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Technology and Interactive Architecture: The Impact of Technological Innovations on Building Design and User Experience,

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Abstract

Interactive architecture is considered one of the contemporary ideas which emerged as a result of technological advancements and the emergence of environmental, functional, and human issues that traditional architecture was unable to solve, the interactive architecture requires dynamic architecture that is adjusted to adapt to internal and external conditions through movement, interaction, flexibility, and integration with people and the environment. The research explains interactive architecture's concept, definition, history, goals, advantages, and the role of interactive architecture in achieving adaptive design by conducting a comparative study of pioneering architecture projects of some countries that have adopted the idea of interactive architecture and analyzing these projects to extract the interactive technologies used and their role in improving building performance. Finally, the research indicates that the future of architecture is increasingly dependent on technology, as these innovations are expected to continue to reshape the urban environment, opening the way for smarter and more sustainable buildings that meet the needs of modern societies more efficiently.

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Keywords

Interactive Architecture, Technology, smart building, Artificial Intelligence, Adaptive Design

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