

Investigating the Application of Kansei Engineering Principles in Mazda Car Design: A Review

HTS Caldera^{1#}, AMYN Amarakoon¹, HMG Divyanjalee¹, SMAU Serasinghe¹,
AGLAD Tharusha¹, and LP Kalansooriya¹

¹Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

#38-bcs-0007@kdu.ac.lk

Abstract

The integration of user emotions and preferences into vehicle design is becoming important in the current competitive automobile industry. Kansei Engineering, a theory for quantifying the psychological and emotional needs of consumers, has emerged as a valuable approach to address these requirements. The study explores the application of Kansei engineering principles in Mazda car design and explores how Mazda uses this approach to create vehicles that resonate with consumers on an emotional level. This review adopts a systematic methodology that includes a comprehensive literature search and selection of relevant articles, data extraction, and insightful analysis to evaluate specific Kansei-inspired design components attempted by Mazda and evaluates their impact on user satisfaction and brand loyalty. By understanding user emotions, Mazda designs vehicles that go beyond functional attributes, establishing strong emotional bonds with consumers. The analysis highlights Mazda's successful implementation of Kansei engineering, positioning them as a leader in creating vehicles that inspire and delight drivers in a highly competitive market.

Keywords: *Kansei Engineering, Car design, Emotions, Preferences, Aesthetics, User satisfaction*