Biometric analysis during the interaction with an affective computing-based prototype: A first exploratory study using neurophysiological measures.

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Abstract

In the field of affective computing, human-computer interaction practitioners and academics are looking for ways to measure the acceptance of new emerging products that can interpret and adapt to user emotions in real-time. This paper evaluates two such affective computing-based interactive prototypes to explore the biometric responses and attitudes towards these types of products. For this purpose, we present two experiments where we use neuromarketing techniques to measure these biometric responses and attitudes with a total sample of 34 participants exploring initial reactions to these innovative products. The results show that interaction with these prototypes has a greater engagement and impact than with traditional products. We conclude that affective computing has the potential to greatly change the way we interact with technology, making machines more responsive to our needs and emotions.

Subject Areas: Consumer Behaviour, New Product Development and Launch

Track: Innovation Management & New Product Development