Development of an Anticipated User Experience Framework for E-Commerce Websites: A Research Proposal
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Abstract: In the field of user-product interaction, creating positive user experience (UX) is becoming the goal of interactive product (IP) designers. Most of the existing UX evaluation methods, however, evaluate UX during or after actual interactions with a product; thus implying that UX evaluations are commonly conducted during the final phases of product development when working prototypes are available. Some studies, however, show the significance of conducting UX evaluation as early as possible in the product development process, as the foundation for positive UX is laid during the concept design stage and delayed evaluation can lead to difficult and expensive design changes in the last stages of the development. The Anticipated User Experience (AUX) Framework by Yogasara (2014) addresses this research gap by understanding the characteristics and concepts involved in relation to anticipation in UX (or UX before product interaction). This was empirically derived using digital cameras as a stimulus IP. Considering this, the AUX Framework then may have the tendency to lack generalizability across other IP types, such as e-commerce websites. This paper proposes the development of an AUX Framework for e-commerce websites (WebAUX Framework). Co-discovery, data coding, and relational analysis shall be used in coming up with the said framework. Insights coming from the WebAUX Framework shall be used to formulate design process guidelines for web developers.

Summary:

After conducting an extensive review of literature, identifying a research gap, and researching on possible methodologies in solving this gap, this research proposal was developed.

The study being proposed aims to contribute to the design for positive UX for e-commerce websites. The impact may involve three areas: (1) providing new knowledge of AUX in the field of web-design; (2) addressing the gap within current research with regard to the generalizability of the current AUX Framework with respect to other IPs (such as e-commerce websites); and (3) addressing the need for UX assessment in the early phases of web development. Specifically, the study generates a greater understanding of the following aspects: a user’s process of anticipating experiences with websites; the characteristics of WebAUX; and the essential factors and design process guidelines that need to be taken into account in supporting the initial stages of the web design process.

The proposed main outcomes of this research include the sub-category networks that form the WebAUX Framework, and design process guidelines that are derived from the findings. These outcomes allow researchers to better understand how users appraise, perceive, and experience e-commerce websites before actual interactions. They also provide the researchers with a foundational knowledge of WebAUX on which future research in the area can build.

The study outcomes will assist and guide web designers and developers in assessing and designing for UX from the outset of the web development process. This is further supported by an interview conducted with UX Expert, Mr. Elymar Apao. In industry, the early assessment of UX is crucial, since it contributes to potential savings by reducing design changes in the final website development stages. This is supported by the fact that the later the design is changed, the more the product development will cost (Magrab, 1997). In addition, given that positive UX has become a key competitive factor that enhances a product’s success (Sward, 2006), this study is significant as it supports web designers and developers to deliver a more pleasurable e-commerce system that meet or exceed users’ experiential needs.

As aforementioned, this research proposal includes the methodology that may be conducting in fulfilling the said objectives. The determined number of (40) participants was in accordance with Morse (1998) who proposes that qualitative research should involve a sample size of approximately 30 to 50, depending on informational redundancy or saturation. The experimental methodology used by Yogasara (2014), which involves co-discovery, coding, and relational analysis was adapted. In a co-discovery
session, two participants are asked to individually imagine a desired e-commerce website and to collaboratively explore and discuss their product concepts. In the next task, they are instructed to pretend to use and interact with their imagined website. This is to be followed by their exchanges of views. Subsequently, participants are asked to individually draw a sketch of their e-commerce website concept, including other information related to their perceived interactions and experiences with that product concept. They then explain their sketch to each other. The last task is for participants to contemplate and share their perceived future experiences and feelings pertaining to the anticipated use of their imagined website. Observation of the experiment session (through video recordings) is to be conducted to support verbal data analysis. The verbal data extracted from co-discovery are to be coded using ATLAS.ti software, where textual data are labelled with categories (factors). Then, a relational analysis is conducted by calculating for the co-occurrences of categories in the statements of the respondents. These co-occurrences will determine the existence and strength of relationship of the categories will have in the WebAUX framework.

References:


