

IMPROVEMENT OF DESIGN THINKING PROCESS USING KAIZEN TOOLS

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Abstract:

The aim of this study is to enhance the performance of Design Thinking (DT) Process with the integration of Kaizen methodology and tools. Design thinking process engages a high degree of creativity in a way that is controlled and directed by the process so that it is channeled towards producing a viable, practical solution to the design problem, meeting or excelling the stated aims of the brief. A large number of design methods and tools have been introduced to facilitate DT process. Empathizing, Defining, Ideating, Prototyping, and Testing are the common stages of a DT process. Empathizing relates to direct interaction with users, on whom the definition is based. Ideation phase includes brainstorming and generating solutions, while the prototype phase implies rapidly making numerous prototypes. Finally, the test phase can also include the final implementation. Selecting the right tools in a DT process is undoubtedly important for effective decision making and communication in a multidisciplinary team. However, according to the extant studies, there are some obstacles or gaps during the implementation of the DT process, which affect the performance of the process and quality of solution, design, and prototype. To fill the gaps and improve the performance of the DT process, in this study, an enhanced design thinking model with the integration of some Kaizen tools to the DT stages was suggested (KiDT). Kaizen is a continuous improvement strategy aimed at solving the problems through the constant involvement of both managers and relevant staff working together to meet customer needs. Kaizen lists numerous process improvement tools (Pareto, 5Why's, Brainstorming, Cause-Effect, and etc.) that can be easily integrated into the DT process. The proposed model represented an extended approach for the product or service creation and also aimed at finding innovative solutions with the help of combined management principles.

Keywords: Design thinking, KAIZEN, Product and service development