

The impact of smart furniture design on meeting the needs of a limited-space housing

Prof. Ali Mohamed Senosy Mohamed

Professor at Interior Design & Furniture Department – Faculty of Applied Arts – Helwan University

Prof. Noha Fakhry Abd El-Salam Ibrahim

Professor at Interior Design & Furniture Department – Higher Institute of Applied Arts – NCA

Dr. Muhammad Hassan Ramadan Hassan

Demonstrator at Interior Design & Furniture Department – Higher Institute of Applied Arts – NCA

Moh.hassan9228@yahoo.com

Abstract:

Life in a limited-space dwelling is one of the most important problems facing residents due to the failure to meet their changing living needs. Which requires re-thinking in a functional way to provide the largest number of human needs without the need to change housing and move from one housing unit to another larger. Thus, it is possible to overcome the problem of owning large and expensive spaces in order to satisfy the wishes of the user and meet his changing needs. Hence, the responsibility of the interior designer comes towards finding appropriate design solutions to solve this problem in a way that is consistent with the user culture in light of modern technology for furniture design.

Through the technological developments in the design of residential buildings using artificial intelligence technology (computer home, digital home, interactive home ... etc.). Consequently, the traditional concept of furniture units has changed from just inanimate objects that humans use to units that are able to sense, identify and interact with users to meet their needs and desires. It was therefore necessary to resort to the idea of intelligent furniture that integrates with everything that surrounds it and interacts with it in response to changing human needs within the void using intelligent systems that have helped to time and effort to perform the required tasks in a given time.

It is worth mentioning that the change in the function of the furniture unit was not only a functional change but was followed by a change in shape to suit this advanced technology, the reductive trend became the dominant in furniture design, where the designs with geometric shapes became easy to configure and realize, far from Jostling decorative elements, the clean lines are suitable for the computer technology used in the furniture unit, as well as with the executing materials of wood, glass and metal that have made an unprecedented breakthrough in the age of technology.

Keywords:

Smart System – Smart Furniture – Narrow House