

Digital Modeling Techniques and Its Impact on Furniture Design Processes

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Abstract:

This paper studies the impact of digital modeling techniques on furniture design processes. In addition, this paper also attempts to provide a development vision for furniture design processes to keep pace with their global counterparts; to reflect this on the furniture industry in Egypt. **Problem Statement:** Furniture design has undergone several changes to keep pace with the continuous developments in the industry; where the shift from manual craft production to automated production to the use of digital technologies in design processes, which has been reflected in production methods. Digital modeling techniques contribute to the development of furniture design processes from their inception to the start of various production processes. It is therefore important to admit the extent of traditionalism in furniture design processes in the local market. **Research Aims:** The research aims to clarify the role of digital modeling techniques and their impact on design processes by linking these technologies to furniture design processes, to reflect positively on the development of the furniture industry in Egypt. **Importance of research:** The research is interested in studying the digital modeling techniques to provide a developmental vision of furniture design processes to keep pace with their global counterparts; to reflect this on the furniture industry in Egypt. **Research methodology:** based on the analytical descriptive method. **Results:** The use of two- and multidimensional digital modeling software helps the designer to obtain multiple design alternatives characterized by accuracy. Employing digital modeling techniques in design and manufacturing processes is critical as it will develop the design process to align with modern trends globally. Educate designers and industrial organizations to take advantage of multidimensional digital modeling techniques in developing their products to compete with similar products in local and global markets

Keywords:

Furniture Design Processes – Design Methods – Modeling - Digital Technique

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