

Standards of industrial product design and its relationship to user behavior guidance

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Abstract

One of the main tasks of the industrial designer is to study the relationship between "user, product, environment" and to estimate the different factors of use to understand and analyse the psychology of the user. The user's behaviour consists of both its actions and its responses when dealing with different products. Since the design or development of a new product requires a study of the user's behavior as well as the characteristics and needs of the user and the implementation of appropriate solutions, and thus the user's status as the architect of the design, the use phase is one of the longest stages of the product's life cycle, from which the impact of the product on the environment or the human being during the process of use and the risks that the product carries. Traditional spatial design has been concerned with reducing the negative impact of industrial product use on the environment during the (pre-and-post) phase of use and sustainable product design through (use of recyclable or disassemble ores) to improve energy efficiency and the investment of specific resources, but this does not always make a difference due to unsustainable patterns of behaviour .

Research Problem

The problem of research is that an industrial designer needs the knowledge needed to achieve comprehensive concepts of sustainability by studying user behavior, identifying barriers to achieving the desired results of design strategies for sustainable behaviour, and choosing the most appropriate design methods to overcome them to apply sustainability concepts in product/systems/services design and to ensure their sustainability.

Research Objective

The research aims to study consumer behavior and interaction with the environment and changes in its behavior with its interaction with industrial products and the impact on the design standards of the designer

Research hypotheses

When providing the designer with adequate knowledge of sustainable behavior, the designer can integrate and apply design strategies to change user behavior in many areas and to identify

and overcome the capabilities and constraints that shape the behavior, thereby maximizing the use of the product and achieving the goals of sustainability.

Research Methodology

The research is based on the inference approach

Research plan

The research plan includes a range of integrated stages

1. The stage of surveying and gathering information, which includes the collection of information and data on the behavior of the user and the study of the stage of use and the experience of the user and benefit from it in finding the relationship between the product and the consumer
- 2 The analysis phase and at this stage the classification, analysis and evaluation of the information reached at the survey and information gathering stage
- 3 At this stage, the development phase builds a knowledge base for different types of design strategies and their association with sustainable behavior and how to integrate and apply these strategies and user patterns and classify them with the industrial designer to reach the best results in order to achieve comprehensive sustainability.
- 4 The stage of results and recommendations in which the results and recommendations reached are presented and applied in the field of industrial design

Keywords

Human behavior - Behavior models - Sustainable behavior - Design for Sustainable Design