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Improving Design Efficiency Using Artificial Intelligence: A Study on the Role of Artificial Intelligence in Streamlining the Interior Design Process

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Abstract:

Today, the world is witnessing tremendous technological advancements in the era of the Fourth Industrial Revolution and artificial intelligence, which has changed many concepts and work patterns. It is a comprehensive revolution that is radically reshaping reality in all fields, including interior design. This requires interior designers to develop their capabilities and skills to respond to the changing world and its rapid technological transformations to meet the requirements of the future job market. This raises research questions about the impact of artificial intelligence on the design process and whether it will replace the role of the interior designer.

The research aims to identify the nature of artificial intelligence and its impact on the design process, as well as to measure the extent of the impact of artificial intelligence techniques on the future of the design process and the interior designer through a questionnaire prepared for a random sample of designers in the field of interior design.

The importance of the research lies in raising awareness among designers about the importance of keeping pace with development and benefiting from modern technologies to improve design efficiency and create a new generation of designers capable of dealing with the developments of the era and employing them in new innovations that serve humanity. The research assumes that artificial intelligence applications contribute effectively to the development of creative abilities and design skills.

The research has reached a set of results, most notably that artificial intelligence tools are a means and tool for brainstorming and inspiration that contribute to improving design efficiency and enhancing creative abilities, and are not a substitute for the interior designer. The research recommends the necessity for designers to keep pace with technological developments and to exploit the capabilities and possibilities of artificial intelligence tools and software to improve design efficiency and save time and effort.

Keywords:

Artificial Intelligence (AI), Interior Designer, Streamlining, Design Process and design ethics.

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