Design and Technology -The Strategy for the Innovative Product Meanings and Technology-

さとる ごとう Satoru Goto

This study defines an output of design as a meaning and shows a relationship between technologies and meanings. Additionally, this study examines of what kind of the technologies the meanings consists and how companies conduct innovations of their product spec and meanings strategically.

This study proposes the novel framework including the technologies and meanings. Recently, the innovation of the meanings is recognized as important competitive advantages. However, academic researches are not enough to find frameworks to examine it and many theoretical challenges is remained. The prior studies for the meanings focused on consumers. Therefore, they are lack of the perspective of technology management. Additionally, the prior studies for technology management focused on the technologies and new product development (NPD). Thus, they are lack of the perspective of the meanings. Our framework show the elements of which the meanings consisted and relationship between them and the technologies. We also find that which the elements influence consumer purchase behavior by our framework. This shows which kinds of technologies companies should develop. This study also evaluates our framework by qualitative and quantitative analysis. The results show that the strategy of Panasonic's flat panel display was effective for Japanese market. Though the prior studies proposed to evaluate the product with two dimension, spec and meanings, they didn't examine quantitatively. Thus, this study can contribute to development of prior studies in both theoretically and empirically.

The empirical implications of this study are that the companies can find 1) which strategies, spec or meanings, their resource is suited, 2) for which technology development designers, which are responsible for the innovation of meanings, cooperate. The theoretical implication is to be able to evaluate the process of NPD and strategy theoretically. Most important implication is to contribute to develop the research of the meanings in technology management discipline.