Design Frameworks

John Knight
University of Central England, UK

Marie Jefsioutine
University of Central England, UK

INTRODUCTION

Design frameworks are a phenomena appearing in the field of new media (e.g., Brook & Oliver, 2003; Fiore, 2003; Dix, Rodden, Davies, Trevor, Friday, & Palfreyman, 2000; Taylor, Sumner, & Law, 1997). They appear to be a response to the multi-disciplinary nature of the field and have a number of things in common. They are usually developed in response to a perceived lack of common understanding or shared reference. Frameworks often advocate a set of principles, a particular ethos, or expound a philosophical position, within which a collection of methods, approaches, tools, or patterns are framed. They aim to support design analysis, decision-making and guide activity, and provide a common vocabulary for multi-disciplinary teams. In contrast to some design methods and models, they tend to be broad and encompass a wider area of application. Rather than prescribe a single “correct” way of doing something, they provide a guiding structure that can be used flexibly to support a range of activity. This article describes one design framework, the experience design framework (Jefsioutine & Knight, 2004) to illustrate the concept.

BACKGROUND

The experience design framework (EDF) illustrates a number of the features of design frameworks identified previously. It was developed in response to the low take-up of user-centred design observed by the authors and identified in the literature (e.g., Landauer, 1996; Nielsen, 1994). For example, Säde (2000, p. 21) points out that some of the large-scale user-centred design (UCD) methods “do not suit the varied and fast paced consulting projects of a design firm.” Nielsen suggests that one of the key reasons why usability engineering is not used in practice is the perceived cost. He argues that a “discount usability engineering” approach can be highly effective and describes a set of “simpler usability methods” (Nielsen, 1994, pp. 246-247). Eason and Harker (1988) found that, as well as perceived cost and duration, user-centred methods were not used because designers felt that useful information was either not available when needed or was not relevant and that methods did not fit in with their design philosophy.

The authors thus set about identifying a set of user-centred methods that would be cost effective, flexible enough to apply to any design life cycle and, most importantly, would be useful and relevant to the needs of the designer. Through a combination of literature reviews and application to practice, the authors identified different aspects of designing a user experience and the way in which these aspects can be drawn together to focus design research and practice. The EDF is thus based on the principles of user-centred design and represents a way of using a range of methods to achieve a set of qualities that work at all dimensions of experience.

USER-CENTRED DESIGN PRINCIPLES (UCD)

Human-centred design processes for interactive systems identifies the following characteristics of a user-centred design process: “The active involvement of users and a clear understanding of user and task requirements; An appropriate allocation of function between users and technology; The iteration of design solutions; Multidisciplinary design” (International Organization for Standardization, ISO/IEC
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