The future of interactive furniture: Design opportunities vs. limitations

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Abstract:

Interaction design has become one of the most trending design approaches growing rapidly, developing every usable type of product. It represent according to David Kirsh a new world of physical, natural, and tangible interfaces. We can interact with digital elements by gesturing and body movement, by manipulating everyday objects and even by training brain activity to control interfaces. But interactive furniture design has a very special nature, due to several reasons and factors that affects the process of developing it. Usability and sustainability with their sub-branches like UX could be considered the main source for these reasons and factors, because both of them include and represent nearly all the majority of modern criteria that control designer's way of thinking and all design process. For example, the furniture will be transformed into a kind of electronic product with increasing obsolescence, what will cause an environmental limitation.

In this paper, we criticized the current state of art of interactive furniture and it`s suggested conceptual designs, by using the principles of both usability and sustainability. In a try to envision the future of interactive furniture. Exploring both the possible design opportunities, and the limitations, to make it clearer for the designers and encourage them to work creatively on sustainable interactive furniture (SIF).

Key words: