

Design Education for the New Millennium

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Abstract

Design Education plays a crucial role in the economy of a country and is of considerable importance in terms of the well being of the industries. While mere manufacturing activities, even of sophisticated nature can be sustained through imported technology and design, steady growth in industrial production and diversified product line are possible only through indigenous design and production. This alone can ensure competitiveness in today's market place. In order to augment human resources in the area of design, academicians should take every effort to impart training and confidence among the students to undertake total design. A well-planned design program with the active support of industries is the only solution to such an end. This method has proved successful in developed countries. Malaysia with a Vision to realize the status of a developed nation by 2020 should certainly take serious efforts to establish Design Schools in the immediate future itself, to take on the challenges of the Millennium that has just been born.

Keywords

Design Education, Industrial Design, Engineering Design, Product Design.

An Empirical Study of the Relationship among Design Autonomy, Design Integrative Mechanism, and Design Performance

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Abstract

This study mainly explores how Taiwan's information firms implement their design autonomy, the fitness of design autonomy and design integrative mechanism, and the impact on design performance. Even though the potential advantages of design on the cross-functional integration in the business have been exploited in prior studies, little has been known of the linkages among design autonomy, design integrative mechanism, and design performance.

The main objectives of this study are: 1) to identify different design autonomies of the firms; 2) to investigate the ways of design integrative mechanism of the firms; 3) to explore the impact of the fitness between design autonomy and design integrative mechanism on design performance. Eighty-three manufacturers from Taiwan's information hardware industry were sampled as empirical subjects. The results show that design autonomy has the significant direct effect on the design collaboration of design integrative mechanism. In addition, a higher level of design autonomy is associated with higher achievement of design efficiency across production, quality and time; however with one exception, budget. Through the moderated regression analyses, the study found that the level of design autonomy moderates the influence of design integrative mechanism on quality and time of design efficiency, utility patent of design innovation, and design adaptability. Finally, implications for design management and recommendations for future research are briefly discussed based on the results of the study.

Keywords

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