

A suggested framework for evaluating the status of design by using the concepts of (Prioritization Matrix) and (SWOT)

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Abstract:

This paper seeks to devise a systematic framework to be used in defining the status of the industrial design (ID), in terms of (1) Select the best design amongst a set of designs, (2) Determining the status of a certain design, (3) Defining the alternatives of evolution for a certain design. This systematic framework can help the productive institutions in defining the status of the current and/ or the new design/ designs, with the purpose of determining the alternatives of development.

The suggested framework is based on the use of the concept of the (Prioritization Matrix) in calculating the relative decimal value (RDV) for the most important factors that affect the quality of the design, namely, (Appearance; Function; Price; and Time of supply), in addition to exploit the concept of (SWOT) as a tool that helps in determining the status of design by sorting the factors affect the design quality into two main groups, where the first group includes the internal factors, and the other group includes the external ones. It is worth to mention that the research doesn't seek to use any of the design analysis tools of SWOT nor the prioritization matrix strictly, however the paper is limited to make a combination between the concepts of both of the aforementioned analysis tools to devise a simplified framework. Eventually, the paper provides a case study which dedicated for applying the suggested framework in analyzing the design of some glass products. **As for the most important results;** it was possible to demonstrate the importance of design as an innovative activity in the enterprises which seek to Excellency and leadership by establishing a relation between the status of the design and competitiveness, in the frame of sustainability and social responsibility concepts, which rule the market nowadays. Furthermore, its was possible to use the concept of (SWOT) in specifying the internal and external factors that affect the design status. Eventually it was possible to devise a suggested framework, to be used in analyzing the status of design by using the concept of the relative decimal value (RDV) and (G.RDV), that derived from the methodology of the (Prioritization Matrix), in addition to harnessing the concept of (SWOT) in classifying the factors that affect the quality of the design, thus determining the development alternatives for a certain design, the research ended by applying the suggested framework –in question - to a case of analyzing the designs of some glass products, where it was possible to stand on the best design, and define the potential alternatives for the evolution of the designs under study.

Keywords:

- SWOT Concept
- Prioritization Matrix
- Design
- Evaluation Alternatives
- Glass Design Evaluation
- Industrial Glass Design

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