

Design and Development of Space Saving Furniture for Low Cost Houses in India



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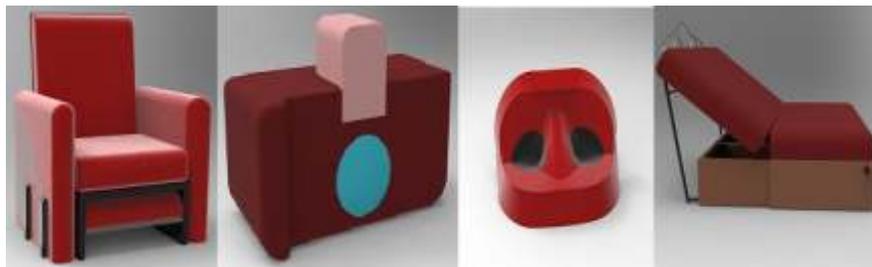
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Abstract:

Design is the creative process which brings ideas to reality. The proposed project 'Design and Development of Space saving Furniture for Low cost Houses in India' was taken up to find a solution to the problem through the creative process. Furniture can be considered as product design and a form of decorative art. It offers the traditional as well as modern aesthetic looks to environment of the house.

The design process started with the data collection through various primary research methods and found the need of space saving furniture for low cost houses in India. Data collection carried out through literature review, product and market study produced valuable inputs for the final product. Users interview, survey reports carried out for finding out the aspirations of the public and detailed ergonomic study for make user friendly product. The data offers from the various research methods to arrive at Quality Function Deployment (QFD) and Product Design Specification (PDS) followed by creation of doodles and concepts by the references of metaphor and user behavior to the product. Final concept selected by weight ranking method and participatory method. The selected concept based on space consumption has designed to arrive at satisfactory solution. Different transformations like sofa, divan, bed are shown multifunction and cost reduction features were incorporated in the final design.

A Mock up model was prepared to check the function of mechanisms, followed by a 1:1 working model called 'MOBEL' manufactured with different materials and stages of processes. Validation was carried out for function, aesthetics, ergonomics, and other important aspects of the product by user feedback, the results were positive and satisfactory.



Concept designs of space saving furniture



Working model



Final concept & logo