Understanding User Experience

Camille Dickson-Deane
University of Melbourne, Australia

Hsin-Liang (Oliver) Chen
University of Massachusetts Boston, USA

INTRODUCTION

As the need for information continues to drive the design and development process in society, understanding how one uses solutions is key. Interactions and the information they produce, drive how often and how successful an experience can be, knowing that each interaction may differ from another. User experience determines the quality of an interaction being used by an actor in order to achieve a specific outcome. The actor can have varying roles and evolving needs thus reviewing and predicting experiences are important. As an actor uses and gains feedback, the feedback guides individual and group behavior thus becoming pertinent to how interactions occur. This then questions how artefacts are designed to promote such interactions and what processes should be incorporated to ensure successful interpretation, use, physical reaction and conation. This chapter discusses the effects of user experiences today based on societal needs and expectations. It shows how the field is delineated into numerous sub-topics all of which can stand on their own yet, still draw from each other. The discussions will include fields such as cognitive science, human computer interaction, learning sciences and even ergonomics to show how design and subsequently interactions can assist in having successful user experiences.

BACKGROUND

User experience (UX) is defined as a generalised approach to acknowledging the quality of interac-

tion an actor [a user] has with an organisation, its service or products (Nielsen, 1992; Norman & Draper, 1986). This acknowledgement is defined as, but not limited to the actors' perceptual views, cognitive and affective feelings, interpretation of meaning, and attitudes. Today, UX is frequently been known to review the quality of interaction an actor has with computer-related technology and is known to include an organisation or product's brand experience (Park, Han, & Kim, 2013). UX is identified as an action as well as a field with relational ties to several different knowledge brackets (i.e., Human Computer-Interaction (HCI), Ergonomics, Cognitive Science, Industrial Science, Human Factors) and has elements which include "usability, affect and user value" (McNamara & Kirakowski, 2006; Norman & Draper, 1986; Notess, 2001; Park et al., 2013 pg. 286; Tullis & Albert, 2008). As such, its history has varying starting points and thus varying influences (see Figure 1).

Norman (1986) known for his work in interaction design, first coined the term. The need to ensure that any experience an actor has with an object is classified not only by the expressed needs of the actor, but also by anticipating the future needs and thus uses of the said object [by the actor]. This means that an object can draw from many disciplines, in order to fulfil this expectation towards a satisfying experience for the actor. The UX is an outcome presented through the interaction of the actor with a user interface (Seow, 2005). The user interface is somewhat physical in its definition and typically describes the layer of an object where an action has an interaction to access

Figure 1. The Disciplines of User Experience Design. This figure illustrates the many disciplines which are included in the field of User Experience.
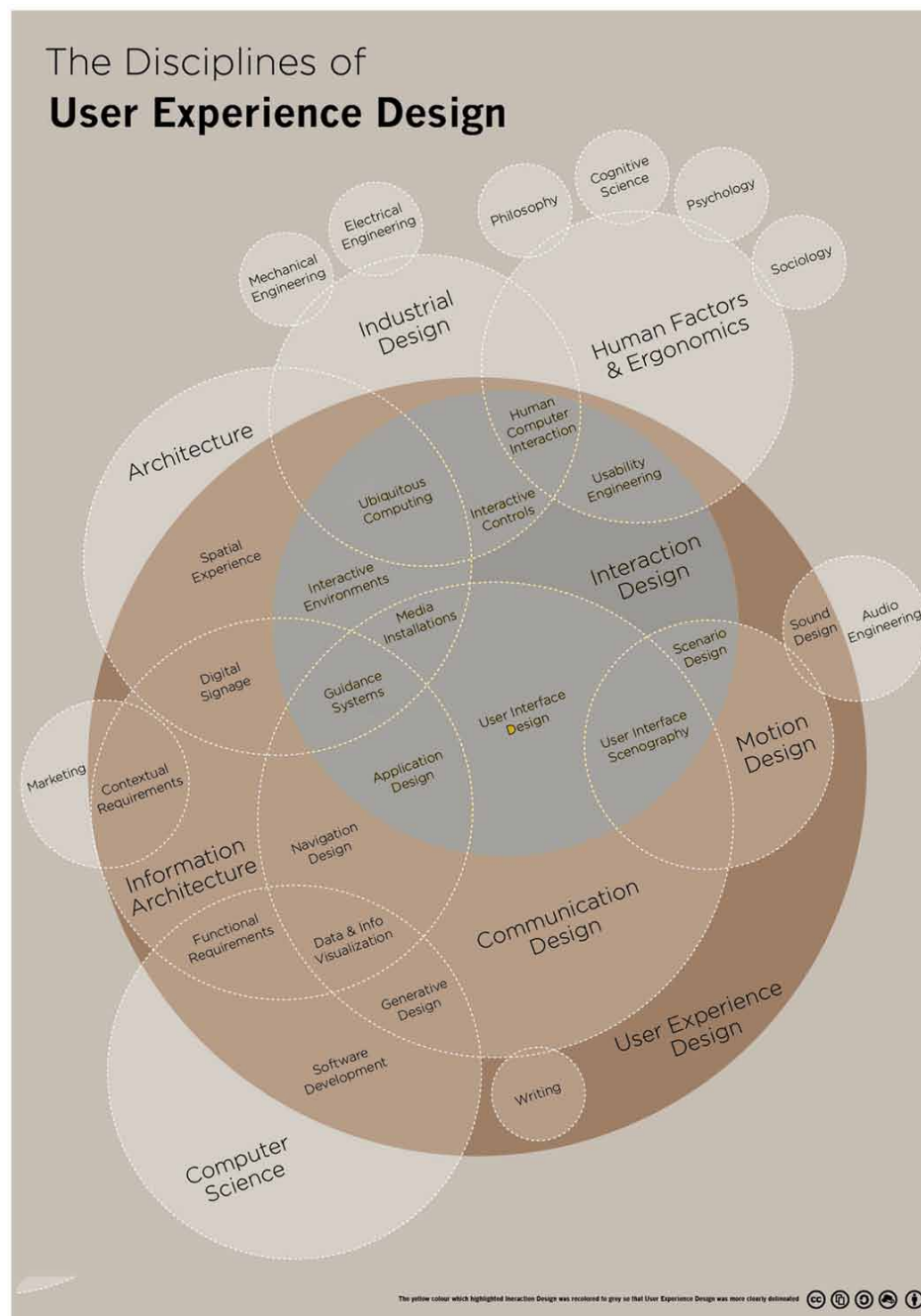
the said object. An example of the user interface, interaction and user experience is as follows

- **Actor:** A user (Man with no inherent challenges to using a door).

- **Object:** A door knob that is circular/round and smooth in design.

- **Context:** The user (the man) is aware of the time and is rushing to enter a law office before it closes. The entry to the law office

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