term as structure? We intend to analyze why the term architecture, in particular the term information architecture as well as architectural metaphor - has come to be accepted and used in the context of information and communication technologies.

So, it will give importance to cognitive, perceptual and communication of metaphor that have often been ignored at the expense of structural aspects. It is important that the cognitive characteristics of architectural metaphors be brought into the discussion in order to stand out of the issues related to the practice of ICT, which is a critical aspect in the context of organizations.

One of the landmarks of architectural metaphor was the article by John Zachman in 1987 which introduced the concept and model of the architecture of the information system (ISA). Zachman was not claiming to be the first to use this metaphor in the field of Information Technologies and Communication. Certainly one of his objectives was to write an article that offered a clear rationale for using the term, given its widespread use, but inconsistent. Its aim was specific, as the summary of our article.

With the size and increasing complexity of the development and implementation of computer systems (management software), were necessary to use some logic design (or) architecture to define and control the relationship and integration of all data and software components. In the mid-1980s it

was clear that, specifically management software systems were critical components of the business. In order to implement a more effective management systems, such systems were necessary to conceive them previously, to define what data to collect, store and make available, involving a wide range of different perspectives and orientations, regardless of the technology (hardware, software and communications) that would be implemented.

When one starts to design computer systems (software) it is necessary to define the requirements of information (data) to collect, store, transmit and access, which may be called the system functionalities as well as the requirements of other infrastructure technology in these systems would be implemented. This could not be accomplished by simply expanding the meetings of programmers, systems analysts and appropriate consultants. Rather than requiring a qualitative review of the systems development process, it was necessary to clarify many of the different interests and perspectives of the people involved (managers, users and IT specialists).

To Zachman, to resolve this issue it must be used the model of architecture. Advocated start with an initial model that was no more than an incomplete draft. This first proposal was a working basis for negotiations between the "client" and the expert (the architect). The purpose of this initial draft was confirmed before the "customer" that the architect had understood what was in the mind of the "client" because it was a working basis for the more technical aspects of the project. This served to focus the negotiation between the parties, helping to achieve confirmation and contractual agreement. This confirmation and harmony were particularly important for professionals in information and communication technologies, as the acceptance of the system (software) by the "customers / users" "was an increasingly embarrassing question. One of the main factors underlying this discrepancy was the very nature of the system. So it was no wonder, since the software was expensive and often had errors.

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