Chapter I

Story Boarding for Web-Based Information Systems

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ABSTRACT

The present chapter is about story boarding for web information systems (WIS). It is a holistic usage-centered approach for analyzing requirements and conceptual modeling of WIS. We conceptualize web information systems as open information systems and discuss them from a business point of view, including their linguistic, communicational and methodological foundations. To illustrate story boarding, we discuss a simple application example.

INTRODUCTION

Information technology impacts economy. It additionally has started changing the modern way of life, e.g., look at work on the so-called semantic web (Berners-Lee et al., 2001), or a web of ideas (Cherry, 2002), or on new
business models due to the impact of information technology (see Kaner, 2002; Kaschek et al., 2003a). Since long information systems (IS) are an important area of active research, lots of competing IS development approaches are available. The problem of somehow developing a right IS is connected to the problem of developing the IS right.

In the present chapter, we focus on the so-called high level phases of IS development. In particular, we deal with analyzing WIS requirements and modeling. Our approach is called story boarding. It is a holistic, usage-centered and agile approach to WIS development. We comment on WISs from a business perspective, and use this perspective to distinguish WISs from ISs in general. We further discuss the linguistic, communicational and methodological foundations of IS development. Story boarding is introduced and explained in terms of these.

Technological achievements such as the World Wide Web (in short, WWW or Web) allow new kinds of ISs, namely WISs, to evolve. Dealing with WISs implies challenges, opportunities and threats. We believe that WISs soon will be the dominant kind of IS, and that development methodology for WISs is of prime importance. To contribute to this field, we adapt and enhance available methodology where this is reasonable, and use new methods, techniques and concepts elsewhere.

**Chapter Outline**

We continue the chapter with a discussion of how ISs and, in particular, WISs appear from a business point of view. We use the abstraction layer model (ALM) to relate the most important phenomena in WIS development to each other and discuss related work. We continue discussing linguistic, communicational and methodological foundations of IS development. We proceed with a discussion of story boarding, customer types and customer profiles, and the language SiteLang, followed by a relatively detailed example. Finally, we summarize the chapter and outline future work.

**A BUSINESS VIEW ON WIS**

We here deal with WISs that conform to the type business to customer (B2C). We consider WISs as sets of services offered to customers. They shall be business enablers and simplifiers. We look at WISs from the angles: conceptual definition, i.e., what functionality do they offer to customers; usage, i.e., the way customers interact with the WIS; beneficiaries, i.e. the individuals or organizations benefiting from them, and construction, i.e., the
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