

# Chapter 83

## Information Architecture: Case Study

**Cláudio Roberto Magalhães Pessoa**  
*Universidade Fumec, Brazil*

**Monica Nassif Erichsen**  
*Escola de Ciência da Informação da Universidade Federal de Minas Gerais, Brazil*

**Renata Maria Abranches Baracho**  
*Escola de Ciência da Informação da Universidade Federal de Minas Gerais, Brazil*

**George Leal Jamil**  
*Informações em Rede, Brazil*

### ABSTRACT

*This paper main objective is to raise information and knowledge demands in an information technology consulting organization, aiming to prepare an information architecture project, where the information and knowledge management will contribute to the expected improvement. A descriptive research has been prepared, using an interview script that enabled to reach the desired goal. It was concluded that existing investments are isolated, without an effective planning that might allow the company to achieve results that would bring real improvements to it.*

### INTRODUCTION

It's clear in modern organizations the need of investment in information and knowledge management business that enables them to create, if not a differential, a condition to compete with greater force in the market where they operate. To Calof and Smith (2010), organizations must be aware of technological trends and employ efforts to best meet competitive edge.

According to Pessoa and Jamil (2012), organization managers, whether from strategic or information technology (IT) area, feel the importance of having investments in order to seek an improvement in the information and knowledge management. Barbosa and Nassif (2012, pp. 114) highlight the productiv-

DOI: 10.4018/978-1-5225-5191-1.ch083

ity paradox of information technology, since IT investments have not been utilized by organizations especially in the case of “facilitating creativity and exploration of ideas by employees or as a support resource for strategic planning and competitive intelligence activities. “

Davenport (1998) argues that organizations should develop their projects holistically, so that all sectors work in an integrated way in search of the desired differential. The author stresses that organizations should best think about their information and knowledge management projects before considering investment in technology, what usually occurs in the opposite way.

In this context, the concept of Information Architecture (IA) is of great importance to assure that strategic decisions are taken in a more founded manner. IA facilitates organizations to organize the information in order to make it easily accessible and useful to the users. According to Wurman (1997), IA has emerged to organize data standards creating an information map that turns the complex clear. This gives the organization a competitive advantage, since decisions will become more effective through the use of accurate and easily accessible information.

Imbued with the thought of these authors, this research main objective is to raise the demands of information and knowledge in an IT organization, aiming to elaborate a planning project of information and knowledge management. Interviews were conducted with five professionals of the organization, from different areas, seeking to develop a diagnosis and propose possible solutions to deployment of AI Project, which will bring the benefit of qualifying the decision-making by offering more precise information to organization managers.

## **THEORETICAL FRAMEWORK**

### **Information and Knowledge Management**

Thinking strategically, managing information in organizations has become paramount to compete in a dynamic market like today's. Pereira (2008) draws attention to the expansion of vision, in information science studies. Today they focus more on understanding the personal, social or organizational situation. In the past, the focus was on the information systems. Ferreira (1995) calls this new perspective “perception approach” or “alternative approach”. In this context, according to the author, the information will have meaning only when integrated to a context. The individual is seen as a person who has a whole range of previous knowledge (culture, beliefs and values, cognitive, affective and physiological needs) that interfere with the search for information that will lead to decision making (PEREIRA, 2008). The information then is an incomplete data to which individual assigns meaning from the intervention of his former previous “schemes”. According to the author, the individual will always use “schemes” to try to solve his/her problems to the extent that permit no longer overcome identified obstacles, making them inoperative. It is clear, at this point, a cognitive vacuum, where there is a lack of information to solve the problem and where the process of seeking for new information begins. It's up to the individual to identify the nature of this emptiness and define strategies to overcome the problem, what is not always a trivial thing.

Choo (2003, pp. 87) concludes that the search and use of information behavior can be predicted when it's known how this “user perceives his/her cognitive gaps and how he/she desires information to help him/her solve the problem situation.” Consequently, Pereira (2008) states that information systems should be designed with flexibility to adapt to the process of seeking information by users.

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/information-architecture/198627](http://www.igi-global.com/chapter/information-architecture/198627)

## Related Content

---

### Mechanism for Crawling, Filtering, and Presenting Opinionated Content on Online Products to the Customers

Rosy Madaan (2023). *Applying AI-Based IoT Systems to Simulation-Based Information Retrieval* (pp. 169-182).

[www.irma-international.org/chapter/mechanism-for-crawling-filtering-and-presenting-opinionated-content-on-online-products-to-the-customers/322856](http://www.irma-international.org/chapter/mechanism-for-crawling-filtering-and-presenting-opinionated-content-on-online-products-to-the-customers/322856)

### Automatic Schema-Independent Linked Data Instance Matching System

Khai Nguyen and Ryutaro Ichise (2018). *Information Retrieval and Management: Concepts, Methodologies, Tools, and Applications* (pp. 1446-1469).

[www.irma-international.org/chapter/automatic-schema-independent-linked-data-instance-matching-system/198608](http://www.irma-international.org/chapter/automatic-schema-independent-linked-data-instance-matching-system/198608)

### A New Approach Based on the Detection of Opinion by SentiWordNet for Automatic Text Summaries by Extraction

Mohamed Amine Boudia, Reda Mohamed Hamou and Abdelmalek Amine (2016). *International Journal of Information Retrieval Research* (pp. 19-36).

[www.irma-international.org/article/a-new-approach-based-on-the-detection-of-opinion-by-sentiwordnet-for-automatic-text-summaries-by-extraction/161659](http://www.irma-international.org/article/a-new-approach-based-on-the-detection-of-opinion-by-sentiwordnet-for-automatic-text-summaries-by-extraction/161659)

### SAR: An Algorithm for Selecting a Partition Attribute in Categorical-Valued Information System Using Soft Set Theory

Rabiei Mamat, Tutut Herawan and Mustafa Mat Deris (2013). *Information Retrieval Methods for Multidisciplinary Applications* (pp. 266-280).

[www.irma-international.org/chapter/sar-algorithm-selecting-partition-attribute/75912](http://www.irma-international.org/chapter/sar-algorithm-selecting-partition-attribute/75912)

### Patient-Centered Clinical Trials Decision Support Using Linked Open Data

Bonnie MacKellar, Christina Schweikert and Soon Ae Chun (2018). *Information Retrieval and Management: Concepts, Methodologies, Tools, and Applications* (pp. 1765-1782).

[www.irma-international.org/chapter/patient-centered-clinical-trials-decision-support-using-linked-open-data/198624](http://www.irma-international.org/chapter/patient-centered-clinical-trials-decision-support-using-linked-open-data/198624)