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# Human Factors As An Approach To Office Buildings Design

Research For Master Degree

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## **Research Introduction:**

It is the main objective of the designer at the architectural design of its office building and within the workplace is to create the proper environment to perform the function for which it was established that work to the greatest possible efficiency, especially with in the administrative buildings in the current period of expansion and the proliferation of local and regional level and the world, and the office building of more buildings, which includes within it many of the activities of various individual and collective, and the administrative building contains many of the spaces organized to suit the administrative office and, in addition to complementary services and spaces that help to perform the work, also includes administrative building, the highest scientific achievements and inventions of the modern era of electronic and mechanical devices, the building is always evolving and trying to contain the latest up-to-organ of the internal and external communication, as applied by the latest means and methods of modern construction methods and their implementation, and several administrative buildings in terms of use it is more than a few multi-country, which is the range of offices for the legal profession and engineering offices, trade offices for the management of industrial firms, insurance companies and banks, and also include various types of government buildings, and office buildings may be classified in terms of high and low to the high-rise buildings and medium-rise buildings and buildings low-rise, and administrative offices can be classified into several departments of the conditions there can be independent in this case called the office building, or that there is an administrative space in a building housing a number of other activities, or that there is complementary to the building and another post.

The aim of the design of the office building to serve the rights and providing an appropriate environment for the users of the building, whether working or visiting it, so the design of the office building must be tailored to the characteristics of users and their habits and traditions, appropriate to the psychological and social aspects of their own, in addition to the aspects and elements of physical comfort physical, and there are many factors that affect the design of the office building of these factors are affecting the whole elements in the formation of the building, which contains the set of elements, the administrative policies of the Organization of the work in the building is one of the most important factors influencing the design of the building management has evolved Science and management schools and the increased interest in the human element within the organizational structure management, as well as examine the elements affecting the efficiency and productivity of the employees motivated to work with, as developed by the Science Department is studying the design of the organizational structure of the organizations and how the distribution of the departments and sections and working groups and the distribution systems supervision and control, is also considered the characteristics of the internal environment of the workplace of the most important factors that must be taken into account when designing the office building, and because of its direct impact on users of the office building, and divided the work place environment to the physical environment linked to the characteristics of the building spaces and conditions of thermal ,visual and acoustical comfort in the spaces, and the social environment of individuals associated with users of these spaces and the interactions and transactions, which they do.

Therefore, the research shed light on humanitarian considerations in the management, as well as humanitarian considerations in the social and physical environment of the place of work, with a view to identifying the elements to be taken into account when designing the office building to provide an appropriate environment for the performance of work.

### **Research problem:**

The human factors is the most important considerations in the design process, which directly affect the formulation of the architectural work, which should be linked to the user and the physical requirements as well as his involvement in the customs and traditions and be compatible with the user's psychological and social patterns of life , Despite the importance of the humanitarian aspects of the design process, however, see a lot of designers had omitted to give attention to aspects of the private and public buildings, and for the negligence of the importance of these aspects in the design process.

The place of work from more places where the rights to most of his time outside the home so it was important to pay attention to the humanitarian aspects in the design of these places, especially since the physical and psychological comfort directly affect large extent on the work efficiency and production.

Therefore, the research is to examine the relationship between what the building contains administrative requirements associated with each design in terms of engineering and administrative aspects and its relationship to the humanitarian needs and requirements of physical and psychological comfort and social users.

### **Objectives of the research:**

The research aims to determine the extent of the impact of human factors to the first stages of design of the office building in order to assist the architect in the design of sound decision-making, which provides psychological and social comfort for users and to raise the work efficiency, in order to achieve the main objective had to be identified on some of the points and topics important to identify trends associated with human beings and the design theories of human behavior in organizations and administrative as well as to identify the impact of the characteristics of the architectural elements of the Special Rules of origin in the humanitarian aspects of the users and also to identify the relevance of recent trends in the design of buildings, the humanitarian aspects of the administrative users.

### **The scope of the research:**

The research aims to study the design of the office building linked to human factors, including considerations of humanity in the scope of rights in the administrative management of the organization, as well as the conditions of the internal working environment physically and socially, and research related to the scope of a specific time period and is the dictatorship of the twentieth century and contemporary to the period and by the fact that the office building of a major development in the period, linked to progress in information technology and its impact on the patterns of the modern work, as the scope of the search was linked to specific spatial and theoretical studies of the architecture is in Western countries because of their leadership in this direction of research, and to try to identify what has been reached and use of science in shaping the thinking of contemporary designers and architects in our societies, and included the work of the applied study of local contemporary.

### **Research methodology:**

-The research Follows the analytical research approach in the study of many of the points, the humanitarian considerations in the management and administrative organizations and theories of work motivation and the pressures that go with it, and also follows the research methodology in the study of analytical considerations of humanity in the workplace environment Kalrahp multi-material elements of visual and thermal and acoustic and as well as in the workplace social environment, which include elements related to the relationship between the individual and the group and location, and follows the research methodology in the study of the development of analytical design of the building, administrative and humanitarian considerations linked to individuals.

- The Research Follows the deductive approach in search of access to the results of the study and make recommendations.

### **Summary of the research:**

Many factors affect the design of the office building is in the formation affect the building and the elements contained in the Group and which must be employed to ensure the job for which it was established that work to the greatest possible efficiency, and these factors include humanitarian considerations in the management of the organization and as well as humanitarian considerations in the social and physical environment of the place of work.

And the first section deals with the research presented to the evolution of the design of the office building, through the first and the second chapter, and Chapter I deals with the components of the office building and the various activities of the personnel inside the building management and the requirements of these activities of the architectural spaces to facilitate the exercise, as the chapter is on how to study the relationship between these spaces and coordination studies together, and

also different classifications of office space and linked to networks of various types which affect the formulation, Chapter II deals with the evolution of building management and the administrative buildings in the event since the emergence of the modern office building in its conception in the late nineteenth century and until the current period with the study of how this evolution of humanitarian considerations in design.

And in the second section deals with research and administrative management role in the effectiveness of performance, and Chapter III deals with the motives of the work in the administrative management of the productive factors and the human component of the organization and motivation to work has also exposed to pressures which may occur during the work, and Chapter IV deals with the organizational structure administrative framework for personnel and administrative policies of the Organization of the work in the building of the most important factors influencing the design of the building is the administrative and management process is responsible to achieve the best results using the elements of physical and human conditions, and subjected to the separation of different forms of administrative regulations and associated element humankind.

And section 3 deals with a vacuum environment and work effectively linked to performance, and Chapter V of the entrances and approaches, and environmental psychology, which describes the relationship of the environment surrounding the individual as being of the individual psychological processes as it relates to this environment Kid rack elements within the environment and behavior, as this chapter is light on the standards of environmental design that meets the needs and desires of individuals in the work environment associated with the elements of the physiological and psychological comfort to these individuals, the impact of Chapter VI The physical environment of the vacuum work on individual performance and that are linked to the characteristics of the building spaces and conditions of thermal comfort and visual and audio in the blanks and study their impact on the performance of the tasks required, while Chapter VII deals with the impact of the social environment of the vacuum action in the performance of individuals and others Kaaazavip of the individual elements of the working group and belonging to them and also make friends with others is linked to personal emptiness of individuals and the appropriateness of the workplace to their personal contacts and also the elements of personal safety and building management also reviewed the research models in Chapter VIII of the vacuum environment of contemporary work.

Has approved the research in section 4 of human factors in the design of office buildings as indicated in Title IX considerations, organizational design and the physical, social, which he drew a questionnaire used in the study applied, while in the tenth chapter is a study of local buildings of contemporary design and considerations related to the extent of humanity.

It also deals with the end in the search results and recommendations of research findings to assist the designer during the design phases in the development of the key points affecting the humanitarian considerations of the proposed office building, with the aim of the degree of efficiency design considerations take into account the organizational and physical and psychological, social and personnel, which would lift rates of job satisfaction and the productive efficiency of workers.