Interactive technology and its impact on interior design in smart banking

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Abstract:
Interior design is the art of designing and studying spaces according to the type of activity used, as it is a process of interaction between humans, time, place and culture (5), and with the increase in electronic commerce operations, the need for a new kind of untraditional banks that goes beyond the usual pattern of performance and is not restricted to a specific place or time, the interior designer plays an effective role in using the elements and foundations of interactive technology that were recently discovered and employed in these smart banks, with low costs, saving time and space, so that banking service is achieved without full dependence on the human resources and is provided all day time.

Accordingly, the use of smart technology techniques in architecture and interior design within smart banks has become a fundamental matter that must be taken care of for both global banks and local ones in Egypt as in our study.

Smart banks are unique in the field of electronic services that can be achieved other than traditional banks services and this advantage meets the needs, Hopes and aspirations of their customers, the following is an explanation of the areas that are characterized by smart banks:

1- Acquiring the largest possible number of clients due to the extended working hours 24/7 in addition to providing all banking services.

2- Providing banking services to customers in a safe manner during the spread of a new kind of diseases and epidemics such as COVID-19, which forced traditional banks to follow strict rules in order to limit the spread of COVID-19 among their clients as well as their employees, and that negatively affects the efficiency of these banks in the way they provide their services due to limitation of time, smart banks succeeded to overcome such circumstances, as they provide banking services all day time as mentioned before.

Keywords:
Interactive technology for smart banks , modern materials , smart architecture , interactive in designing banking institutions.
An Introduction:
Banks are considered one of the richest buildings, whether in their design or furniture, and this interest came from those in charge of giving an impression of confidence and luxury to attract customers to it, as well as providing distinct and accurate banking services and transactions, and large budgets have been allocated to design bank buildings in proportion to financial services. They are provided, in addition to their presence in vital and important areas, and large areas are often allocated to them, which gives the designer an impetus for creativity in interior design and to design high-quality pieces of furniture, as it was natural for bank furniture to be distinguished from the rest of the furniture in other commercial and service buildings. And that is because of the magnificence of the design and its containment of colors, raw materials, and the quality of design because of the effects of these elements in attracting and enjoying the largest number of customers, as many studies and research have directed towards the interactive design of the environment as the trend towards designing internal environments that leads us to create dynamic spaces and materials capable of performing interactive human functions. Wide-ranging, where complex physical interactions become possible with their real, physical counterpart, being interior design is a multifaceted profession in which space is associated. Lol innovative and specialized within a design structure to achieve an environment based on scientific solutions to promote personal satisfaction and customer culture to be attractive and fulfill their requirements, and life has changed for many of us to an unrecognizable degree compared to what it was a whole year ago - and one of the biggest changes was to do electronically. By doing business more than before, such as holding video conferencing, social networking, online shopping, as well as providing digital banking services, etc. (23), as those banks and financial institutions that rely on electronic services have benefited and by employing modern technology in the field of information and communication and were able to provide all banking services are safe, at the lowest cost, in the fastest time, and with the least effort for customers.

Research Problem:
1- Failure to fully employ smart technology applications that are compatible with the internal spaces of smart banks, in order to find unconventional solutions capable of serving the largest number of customers in the least time without being restricted to specific working hours.
2- The spread of diseases and epidemics due to which it is difficult to provide banking service.

Research Aims:
1- Employing smart technology elements in interior design and furniture in the internal spaces of smart banks to provide banking services around the clock in light of the Corona pandemic.
2- Knowing the developments in the fields of architecture in general and interior design in particular as a result of the huge boom in the use of advanced electronic technology and modern technologies and their applications in smart banks.

Research Hypotheses:
1- Providing banking services using interactive technology by employing the spaces of the bank branches, leading to a saving of time and effort.
2- The use of interactive technology in the interior design elements and furniture to serve the smart institutions and banks, especially in the customer lounges, which helps to improve the job performance inside the bank branches and bank lounges.

**Research Importance:**
1- Making use of the design standards for interactive interior design and their applications in smart banking branches.
2- Learn about smart technology and its impact on the interior design of customer lounges and smart branches.

**Search Limits:**
1- The spatial research limits are represented in studying the banking branches, especially the customer lounges in Egypt, whether they are local or foreign banks.
2- The temporal boundaries of research are represented in the current era, beginning in the twenty-first century.

**Research Methodology:**
Descriptive-analytical approach (an analytical descriptive study of the shape of the current banking transaction halls and the shape of the transaction halls in smart banks by applying interactive technology in interior design and furniture).

**Results:**
- Applying the scientific foundations of design and merging between interactive technology and the elements of interactive interior design in developing the current banks, where the smart banks are unique in providing many distinctive services that traditional banks do not provide. Smart banks provide banking services around the clock, and this provides more convenience to customers, contributing to improving the behavior of individuals and society, and helping to preserve the health of customers from the diseases and epidemics that are widespread in our time.
- The interior designer has an effective role in employing modern technology within the administrative headquarters, especially banks, which leads to an increase in the share of banks in the banking market due to easy access to customers from various channels and categories, as smart banks are characterized by their ability to reach a broad base of customers without being restricted to a specific place or time.
- The expenses of operating the smart book in the form of employment and operation, as well as the expenses of preparing fixed assets such as rent and maintenance of facilities are low expenses compared to the expenses of traditional banks and this is clearly reflected in the increase in profits.
- The savings that smart banks offer in the field of energy and the rationalization of its consumption compared to traditional banks.
- To achieve sustainable design, the objectives and benefits that achieve the quantitative and qualitative increase in the facilities and the economic, physical, health and psychological benefits must be defined for customers.

Departing from the traditional way of providing banking service, which depends on waiting and wasting time, as smart banks allow providing the service in a fast and advanced way that will deliver data at a high speed around the clock, as well as automated work systems that help
reduce the time spent in providing the service and thus increase customer satisfaction and innovation New products.

**Recommendations:**
In light of the above study and results, the study recommends the following:
- The need to take into account the use of dynamic and interactive systems in the design of banking environments, in order to make them flexible in providing banking services in an easier way to reach a broad base of customers.
- Taking into account that the interior design of the interactive banking environment is conducted in a scientific manner and planning by choosing interactive elements commensurate with the required banking service within the administrative space.
- Setting standards for designing banking planning in the administrative space, taking into account modern technology and the use of new materials and employing them in the spaces that provide specific tasks.

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