The role of digital technology in shaping public architectural spaces and its impact on human behavior

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Abstract:

The digital technological revolution depends primarily on the human mind, and its capabilities in using computers and internet networks, and with the advent of the computer in the sixties, interaction processes became possible. One of the digital artworks that give the designer the freedom to choose and propose various design alternatives that stay away from repetition and select the best, through the language of dialogue between the designer and the computer programs produced for it, such as virtual world arts that produce virtual reality industrial life and the art of processing in the digital interactive space Installation Interactive Digital Art and graphic images that are difficult to produce by hand. For the artist to process and program the mental image of his basic idea, and produce it in a way Visual is keen not to reduce intellectual and technical effectiveness and turn it into dry mechanical thinking. Research deals

The first axis: modern technological trends that contribute to the formation of general architectural spaces that achieve interaction and raise the general taste of individuals.

The second axis: human behavior and its impact on technological development and its immersion within the artwork and its taste in a framework outside the exhibition.

Keywords:

Digital media technology, human behavior, digital applications, digital design, digital orientations, Installation Interactive Digital Art

The Introduction:

Today, the world is witnessing a boom in all areas of life. The scientific and technological revolution, beginning with the industrial revolution, passing through the digital revolution, and even nanotechnology, is one of the most important and prominent manifestations of change. Technology invisible to the naked eye makes public spaces a special and different place for each person who passes through it. The amazing technological progress has contributed to the use of digital technology in all lifestyles.

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Design directs technology and uses it to achieve material forms of ideas through production materials and methods used. Digital technology is an important field for continuous development, as it adds formative and executive dimensions, allowing the designer to implement his ideas with maximum efficiency and many alternatives that help him solve design problems. The use of technology is also Digital in design is in addition to the physical dimension and philosophical thought of art, which shows many different ideas that combine it with modern technology that is widespread in the current era, and thus both of them become one of the most important elements for producing unprecedented artistic formations, and Frank Popper points out in his book "Technological to Virtual Art "What is new in digital media art is the humanization of technology and its emphasis on interaction.

Research problem:

The research problem is summarized in the following:

- 1. The scarcity of functional digital interactive works in public places and the neglect of benefiting from them in the field of cultural development at the public level.
- 2. Interactive digital arts are limited to exhibitions and indoor spaces, while the average recipient can taste art in public spaces outside the framework of the exhibition, and then the greatest benefit is achieved through interactive artworks.

research aims:

The research aims to:

Clarify the importance of benefiting from digital technology and integrating it with the design of artwork within public spaces to keep pace with the spirit of the times, whether in design or techniques and implementation methods in line with the Egyptian environment.

- 1. Reformulating the design of artworks to create new, innovative and unconventional visions to beautify public spaces that work on communication and interaction between the recipient and the artwork within a meaningful framework.
- 2. Drawing inspiration from the Egyptian civilization in designing interactive digital works suitable for different age groups in public and open spaces.

research importance:

The importance of the research is determined by the following points:

- 1. Discovering the impact of technological development and how to benefit from the merger of the fields of art and technology together, in influencing the recipient and immersing him in the artwork to become more interactive.
- 2. The role of digital art in contributing to the formation of the concept of art with updated visions of the foundations and plastic techniques within public spaces, enabling artists to express their ideas freely and opening new horizons that were from the paths of imagination in traditional systems to reach all segments of society.
- 3. Contributing to the development of public spaces with designs that keep pace with technological development and transforming them into public exhibitions full of movement and interaction.
- 4. Shedding light on the impact of digital art on the recipient's behavior and activities within public spaces.

Research hypotheses

- 5. The creation of digital artistic designs in public spaces achieves a utilitarian and aesthetic value as art museums are open to their visitors from the public with the aim of reaching art to the largest public base, working to integrate the gap between the artist and the recipient, which would raise public taste and stimulate human energies to interaction and creativity.
- 6. The application of digital art works to achieve theories of perception of the recipient and his positive interaction with the environment in which he lives.

Research Methodology

1. The research follows the descriptive analytical approach in:

Describe and analyze the impact of the fusion of art with technology on the perception of public spaces, and how to influence human behavior in the light of modern technology.

Results

- The use of modern digital technology led to the formation of the concept of art with updated visions of the foundations and plastic techniques within public spaces and enabled artists to express their ideas freely by presenting an entertaining design that enables the recipient to enjoy it and interact with it by employing different senses. Traditional systems to reach all segments of society.

Digital design has a fundamental and important role in social life, not only in advancing different ideas, but also in its ability to understand and absorb society's problems, find various solutions, and deliver important messages according to age groups to reach the maximum level of interaction.

The use of modern technologies in interactive architectural interfaces works to immerse the recipient and transform them into public exhibitions full of movement that allow the recipient to create, design and participate through the use of different technological applications for a number of users at the same time.

Recommendations

- The design of public spaces must be done with a great deal of awareness of the changes and requirements of the era, and that interactive artworks carry within it developmental goals and their role is not limited to beautification only.
- The need to work on integrating digital technology of all kinds and technologies into the design process of artwork to support and contribute to the formation of public spaces to keep pace with technological development.

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