

TOWARD EXPERIENCE DESIGN

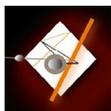
The changing face of technical communication

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Keywords. Design, Experience, Usability, Emotion, Culture, Engagement.

The changing face of technical communication is no longer centered solely on the principles of document design, audience and task analysis, the specific heuristics in design analysis, and interactions design; rather, attention has shifted to include what makes for good experience. Good experience design demands a widening scope for user engagement and goes beyond the interaction between the system and the user.

Experience design (Aarts & Marzano, 2003) could be better explained by asking questions like: “Has the traditional role of the user and designer changed or merged to a large extent?” “Is design an experience or an outcome?” “Is design for task completion or for engagement?” Design in this era is more about creating a community, relation, feelings, friendship, and collegiality that promotes and maintains a sustained user interaction with the interface. Users will remain interested



CONNEXIONS ■ INTERNATIONAL PROFESSIONAL COMMUNICATION JOURNAL

2013, 1(1), 111–118

ISSN 2325-6044

in an interface not only because it looks good, but because it keeps the user engaged in continuous exploration, newer applications, a deeper level of personal satisfaction, dynamic feedback, and a sustained dialogue among users of the system.

Recent research (Sun, 2012) on culturally localized user experience (CLUE) and cultural usability could help explain how experience design professionals deal with cultural differences when designing to maintain user engagement. This research provides explicit indications of how identifying culture-specific markers—for page layout, navigation, text and graphics links percentage, search function, display density, underlined links, total amount of items, etc.—for different web application designs, and targeted to a multi-cultural audience could facilitate sustained user engagement and a superior experience.

Cultural models provide enough indication of how culture-dependent interpretation of context, space, and time might influence users' experiences when interacting with an interface or application. Marcus and Gould (2001) have investigated how cultural factors—based on Hofstede's cultural dimensions in considering the usage requirements, preferences, metaphors, appearance, mental models, and navigation of different user web designs—influence and support a higher level of usability, as well as a better understanding of web content. All this research suggests a new set of usability heuristics focusing, not only on audience background, but including usage preferences stemming from multiple cultural conventions.

There is recent research focusing on designing professional communication systems for both experience and emotion. Adding social

cues to a web site has been suggested as a possible strategy to increase consumer trust in online vendors. Research studies have examined the effectiveness of including photographs in an e-bank's web site and found a significant positive effect on perceived trustworthiness of the examined web site (Steinbrück, Schaumburg, Duda, & Krüger, 2002). In the past, research projects discussed how computer-mediated communication systems should be structured systematically to prevent information overload, but structure should be imposed by individuals and user groups according to their needs and abilities, rather than through general software features (Hiltz & Turoff, 1985). We are now talking about “mixed reality teaching & learning environment” (MiRTLE) that enables teachers and students participating in real-time mixed and online classes to interact with avatar representations of each other (Callaghan, Shen, Gardner, Shen, & Wang, 2010).

Research (Cook & Das, 2005) on designing for the human experience in smart environments, emotions evoked by mobile applications (Isomursu, Tahti, Vainamo, & Kuuti, 2007), discovery that visual design aesthetics significantly impact perceived usefulness, ease of use, and enjoyment—all of which ultimately influence users' loyalty towards a mobile service—definitely point to the fact that professional communication is riding the wave generated by experience and emotional design.

Experience with a product often could be interpreted in terms of its emotional appeal and subsequent design. Norman (2003) provides a comprehensive example of how to look at a product by considering behavioral, visceral, and reflective aspects of design. So far, however, little

is known about how users respond emotionally to products and what aspects of design and interaction trigger emotional response (Desmet, Porcelijn, & van Dijk, 2007), although there also is research identifying quantitative relationships between key design factors and dimensions of emotions for developing homepages that target emotions more effectively (Kim, Lee, & Choi, 2003).

New research in applied ergonomics explores users' emotional relationships with products. Such research projects have discussed new user needs analysis techniques like *product personality profiling*, *mood boards*, and *visual product evaluation* toward developing heuristics for emotional design (McDonagh, Bruseberg, & Haslam, 2002). Also, the concept of Kansei Engineering contributes to our understanding of emotional design. New research involves the adoption of Kansei Engineering in web sites as a systematic method to engineer consumers' affective appeal and incorporate them into new formulas for web design (Anitawati, Nor Laila, & Nagamuchi, 2007).

Users' emotional relationships with products or interfaces also could be explained in terms of the shifting locus of control. To promote sustained user engagement, designers now allow readers to create customized products—mugs, t-shirts, calendars, collages etc.—using their own digital photos from a web gallery. Online news portals now give users direct engagement by asking them to post comments on reports or send in photos and videos (e.g., CNN iReport). Facebook or other online channels like Twitter, forums, and Tripadvisor allow users to create instant discussion platforms, provide information, support or challenge ideas and views. Web sites like Lulu and Amazon allow users to

self-publish. Amazon engages users by allowing them to write product reviews. Such ideas and varied applications create different experiences for the product specialists, architects, designers, marketing people and customers, with every idea and approach having a life of its own.

Depending on the application domain, it is quite possible that the traditional role of the technical communicator might be broadened to include a role as an experience designer. Additional heuristics related to designing and measurement of emotion, user engagement, and experience with and without the system, and locus of control should be developed. This new-age technical communicator should remember that the goal is not simply to capture the direct interaction between the system and the user; neither is it to jump right into the design process. It is equally important for any design to schematize and include additional experiences related to the product (e.g., branding, mass media experiences).

Research into cognition and behavior is still important. Everyone still wants to know what and how users and designers think about design. But we have reached out to embrace more than cognition and behavior. Experience design starts with models of holistic experience and with a story—not mock-ups of specific screens. And it still needs the traditional brainstorming techniques, prototyping, writing in sequences, and so forth, in the design process—although with different priorities and terms of use. The traditional usability methods have been updated to include more state-of-the-art techniques, and the traditional document design techniques are used in a way to promote engagement and provoke emotional appeal.

We have reached a stage where it is rather abstract and difficult to quantify who contributes to the design and to what extent. There is no one way to an experience because everyone involved has different stakes and viewpoints in the design process. To start with, we need a holistic approach to experience modeling, rather than getting bogged down with interface level details. Experience design introduces a cybernetic approach to the design environment and outcome, where action by the design system causes some change in its environment, and that change is fed to the design system via information—feedback—from any experiencer, enabling the system to change its behavior. ■

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