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Editorial: User Preferences and Creativity in Design

The study of user preferences and creativity in the context of design is the subject of this issue. Understanding the users' preferences, cognitive processes, and role in the design process is of importance to designers and manufacturers. As one of the authors in this issue notes, "listening to consumers' voices" and "satisfying consumers' needs" have become essential in product design. The studies of user preferences and creativity in design are trandisciplinary since they inevitably involve techniques and approaches developed across disciplines.

The first paper in this issue, entitled "Pair-Wise Preference Comparisons Using Alpha-Peak Frequencies," presents an interesting methodology that uses brain signals to capture user preferences of given designs. Combining biology and design does indeed provide an opportunity to develop trandisciplinary techniques in order address a research question on user preferences. Product designers and manufacturers of products would put weight on the ability to effectively capturing customer preferences accurately. This study consisted of showing subjects images from the International Affective Picture System (IAPS) library while measuring their biological signals (EEG signals in this study) from the steady-state level. The results clearly showed a strong relationship between the strength of the biological signals (alpha-peak frequency) and the preference of an individual. It was shown though that the alpha-peak frequencies cannot be compared for different subjects. Furthermore, the study also identified cognitive preference of participants when both cognitive and affective preferences were present. The proposed preference extraction method has an application potential marketing research and neuromarketing.

The second paper in this issue is entitled "User as Designer: A Design Model of User Creativity Platforms" and it presents a design model of platforms to satisfy user creativity for physical products. Here, the focus was on areas (form, function, and use) that are relevant to a user, so s/he can re-create or re-design. In this study, the creativity platform is defined as a tangible; its partial or overall elements, usage, ways of presentation, function types, and operation methods allow the creators to design the product and show their own creativity. In this paper, the User Creativity Platform consists of four features, namely, open design rights, tolerance for unerror, reconfigurable components, and creativity-friendly interfaces. The model presented in this paper is shown to effectively develop toys more advanced than other products of the same category by allowing a high sense of ownership, curved surfaces, improved interpersonal interaction, and variety and innovation of the outcomes. The design model of user creativity platform creates a new design value for the user, namely, experience of design, which is an elevation from just product design.

The third paper in this issue also focuses on the user or customer and is entitled "Using the Systematic Empathic Design Method for Customer-Centered Product Development." This paper introduces the Systematic Empathic Design Method (SEDM) for developing customer-centered products using Hierarchical Value Maps, Implication Matrix, Laddering Interviews, Mind Mapping, and Participant Observation. SEDM strives to understand the consumers' emotional state and gain insight into consumer

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experiences of a given product. Although currently the techniques used in SEDM are based on only visualization, there is a potential in future to integrate hearing, smell, taste, and touch. This would certainly increase the effectiveness of interpreting the customers' demands.

The last paper in this issue is entitled "Creative Space in Contemporary Swedish Moving Image Production." It elevates the notion of 'creative space' as a critical asset to manage in the design process. In particular, this paper explores the constraints on creativity introduced by digitalization (shifting from celluloid to digital technologies) in the film and TV production chains. The impact of the environment on the how the designers think and act is considered. And the role of constraints in creativity is acknowledged. The authors noted that the lack of effective workflows is the most critical element that constrains design creativity. They propose a pre-production file format check-list as a tool to support design management.

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