

# **Employing modern technology in the design of guidance and extension systems for general administrative buildings**

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## **Introduction:**

The process of designing public administration buildings went through several stages, starting with the smallest group of users assembled in one place to perform multiple tasks and then developing into the very large work spaces, which arose as a result of the flourishing industry and the increased need for administrative spaces. The need to arrange workplaces and achieve effective guidance for the convenience of users and visitors. Modern technology has achieved a major shift in the design and implementation of routing systems to optimize the use of all administrative and user environments. To wander around.

## **Research problem:**

The problem of research stems from the need to employ the characteristics of modern technology in the design of guidance systems for public administrative buildings characterized by the density of users and therefore there is a need to avoid the problems of finding the place and the smooth movement within the multiple spaces.

## **Research aim:**

The aim of this research is to identify the effectiveness of employing modern technology in the design of guidance systems in public administrative buildings, with an applied study on the faculties and administrative buildings at Benha University.

## **Research Methodology:**

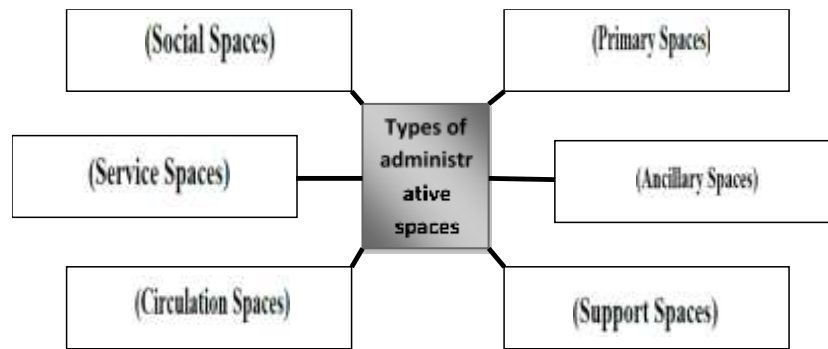
The research follows the descriptive approach

## **Research hypothesis:**

The researcher hypothesizes that the use of the characteristics of modern technology in the design of guidance systems for public administrative buildings will work on the effective performance of these systems and thus smooth movement within multiple spaces.

## **1- The considerations for the design of guidance systems for Administrative Buildings**

Companies are now competing in how to make their employees achieve the highest productivity, so companies have tended to create new activities that help workers to perform their work and try to eliminate their sense of stress and tension and boredom, which called for effective guidance and guidance for these spaces, which have become essential in administrative buildings, can be summarized Administrative spaces according to their function in the following figure:



**Types of administrative spaces**

Therefore, it was necessary to achieve high speed work and productivity using guidance and guidance systems and the speed of adaptation to the functional spaces and the requirements of the effective performance of the work in administrative spaces and these methods are- :

- Easy communication and work flow
- Design flexibility
- Easily find the target location



**Functional methods for the use of guidance systems in administrative spaces**

**Information on guidance systems:**

Information on guidance systems for administrative spaces includes:



**Information on guidance systems**

## En-route information

En-route Information on guidance systems for administrative spaces includes:

- road signs
- site entrance signs
- environmental information



En-route information

## On-site information

On-site Information on guidance systems for administrative spaces includes:

- signs
- directories
- site maps
- environmental information
- directions



On-site information

### Locational information

Locational Information on guidance systems for administrative spaces includes:



Locational information

## 2-The use of technology in the design and production of guidance systems

Some examples of employing technology in the design and production of guidance systems can be illustrated as follows:

### Photochromic signs:



### Electroluminescent signs



### mixed-digital signs



## Interactive Wayfinding Maps



### 3- An applied study on the faculties and administrative buildings at Banha University.

The students using the signs that have been designed in the work of the Mobil application to facilitate student access or any user to any place within the college away department of computer and information Banha university to keep up with the technological age.





### The research result

The research results found that there is effectiveness in the application of technology in the design and production of guidance systems in terms of the creative results achieved by the applied study through an educational model to the students of Advertising Department, Faculty of Applied Arts, Banha University.

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