Chapter 28
Information Architecture:
How to Conceptualize It and Implement It

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ABSTRACT

This chapter analyzes the definition, origins, and evolution of Information Architecture (IA), discusses IA principles, the need to understand IA, the problems that can be solved by IA, and IA in practice. It also discusses the characteristic patterns of IA to comprehensively understand IA from five aspects, such as core concepts, research objects, disciplinary viewpoint, effects, and the human's role in IA. In terms of implementing IA, the chapter analyzes two guiding theoretic principles and the common process of IA and summarizes and concludes with tools, methods, and measures of IA.

INTRODUCTION

The chapter firstly states the definition and the origins of IA and then analyzes research and practice status of IA in North America and in the Asia-Pacific region, especially in China. The discussions focus on four problems, namely: Why is IA generated? How should we understand IA? What are the guiding theories of IA? How is IA implemented?

IA is defined to be an art and a science, which organizes information and designs information environments, information spaces and information architecture to meet the information needs of users and to help them meet their objectives. IA is comprised of processes such as survey, analysis, design and implementation, and relates them to the design of organization systems, labeling systems, navigation systems and search systems, with the aim at helping people to successfully find and manage information (Hurst, 2000).

The first phase of IA was put forward in 1975 and was applied in the World Wide Web to solve problems of Web usability at the end of the nineties. Over the following ten years, IA has begun to be widely discussed and accepted by the world. The theoretical system as well as the practical tools and methods have been gradually improved and

enriched. In addition, colleges and universities have started teaching and conducting personnel training in IA, and some people made IA as their professional titles.

What is the development status of IA in North America, in the Asia-Pacific region and in China since the end of the nineties? Why was IA generated and what problems can IA solve? How should we understand IA? What are the guiding core theories of IA? What are the tools and methods adopted for the development of IA? This article will give discussions centering on these questions.

BACKGROUND AND DEVELOPMENT

Definition and Origins of IA

The American architect Mr. Richard Saul Wurman creatively put forward the words of IA and its corresponding research field in 1975. After comparing collections, organizing and presenting information with problems needing to be solved for construction, he deemed that ordering of the objective knowledge space had something in common with the ordering of physical space during design of the construction. Therefore, Mr. Wurman considered the ordering problem of information as construction design work serving the specific object.

American scholars Louis Rosenfeld and Peter Morville published the monograph *Information Architecture for World Wide Web* in 1998. They re-discovered and reused the ideas of Wurman about information architecture and the information architect, further pushing the theory of IA to the network environment for research; they more deeply penetrated the knowledge of the information management discipline in the theory of Wurman, systematically combining and refining components of Website information spaces and cores, methods and the flow of Website information construction to a specific theoretical system and forming specific thinking and methods of Web-

site information construction. The book led to a great sensation after publication, and was rated the best-selling book at Amazon's online bookstore. Editions 2 and 3 of the book were published soon thereafter. The theoretical methods of Rosenfeld and Morville helped people find potential and a greater application value of IA during Website construction. The two scholars' popularization and extension on IA provided an opportunity for the propagation and flourishing of theoretical methods of IA on the World Wide Web, and attracted more people to become engaged in Website design, Website editing, network development, software development, information system design, project management, network operation management and maintenance. More people started to systematically solve the problems of IA and this led more people to start calling themselves as "information architects," an honorable title to obtain.

Promotion by ASIST (American Society for Information Science and Technology, Now with a Changed Name of Association for Information Science and Technology since 2013)

The positive promotion of IA by ASIST is obvious. Since 2000, the society has continuously held summit meetings on IA. The subjects of the summit meetings are as follows:

- **IA Summit 2000:** Defining Information Architecture
- **IA Summit 2001:** Practicing Information Architecture
- **IA Summit 2002:** Refining Our Craft
- **IA Summit 2003:** Making Connections
- **IA Summit 2004:** Breaking New Ground
- **IA Summit 2005:** Crossing Boundaries
- **IA Summit 2006:** Learning, Doing, Selling
- **IA Summit 2007:** Enriching Information Architecture

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