

**AN AFFECTIVE ENGINEERING APPROACH FOR ENHANCED
USER INTERFACE DESIGNING: A CASE STUDY OF WEBSITES OF SRI
LANKAN HIGHER EDUCATIONAL INSTITUTES**

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Organizations always seek ways to attract and retain customers by providing the best user experience. In this regard, enhanced user interface (UI) designing of web sites is crucial. Apart from improved usability, emotional arousal and aesthetic appeal of UIs must be well considered during designing. Kansei Engineering (KE) is an affective engineering approach which aims to transform consumer affect into design elements. Recent review of literature reveals that KE is frequently explored for tangible products while its potential in UI designing remains to be explored. Further, the existing studies heavily focus on e-commerce web sites while institutional websites require further attention. Therefore, the aim of the study is to introduce KE for UI designing of institutional websites, specifically of Sri Lankan higher educational institutions. Employing ten specimen websites, a questionnaire survey was carried out as the subjects being Sri Lankan undergraduates. For each specimen, the product property space was documented including colour, layout, lines/shapes and typography. As the semantic space, a Kansei word database was developed referring to related research articles, magazines and similar evaluation metrics. Survey questionnaire comprised 12 bipolar adjective pairs each on a five-point semantic differential scale, derived from the above database. Moreover, the preference for each specimen was obtained on a five-point scale, and no intermediate labels were used. For statistical analysis, Principal Component Analysis was employed through the findings of which the design guidelines were to be established. The study is limited by the inclusion of a homogeneous study population whereas age, culture, and occupation-based differences are important to be explored. Design elements which require in-depth analyses are also to be identified through this preliminary study. It is believed that the study would contribute in bringing out a KE-based design model which helps revamp the Sri Lankan higher educational websites.

Keywords: Affective engineering, Higher educational institutions, Kansei engineering, Semantic space, User interface designing