

Alexandria University
Faculty of Fine Arts
Department of Graduate Studies
Decoration Department
Specialization of Interior Architecture



The Technological Interior Architecture of Innovation Park Centers

A Thesis submitted to Décor department Faculty of Fine Arts – Alexandria University For partial Fulfillment to the Requirement of Master Degree In Interior Architecture

Updating of the studies assessed for the degree of Master
In Fine Arts - Department of Decor - specialization of Interior Architecture

Presented by:

Nada Samir Mohamed Shahin

Demonstrator - Interior Architecture Section

Supervised by:

Prof. Dr. / Abdel Hamid Abdel Malek Ali Emeritus Professor of Interior Architecture Faculty of Fine Arts Decoration Department, Alexandria University

Dr. / Amr Rizk Emeritus Professor - Decoration Department

2019

The Research Summary:

The Technological Interior Architecture of Innovation Park Centers

Through research and analysis, it can be recapitulated as follows:

- The research dealt with the innovation gardens of the strategic entities that have an important role in the development of the knowledge economy, which is based mainly on the dissemination of information and investment through the generation of ideas and turn them into investment projects whether for new products or services to the community or to export software.
 - These centers have received great attention from the countries governments to improve the quality of life in all fields, through the use of the human mind as capital and the use of scientific research to bring about a series of significant changes in the economic surroundings.
- The selection of this type of institutional entities to shed light on them from the perspective and vision of the interior design is a confirmation that the interior designer has his artistic and aesthetic imprints in various fields and activities that add touches that reflect the spatial image of the entities by providing special specifications for the innovation gardens, as called in the literature And translations.
- From the review of models of innovation centers in some countries of the world it is clear that the interior designer has an effective and professional role in the use of internal design elements when dealing with internal spaces for such quality centers to achieve the highest level of functional benefit so that users of those centers enjoy the pleasure and satisfaction called "Aesthetics".
- The innovation centers are characterized by multi-purpose and purposeful functional spaces to help innovators to carry out their tasks and generate intelligent ideas. We believe that the center contains factories, workshops, conference rooms of all types and restaurants. Each function in these spaces differs from the other but is united in aesthetic design and harmony. Here comes the professional interior designer's ability to coordinate the aesthetic of these different parts of the uses in one place.

- It is noted from the selected models of the innovation centers beauty and good choice of location, the surroundings areas are green and some of them are located on rivers so there are no sources of visual and audio pollution, and always be on the outskirts of the city to make it difficult to crawl the region. These centers were characterized by effective spaces to carry out their activities with the maximum possible efficiency and profitability, which led to the ease of movement in these places according to their function.
- The interior designer in these centers prefers the use of natural lighting to benefit from the advantages of high performance buildings. Natural light gives a certain mood to the vacuum by means of precise changes of light during different times of the day and different seasons of the year. Therefore, the interior designer made laboratory spaces in the centers to the north to provide good lighting and ventilation of the laboratories.
- Elsewhere in the center, especially in the reception area, the interior designer used the latest OLED (organic light-emitting diode) technology, which is available for power, and then installed in different modes and shapes to give joy and dazzle.
- -The walls in the innovation centers are one of the main elements of the interior design. The wall is used in a way that suits all use and activity inside the center. The walls are separated by spaces and folding joints, both of which are used as needed to expand or reduce the vacuum or acoustic insulation. In some innovation centers he uses the moving wall as a white display screen used in presentations for workshops and seminars.
- -The flooring in the innovation centers is one of the most essential and important elements. It represents the largest share of the interior space. It is also more important than the ceiling as a main element of design. The floors in these centers are characterized as being level or multi-level (e.g. in the multi-purpose hall auditorium).
 - In the official meeting rooms of these centers, the interior designer used the "Raised Floor", which are made of vinyl or wood, reinforced with aluminum foil, mounted on metal supports that lift it from the original floor. The floor is used to pass electrical installations and cables Electrical or electronic devices.

- The surface finishes of the labs are considered to have the optimum finishes for the most suitable floor in order to provide durability and chemical resistance at the lowest cost and more beautiful.
- The Bishop in the innovation centers took special care in some parts, where the ceilings are the upper lace of the surfaces in the inner space and the enclosed spaces. In terms of construction, the ceiling may be seen as a separate or simply the lower face of the upper vacuum construction. Multipurpose halls in the innovation centers to direct sound energy from the platform to the seating area.
- -The internal equipment at the innovation centers took an interest in visual perception in order to achieve the psychological and physical comfort of the researchers and also when choosing the furniture and equipment required for the different parts of the innovation centers. The center of (the Jockey Club Innovation Tower), designed by Zaha Hadid, used a versatile and comfortable chair.
- As for architectural elements ... It is clear that the interior designer contributed to the design of stairs to achieve security considerations and the comfort of the users of the stairs and also to the considerations of the function by interested in the width of the stairs and the establishment of Landing at appropriate distances to avoid too long elongation to allow the user to stand during interviews. This was observed at the Penovation Center in Philadelphia, Pennsylvania, United States where it was observed that the architect linked the three floors with stairs characterized by the breadth of the width in the middle of the building.
- -The coincidence of research numbers, the promulgation of organized laws to support innovation in Egypt, and the linking of scientific research to industry, technological alliances and valleys of science and technology.