Applying design trends and modern techniques in interior design for Exhibition Halls

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Abstract

When studying the current situation of the major international fairs, we note the presence of design features that distinguish them at the architectural and urban level, as well as their connection to distinctive features as a result of being affected by the current modern developments, which led to the emergence of design features that distinguish those exhibitions that link people to each other. Therefore, the field of study was determined in the exhibition halls where the research identified the pillars of the system affecting the design of exhibitions, which greatly affected different methods of presentation and made a breakthrough through the concept of interactivity.

Modern technology also represented opportunities to develop the techniques used in exhibitions and the transition of design from the second dimension and third dimension to other dimensions that are more profound and interactive with humans. Interactive display methods are one of the important means to attract attention and effectively display the exhibits to deliver a message and achieve the goal for which the exhibition was held in a modern and innovative way, through the participation of the visitors through interaction with exhibits.

Despite the tremendous progress in the digital revolution and the effort expended in developing exhibitions, Egyptian exhibitions may not keep pace with international exhibitions in the desired and hoped-for way in terms of employing modern technologies in display methods.

Therefore, the importance of the research came to determine the most important design criteria for international exhibition halls and exhibitions, including determining the impact of technology, digital and environmental dimensions on the interior design of those exhibitions, which the architect and interior designer must take into consideration to achieve an integrated exhibition design.

The research problem is identified and becomes clear, as many exhibition designers tend to achieve the requirements of space only without looking to keep pace with the development of modern interior design trends that depend on advanced technologies and raw materials. It fits with the general characteristics of the exhibits by taking advantage of the design trends and modern technology in finding practical solutions to the design problems of the major exhibitions at present.

The research aims to shed light on modern technologies and link them to practical reality to raise the awareness of designers to contribute to the civilized development that we are witnessing.

Keywords.
Major exhibitions - Interior design - Virtual and augmented reality - Interactivity – Sustainability.

•Introduction

When studying the current situation of major international exhibitions, we notice the presence of design features that distinguish them on the architectural and urban level, as well as their connection to distinctive features as a result of their influence by current modern developments, which led to the emergence of design features that distinguish these exhibitions and that link peoples to each other. Many designers tend to fulfill the requirements of the interior space only without considering keeping pace with the development in interior design schools and trends. Shedding light on such theories and schools of thought and linking them to mental reality aims to raise the culture of users and contribute to cultural development.

•Research problem

The research problem lies in the tendency of many exhibition designers to achieve space requirements only without considering keeping pace with the development of modern interior design trends that rely on advanced technologies and materials. Therefore, the role of specialized scientific research is to find design solutions for the interior spaces of exhibitions in modern and innovative ways.

• Research objective

The research aims to shed light on modern technologies and trends and link them to practical reality with the aim of raising the awareness of designers in order to contribute to the cultural development that we are witnessing. It also aims to employ modern technologies and interactive technology as one of the display methods in a way that is consistent with design standards and trends and achieves sustainability in the internal spaces of exhibitions and exhibition halls. .

•Research hypotheses

The research assumes that employing modern technologies in innovative ways helps in facilitating modifications to obtain a space that matches the general characteristics of the exhibits, and in finding practical solutions to the design problems of major exhibitions at the present time.

•Research Methodology

The study within the research is based on the descriptive analytical approach by studying and analyzing some models and designs, especially the Expo 2020 exhibition in Dubai, and applying some of the techniques used in it in a project within the Arab Republic of Egypt.

•Results

1- The use of modern display technologies in exhibitions and the application of technological and environmental standards contribute to the success of exhibitions locally and internationally.
2- Applying the Metaverse virtual display technology helps facilitate communication with exhibition visitors.

3- Relying heavily on interactive elements of display, such as floors, walls, and ceilings, helps raise the level of display within exhibitions.

4- Using modern construction systems and building materials that can be recycled, such as wood, achieves the principle of sustainability.

5- The combination of nature and modern technologies in creating halls, as in the Expo 2020 Dubai exhibition, contributes to the idea of communicating the interior design of exhibitions with the cultural environment and the natural environment.

• Recommendations

1- Benefiting from international experiences in designing major Egyptian showrooms when holding internationally participating exhibitions.

2- Urging the Ministry of Tourism to work on developing existing local exhibition lands inside Egypt in line with global developments.

3- Encouraging specialized colleges and institutes to teach modern interactive presentation methods, especially Metaverse, in their teaching curricula.

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