INTERACTIVE ADVERTISING ENVIRONMENT

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ABSTRACT:

This paper focuses on the characteristics of design, technology, components and strategies affecting the interactive advertising environment. The goal of this research is to shed light on the interactive environments systems and methods that employed in advertising design and the possibility of their application in the field of advertising in Egypt. Also the paper explains the ways that Integrates components of the architecture internal environment in interactive advertising. This paper presents a proposed strategy for the design of interactive advertising environments in order to achieve the best possible impact on the receiver to achieve the purposes realizable and communication desired.

Keywords: interactive design - interactive advertising - interactive environment.

1. INTRODUCTION

Interactivity in the advertising communication process plays an important role, which is booming, especially after the large and rapid developments in computer technologies and digital technologies in advertising work. It is considered the basis for the production, display and retrieval of information based on interactive multimedia as a way to provide advertising message, which increases its effectiveness   as a result of association with technological progress.

Interactivity is the degree to which participants in the communication process will be able to control and exchanged the roles during the mutual interaction that includes a control, speed of response and the ability to terminate the process. The exchange of roles is linked to the degree of mutual interaction and the development of level of interaction between the sender and receiver.

So, this paper targets the study of the concepts associated with interactive environments and interactive advertising as well as characteristics of the elements and components of the interactive advertising environment.

2. INTERACTIVE ADVERTISING ENVIRONMENT CHARACTERISTSCS

Interactive advertising environment is part of the virtual reality, which creates of interactive spaces, which are the production of new worlds and imaginary at the same time, the worlds of fictional invention and the world is interested in marketing entertainment dealing of advertising with society and technology,

Advertising digital interactive Environment is a space where the agents of time and motion are important in the interactive experience, where the environment changes, moving and morphing, digital space offers many possibilities for architects, interior designers and interactive advertising designers.

With the increasing of humanitarian activities it becomes a significant impact on the social and cultural environment and thus the impact of the built environment and lifestyle, and therefore its impact on the advertising, marketing and advertising industry.
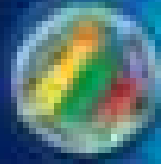
2.1 Interactive Simulation

Interactive is the model ability to respond to external influences, whether those influences are human or environmental effects.

Interactive simulation has come to form by various professional and technical methods as a magnet for the viewer through what they offer in the form of fun and an innovative template. Interactive simulation is a tool link between reality and fantasy, especially with all special effects allowing the viewer to live on the land of fantasy realism, Illusions its credibility is beauty, artistic, amazing, easy to understand, strong influence and aesthetically rich.

In Interactive simulation the responses is not necessary to be realistic, we shall never forget that we are dealing with electronic representation, whatever the accuracy of this representation and whatever the level of realism in it. These responses can be in accordance with the laws of the physical and chemical nature etc .It also can be according to the law of may the designer lend even if this law violates the laws of nature, for example, it can be two bodies collide crosses and snaps one of them inside the other, or fly in the opposite expected direction. (Moggridge, A., 2007)

The interactive simulation has many features which affect the quality of the final interactive process; these features are Activity, Immersion and Remote participation

2.2 Interactive Advertising Characteristics

The researchers divided of interactive advertising options in three forms:

-**Navigational Interactivity**: namely that guide the user to the next step or go back..... and so on.

- **Functional Interactivity**: It is made through direct mail, Links, and News groups

- **Adaptec Interactivity**: It is offer advertising enable to adjust itself with the user behavior.

There are a range of factors that affect the reception of the advertising message within the interactive advertising environment:

- Environment and Society.
- Recipient relationship with other recipients.
- Designer.
- Advertising message.
- Environmental interactive surface

The mechanics of building the interactive advertising system

- The possible fragmentation of the interactive advertising system elements to partial and secondary units that compatible to achieve the purpose of advertising and marketing.

- The possibility of diversity in design alternatives configurations to meet the changing of interactive functions to suit the needs of the recipient and the relationship with the interactive environment.

- The possibility of interactive advertising system separated into small functional units without damaging the components and structural units.

- Economy in time, effort and suitability for installation in various indoor environments.

- Possibility of replacement and switch through the provision of alternative components (spare parts for maintenance).

- The possibility of future extension by adding new modules and interactive elements.

- Easy transport and storage of the constituent elements of the interactive advertising system operations.

- Easy to change the status of the interactive advertising system or re-built.
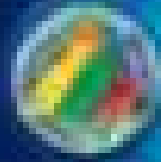
- Environmental friendliness through the re-use and exploitation of interactive elements and parts of the system again.

2.3 Interactive Advertising Systems Considerations

We can summarize the interactive advertising systems considerations as follow:

a. **Interactive advertising systems must be Maintainable**: which is the system's ability to adopt changes easily and without the high cost in the construction of its constituent elements.

b. **Interactive advertising systems must be of a high degree of reliability**: which is the degree of reliability which is characterized by the system when any attempt to use.

c. **Interactive advertising systems must be Efficient**: which builds interactive advertising system with a high efficiency degree taking into account the used cost.

d. **Interactive advertising systems must have appropriated User Interface**: because the user is the person who is not an expert to these systems and methods of work and care about is how to use interactive surfaces to meet its own needs.

3. INTERACTIVE ADVERTISING ENVIRONMENT FORMS

3.1 Interactive Walls

Interactive walls are a special type of computer applications that have become characterized by high amazing capabilities, which serves many life applications and one of the more convenient of interactive applications exciting for the recipient large models, starting with the associated applications collective action to computing applications in advertising and entertainment areas.

- The advantages of interactive walls:

1- Touch: Direct Experiences

2- Large Size: Life Size Experiences

3- High Res: Life-Like Experiences

4- Multi-user: Shared Experiences

5- Connectedness: Dynamic Experiences(Kelly L. Dempski and Brandon L. Harvey 2005)
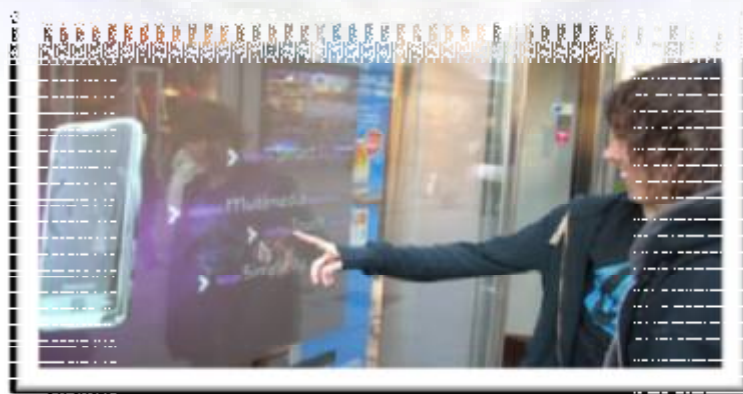

Figure 1 Touch: Direct Experiences
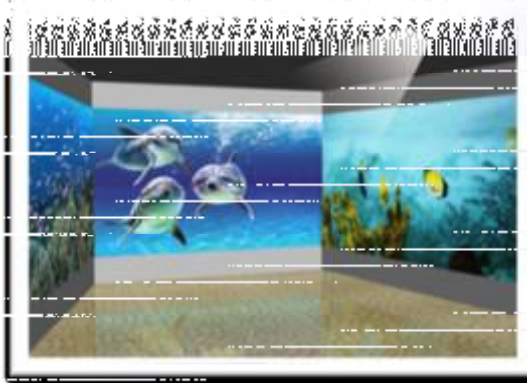
Figure 2 Large Size: Life Size Experiences

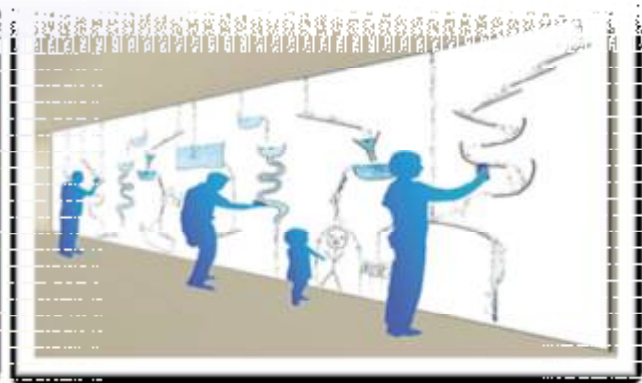Figure 3 High Res: Life-Like Experiences
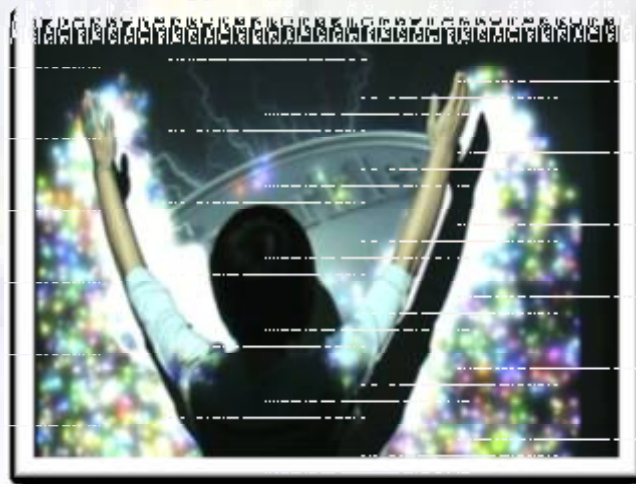

Figure 4 Multi-user: Shared Experiences

Figure 5 Connectedness: Dynamic Experiences

Forms "of interactive walls": the surfaces of the interactive walls are divided into two types as follow:

1- T-Frame.
2- Interactive Windows Display.

3.2 Interactive Floor

Interactive floor is one of modern technique means of projection technology, which offers an interactive experience enjoyable and post impressive interactive and this technology include attached installed external cameras, a computer connected to it and a projector.

The camera captures the movement of the individual paths through position trackers devices (where simulation Tele-presence or influence its existence through position trackers devices that contain a number of Motion Sensors accurately captures the user's movements and adjust his vision across the screen) And transfer to a computer which in turn adjusts and modify the image to make it look as a person movement reaction in real time (real time to occurrence of the same thing in fact, and the same speed as the real responses) (Hayward V. et al.,2004).

A natural and intuitive way of interacting with digital information displayed on the floor is stepping on it. Magic carpet is a sensitive floor which enables people to influence sounds by moving over it, The Z-Tiles system also allows people to interact with the floor through walking or stepping on it, but provides a more modular approach (Richardson, Leydon, Fernstrom, & Paradiso, 2004).

Figure 6 interactive floors

Forms of interactive floors: the surfaces of the interactive floors are divided into two types as follow:

1- Sensor-based interactive floors.
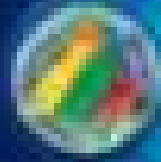2- Vision-based interactive floors.

3.3 Interactive Ceiling

Four important foundations for the concept of interactive ceiling were identified as follow:

(1) General aspects of architectural ceilings.

(2) The use of the ceiling in architecture.

(3) The ubiquitous computing paradigm.

(4) The concept of ambient display (Martin Tomitsch,2008)

Figure 7 interactive ceilings

Forms of interactive ceiling: the surfaces of the interactive ceilings are divided into two types as follow:

1- Sensor-based interactive ceiling.
2- Vision-based interactive ceiling.

4. PROPOSED STRATEGY FOR THE DESIGN OF INTERACTIVE ADVERTISING ENVIRONMENT

The proposed strategy is trying to integrate and transform internal environments components into interactive advertising environment through the study of necessary design and technological characteristics for interactive advertising implementation. Therefore, the proposed strategy includes the following steps:
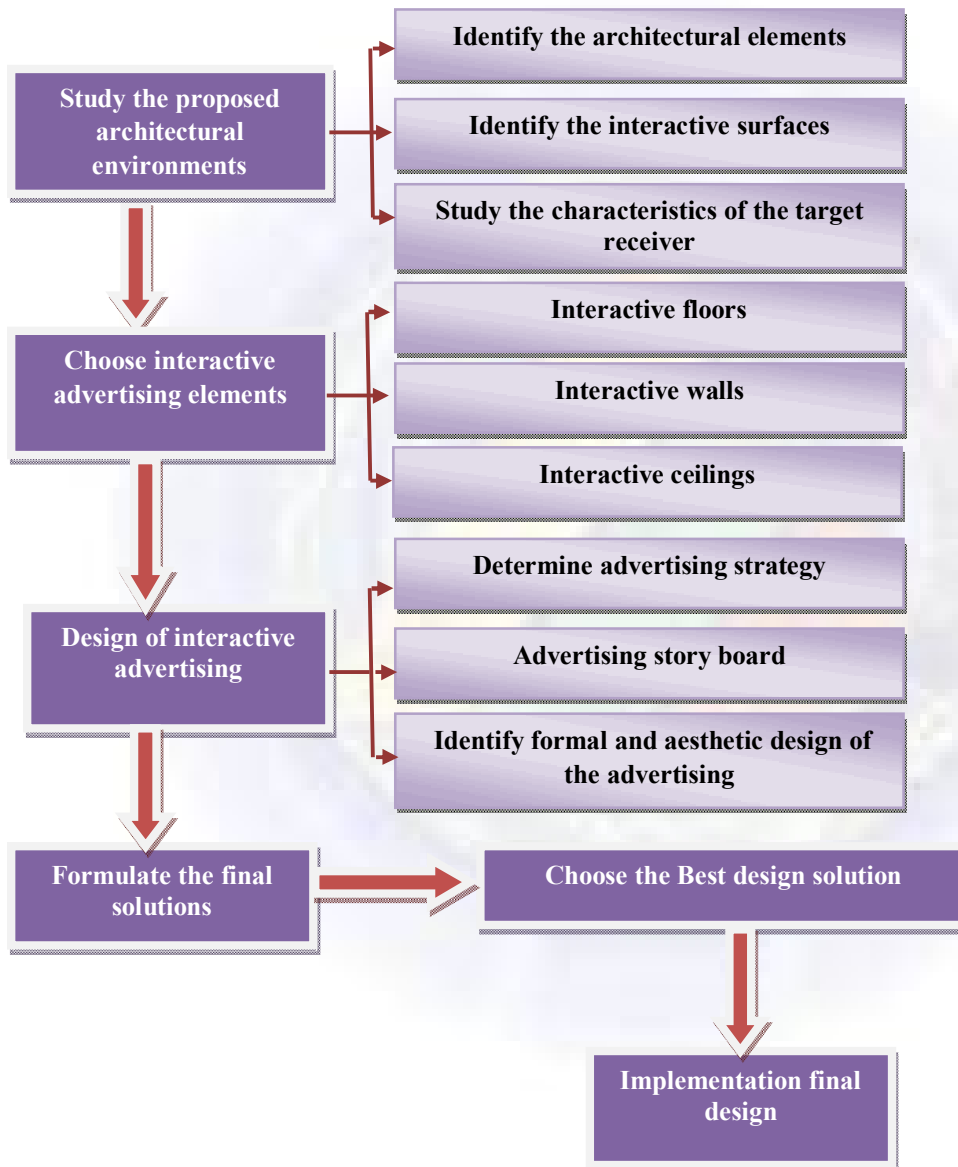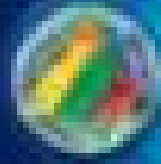

Figure 8 the proposed strategy

1. Study the proposed architectural environments and their suitability to the integration of interactive elements.

2. Study the characteristics of the target receiver, and how he interacts with advertising and interactive advertising environment.

3. Choose interactive advertising elements of the environment whether it is "interactive floors" or "interactive walls" or "interactive ceilings", or merge them, to determine their suitability to the target recipients.

4. Determine advertising strategy.

5. Visualize analytical or "Story board" for how the recipients interact with the ad and expected reactions.

6. Identify formal and aesthetic design of the advertising.

7. Formulate the final solutions.

8. Choose the best solution.

9. Evaluate the best solution.

10. Conduct the actual implementation.

5. CONCLUSION

Production of interactive advertising environment depends on the existence of physical components "floors, walls and ceilings," that makes it possible to put reflectors, screens, cameras, motion sensors and lighting manufactures that makes the space imaginary visible to the recipient. Interactive advertising systems are characterized by significant qualities including high cost of maintenance in the construction of its component, a high degree of reliability, efficiency and appropriated user interface. The paper presents a proposed strategy for the design of interactive advertising environments in order to achieve the best possible impact on the receiver in a way that achieves the purposes and communication desired.

REFERENCES

[1]. Dan Olsen (2009), Building Interactive Systems: Principles for Human-Computer Interaction, Cengage Learning.

[2]. David Benyon, Phil Turner, Susan Turner (2005), Designing Interactive Systems: People, Activities, Contexts, Technologies, Addison-Wesley.

[3]. Hayward V, Astley OR, Cruz-Hernandez M, Grant D. (2004), Robles-De-La-Torre G.- Haptic interfaces and devices. Sensor Review 24(1),.

[4]. Kelly L. Dempski and Brandon L. Harvey (2005), Touchable Interactive Walls: Opportunities and Challenges, ICEC 2005, LNCS 3711.

[5]. Martin Tomitsch- Interactive Ceiling (2008), Ambient Information Display for Architectural Environments- Research Group for Industrial Software (INSO) – Austria.

[6]. Moggridge, A. (2007), Designing interactions. MIT Press.

[7]. Richardson, B., Leydon, K., Fernstrom, M., & Paradiso, J. (2004). Z-tiles: building blocks for modular, pressure-sensing floorspaces. In CHI'04: Extended abstracts on human factors.