

The impact of Smart Sustainable Cities on Enhancing Tourism Competitiveness: A Case Study of the New Administrative Capital

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ABSTRACT

Keywords:

Smart Sustainable Cities; Egyptian Tourism competitiveness; New administrative capital.

The present research has investigated the impact of smart sustainable cities on enhancing tourism competitiveness in Egypt focusing on the New Administrative Capital as an example for The smart sustainable cities. The purpose of our research is to investigate the importance of the New Administrative Capital on activate tourism in Egypt. The sample was 50 Egyptian tour guides, 30 workers in tourism, and 20 tourists who visited the new administrative capital. A questionnaire was used to gather information. The connection was spread through Facebook communities. In general, the tour guides are the highest sector that agrees with the importance of New Administrative Capital in enhancing tourism, then the hotel and restaurant Managers, but the Holiday Village Managers are the lowest results accepting the ideas of enhancing tourism through the New Administrative Capital, according to the results. The disparity was, however, insignificant.

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1. Introduction

Nowadays, the Egyptian Government adopts promotional strategic plans and initiatives in the current period to support and advance the tourism sector. From these strategic plans, is building smart sustainable cities such as the new administrative capital which will solve many essential problems like traffic, pollution, crowding, energy, and water by using Information and Communication Technology (ICT).

The new administrative capital aims at providing a citywide secure, smart, and flexible transformation. it relies on adopting ICT transformation in all things. That mitigates many of the risks and challenges they are facing. It harnesses the capabilities of the integrated ICT. It extends to create real social, economic, environmental opportunities, and save lives and achieve sustainability. Therefore, it leads to enhance tourism and attracts tourists from all over the world.

This research aims at describing the effect of smart sustainable cities (New Administrative Capital) on enhancing tourism competitiveness in Egypt and attract attention to the importance of the New Administrative Capital.

2. Research Problem

Egypt has suffered during the past period from the government's lack of interest in establishing smart sustainable cities that help in tourism development and increase tourist demand rates, which contribute to promoting comprehensive economic

development in Egypt, while many countries of the world have tended to establish such cities for decades and rely on smart and sustainable technology in Enhancing tourism for these countries and contributed to placing these countries on the world tourism map

3. Research importance

The present study attempted to answer the following questions :

1. What is the effect of smart sustainable cities (New Administrative Capital) on enhancing tourism competitiveness for Egypt?
2. What are the opinions of Egyptian hotel and restaurant Managers, Holiday Village Managers, and tour guides about the effect of the New Administrative Capital on enhancing tourism?
3. What is the effect of the New Administrative Capital on tourism sector (from the tourists' point of view) ?

4. Research Hypothesis

The present study hypothesized the following:

1. Smart sustainable cities will enhance tourism competitiveness in Egypt.
2. The Egyptian tour guides assured that the New Administrative Capital will enhance tourism.

5. Literature Review

Smart sustainable cities and Sustainable cities are used equivalent around the world. To best interpret the relationship between the two terms, the study reviews the definitions of “sustainable”, “smart” and “cities” and then discuss them.

7.1. “Smart Sustainable Cities” concept

All tiers of governments and public bodies follow the term “**smart**” to differentiate their modern policies, plans, and programs for aiming at sustainable development, sound economic growth, and developed standard of life for their people. Thus, smart development is viewed as a regulatory argument and as an ideological factor, recognizing its significance as part of urban planning (Centre on Governance, 2003).

This can also be stated about the use of technology as they have spread into the commercial uses of intelligent-acting products and services, artificial intelligence, and think tanks (Moser, 2001). When it relates to technology, the word "smartness" refers to an automated computer operation such as self-configuration, auto-healing, self-protection, and self-optimization (Spangler et.al, 2010).

The smart component of the structure includes a huge number of buildings such as smart houses, intelligent buildings, and bigger ones such as airports, hospitals, and university campuses with a wide range of mobile terminals and integrated appliances as well as wired sensors and actuators (Klein and Kaefer, 2008). This expansion of a smart ecosystem is built on a broader context as with whole cities to make greater communities (Yovanof and Hazapis, 2009).

“**Sustainable**” is a term that relies on social construction to indicate the level of development. Sustainable development is the growth that fulfills the needs of the present without affecting the capacity of future generations to meet their own needs. This meaning adeptly indicates the importance of both the demands of the present and their impact on the requirements of future generations. It should be noted that particular attention should be paid to the needs of the poor (Gabrys, 2014).

“**City**” is a place where people live that is greater or more significance than a town. It is a region where many people live and work. It is used to identify the types of human systems and ecosystems in which intelligent sustainable development strategies can occur. Given the tremendous influence on the environment and the colossal role that cities play socially and economically, they are perceived to be vital to the future (Mori and Christodoulou, 2012).

With cities being by far the largest points for consumption of the world’s resources, and their contributions should be considered both economically and conversely environmentally. However, as people can be considered in universal proportion as the fundamental actor in relativity A more anthropocentric strategy has been advocated recently, to ensure that cities meet people's needs employing sustainable socio-economic alternatives. Sustainability is promoted in many ways by promoting natural resource inventories. (Turcu, 2013).

The providing of numerous meanings for the term at hand by the international community, governments, Academia and private sector has led to the combination of these three distinct concepts which led to the creation of abundant literature on smart sustainable cities’ terms with a clear reference to sustainability. Sustainability dimension declared by the International Telecommunication Union (ITU-T FGSSC) (Webster, 2015). In study research, the scope of the concepts smart and sustainable will be that of cities.

7.2. The Definition of Smart Sustainable Cities

The term "smart sustainable cities" is currently prevalent on the scene, which are cities that excel in meeting the needs of citizens in all aspects of life through technological techniques that save time and effort and seek to provide an environmentally friendly digital environment which stimulates learning and creativity and contributes to providing a sustainable environment to enhance the feeling of happiness and health. There is more than one definition for this term and sometimes more than one name, such as “digital cities” and “eco-cities,” and they differ according to the goals set by those responsible for their development. Smart sustainable cities are no longer a luxury, as the world’s cities are currently transforming into smart sustainable cities or sustainable cities (Kosowatz, 2020).

"Smart sustainable cities” are anticipating the future at the economic and social levels, migration rates have increased to large cities in the hope of obtaining better jobs and enjoying a higher standard of living, which creates overcrowding and puts pressure on resources such as energy and water, and there is an increase in demand for services such as sanitation, health care, and education.

To meet these needs, the concept of a smart city emerged more than a decade ago, which foresees the future on the economic and social levels, and allows these cities to monitor the basic infrastructure, including roads, bridges, tunnels, railways, train tunnels, airports, seaports, communications, water, energy, and major buildings, from To reach the optimum level of resources and security, and also allow to maximize the services provided to citizens, Egypt has begun to enter the era of smart sustainable cities, where the Egyptian government has a clear investment vision in the new smart sustainable cities that it implements, especially with the huge size of its projects, and the multiplicity and diversity of investment opportunities in them (CISCO, 2021).

7.3.Smart Sustainable Cities According to the European Union

The European Union defines smart sustainable cities as those that bring cities, industry, and citizens together to improve urban life through more sustainable integrated solutions. This includes applied innovation, better planning, more participatory methodology, greater energy efficiency, better transportation solutions, smart use of information and communication technology, etc. Defining it as a city that achieves good performance in all these six areas, through a joint interaction between the economic sector, governance, transportation, environment, and life with citizens who enjoy awareness and independence.

The European Smart City project was implemented in 70 medium-sized cities in Europe in 2007, as they were arranged based on the six characteristics of smart sustainable cities, and this project aimed to identify the strengths and weaknesses of each of these medium-sized cities so that they become more competitive than by achieving local development appropriate for all (Liu, et.al., 2020).

7.4.The Components and Features of Smart Sustainable Cities

Smart sustainable cities” depend mainly on the infrastructure of information and communication technology, and what distinguishes them most is their focus on people in the first place, as they can respond to changing economic, cultural, and social conditions, unlike traditional cities. Smart sustainable cities can be new cities designed and built smartly from the beginning, or a traditional city that has been gradually transformed into a fully smart city.

Many cities around the world have launched smart city projects, including Dubai, New York, Tokyo, Shanghai, and Amsterdam, and it is expected within the next decade that Smart city models are widespread and that these models constitute basic rules upon which city development plans are based (El-Assasy, 2020).

Despite the different priorities and purposes of smart sustainable cities, fig.1 has shown they all share three main features: the information and communication technology infrastructure, the carefully defined integrated administrative framework for the smart city, and smart users, so users must have the required technical skills that allow them to interact with smart services and achieve benefits. Extreme ones; the role of smart sustainable cities is limited to making it possible to use smart devices and extends to training its residents to use them properly. Smart sustainable cities aim to increase sustainability, improve citizen life, and economic growth (El-Assasy, 2020).

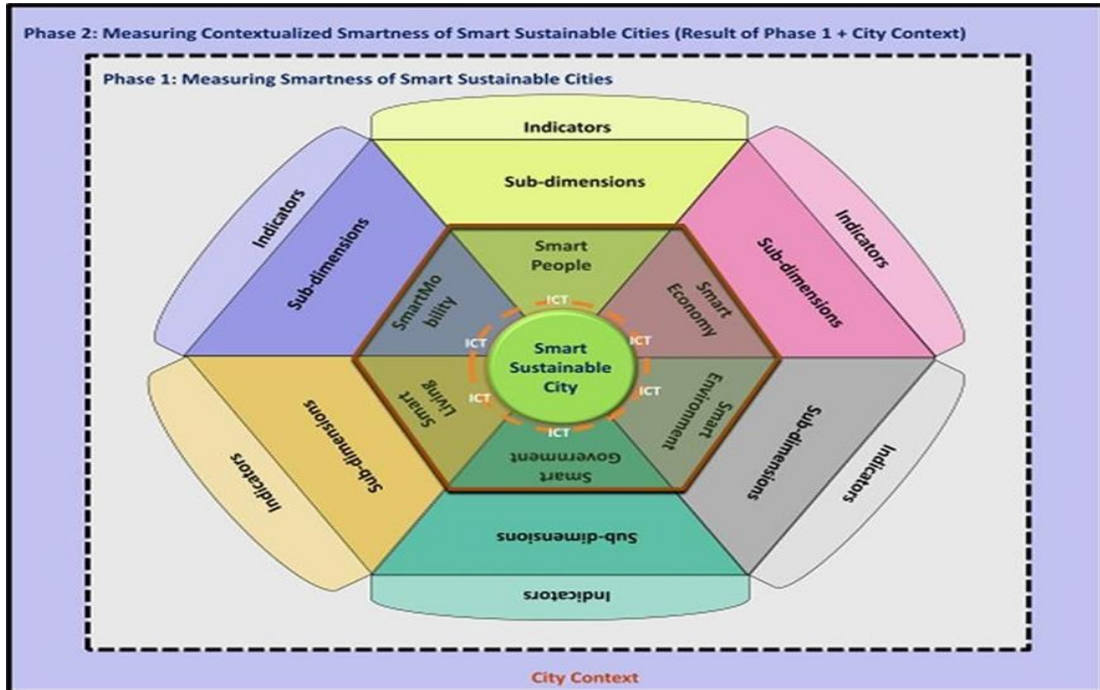


Fig.1.Key components of smart sustainable cities
(Al-Nasrawiet al, 2015)

7.5.Smart Sustainable Cities around the World

Smart sustainable cities no longer belong to the world of imagination but have become a reality in which many cities in the world live, including Stockholm, Sweden, Adelaide in Australia, Sion in South Korea, Ontario, Canada, Taipei in Taiwan, Metaka and Fujisawa, Japan, Glasgow, Scotland, New York, USA, Vienna in Austria. Among the smart Arab cities, Abu Dhabi and Dubai in the United Arab Emirates, Jeddah, and Riyadh in Saudi Arabia, a recent United Nations report revealed that 70 percent of the world's population will live in urban areas by 2050 (Ministry of Housing, Utility and Urban Communities, 2021).

7.6.Smart Sustainable Cities in Egypt

International economic statistics indicate that Egypt is preparing to enter the era of smart sustainable cities by establishing 13 cities with international technological standards, for which the government allocated a special budget in 2017 according to a specific timetable. A great change in the telecommunications and real estate sectors in Egypt, and the government is striving to build all new cities with a "smart city" system that achieves technological development in the context of the transformation into a digital society that facilitates services provided to citizens. The importance of smart sustainable cities does not lie only in development, innovation, and a qualitative shift in the lifestyle of the citizen, but without it, a new problem will emerge, which is how to run cities, whose population is increasing, and need huge amounts of resources and personnel to manage them (Construction Review, 2021).

It comes on top of the smart sustainable cities that Egypt seeks to establish, the new administrative capital, which is being built in cooperation with experts in the

establishment of this type of city, in addition to the new city of Alamein and New Aswan, whose establishment is announced with an environmentally friendly digital climate, a catalyst for learning and creativity, and enhances feeling Happy and healthy, over the next five years. The state's keenness to spread smart sustainable cities by building new cities with this system does not stop but will extend to all Egyptian cities, even the old ones (Egypt Today, 2020).

7.7. The New Administrative Capital as a Unique Model

The establishment of the new administrative capital east of Cairo has been initiated to transform Cairo into a leading political, cultural and economic center for the Middle East and North Africa through a thriving economic environment supported by various economic activities and achieving sustainable development to ensure the preservation of the distinctive historical and natural assets that Cairo possesses, and to facilitate living in it through an efficient infrastructure, due to its distinguished location and proximity to the Suez Canal area, regional roads, and main axes.

The target population during the first phase is about 0.5 million, in addition to about 40 to 50 thousand government employees who are transferred to the new headquarters while planning to increase the capacity. The capacity to 100 thousand employees after the first three years, and the total area of the city is 170 thousand acres, and the number of inhabitants upon completion of the city's growth is 6.5 million people, and the job opportunities generated are about 2 million job opportunities, and the first phase of the new capital will be held on an area of 10,000 acres (Abdeen, 2019).

The New Capital consists of the northern Muhammad bin Zaid complex, a conference center, an exhibition city, a complete government neighborhood, a residential neighborhood, a medical city, a sports city, a central park with an area of 8 km, and a smart city, and the total area of the government district in the new capital is 1,133 acres, equivalent to 4.8 million square meters, and the phase includes The first is the building of the Council of Representatives and the Council of Ministers, in addition to the first phase of ministerial buildings, with a total of 34 buildings, accommodating 29 ministries, on an area of 153 feddans, and the size of the implementation of facilities in the government district of the New Administrative Capital has reached 80%. The capital contains a green river with a length of 35 km linked to all neighborhoods and universities of the city to simulate the Nile River in the city of Cairo, and the Green River is the largest green axis in the world, and the new capital project will be linked with a new railway line with all railway networks in the republic, and it will be linked The 10th of Ramadan City and Belbeis by electric train, and an international airport will be established in the Administrative Capital on an area of 16 km (Egypt Independent, 2020).

7.8. Projects of the New Administrative Capital and its Effect on Tourism

The implementation of the first precedence of the first phase of the New Administrative Capital project have been completed by the end of 2018, and the headquarters of the ministries: Health, Housing, Higher Education, Education and Supply, Military Production, Endowments, and Justice will be transferred, in addition to the Parliament building and the Cabinet Building in addition to the Presidency

building. Among the projects that are being built in the "New Administrative Capital" is the main road network of about six hundred and fifty kilometers of the size of the "width" of the streets, and this volume has not been witnessed by any city in the Arab Republic of Egypt. Also, for the first time in the Arab Republic of Egypt, a "high-speed train" project will be held, and the line will be the width of the Egyptian state, as it is common in Egypt to construct train lines vertically from "north to south." (Elmouelhi, 2019).

The "high-speed train" line will link the "new administrative capital, to the Ain Sokhna region, as well as to the city of El Alamein, the 6th of October City, and the city of Alexandria", which will lead to linking any Egyptian authorities, and a "financial and business area" will be established. The "New Administrative Capital", includes many towers that have been planned at the highest level, including a "diplomatic quarter" for the establishment of international diplomatic missions, and "tunnels for infrastructure" will be established, where the infrastructure spending will accommodate the infrastructure pipelines inside them, as well as The highest tower will be constructed on the continent of Africa, as the Chinese company, CSCEC, announced the implementation of the largest skyscraper in Africa, with a height of 345 meters, in the New Administrative Capital, to mediate the financial and business district, which includes in addition to the giant tower 12 commercial complexes, and five Apartment buildings and two hotels. The French company Alstom, the largest of the world's trains, trams, and metro companies, confirmed that the new administrative capital, which the Egyptian government is currently building, will become a unique symbol of smart sustainable cities in the African continent (Mbogo, 2018).

The Executive Vice President for the Middle East and Africa at Alstom said that the company is interested in implementing metro and tram lines projects in the New Administrative Capital, in addition to replacing and renewing the tram line in Alexandria, after they were offered by the Egyptian government, and the tram represents an easy and affordable means of transportation, as it serves stations and lines. Specifically designed to reduce the usual congestion on some congested roads, and to ensure a highly efficient transportation service, given that it has a scheduled schedule, provides comfort during the trip, covers a large area within the city, and occupies a small area on the roof, where the size of the tram unit is about 40% less compared to the system Traditional transport (UNIVERSAL, 2019).

The tram is the ideal model for transportation in modern and crowded cities, as it rationalizes energy consumption, has a long service life (an average of 30 years without the need for renewal or replacement), and accepts more additional vehicles depending on the number of passengers at the peak, and the global tram market is about 3.3 One billion euros, which is the most promising market for rail transport. A joint-stock company has been established to manage the New Administrative Capital project with a capital estimated at 6 billion pounds. The New Urban Communities Authority, the National Service Projects Organization and the Armed Forces Land Projects Agency will share. The company undertakes planning, construction, and development of projects in the New Administrative Capital. Its board of directors consists of 13 members, including 3 representatives of the Urban Communities

Authority, 6 experienced members, and 4 representatives of the armed forces (EGYPT, ENERGY,2018).

The political leadership in Egypt believes in the importance of sustainable smart cities as a tool for the comprehensive development of the state, which definitely includes the tourism sector thus, Egypt is seeking for establishing new smart cities to be attractive tourist destination for example, the new city of El Alamein which considered one of the civilizational models, a global tourist and cultural destination, and one of the fourth generation cities, and it witnesses an unprecedented percentage of projects, as the city will change the map of the entire North Coast and the concept on which it was established, so it will be a residential city It attracts citizens throughout the year, not just the summer season as usual, and the first phase consists of two basic sectors with an area of about 8 thousand feddans, which is a coastal sector and includes the World Tourism Center sector, the archaeological sector, and the urban sector (Worldometers, 2019).

The city is scheduled to contain about 25 thousand hotel rooms, and the city has a distinct facade on the Mediterranean that extends for more than 14 km equivalent to the Corniche of Alexandria, which is to be an environmentally compatible city that provides high levels of quality of life, applies best environmental practices, and contributes to Achieving economic development while providing job opportunities and achieving quality of life for its residents, and it represents a new model for Egyptian coastal cities that achieve integrated development and provide a diversified economic basis (tourism, agriculture, industry, trade, scientific research. (Hussein, 2019).

The city of El Alamein is considered the first "environmentally friendly" city of the "fourth type", one of the most important outputs of the Northwest Coast Planning and Development Project, which aims to absorb nearly a million citizens, to relieve pressure on overcrowded governorates, and it has a summer headquarters for Administration of the state, "where facilities have been built to host some presidential meetings and the presidency of the government, and according to the plan, the new city of El Alamein will become the summer residence of the Egyptian presidency and government; Where presidential headquarters and other headquarters for the Council of Ministers were established. In addition to what is included in the city plan, including a chain of hotels with the latest designs, and high-rise residential towers, which rise to more than 38 floors, and the first phase includes the establishment of tourist, urban, archaeological, and historical areas, and among its most important divisions is the beach area, the establishment of a public beach, a games area, and several bridges. , For 100 million pounds, and a group of international hotels, and an extension of water and sanitation networks in the city, in addition to other networks for rainwater drainage, irrigation, and electricity networks, for one billion and 30 million pounds (Khorshed, 2017).

In the same context, the largest consulting offices in Egypt have planned the New Administrative Capital based on a sustainable city and the foundations of clean energy and is used as a support for the Suez Canal Corridor region and as one of the

forces driving economic growth. The city will be a link between the eastern region of the city and the western region by linking it to a road network and a railway line and through the tunnels, the city will witness the construction of national, tourism, and economic projects to become a tourist and international city. According to a study by the German company Bosch, the smart city market is expected to grow by 19% annually until 2023, bringing the size of this market to about 800 billion dollars, and the need for expansion in the creation of smart sustainable cities appears after the Intergovernmental Committee on Climate Change indicated. The Intergovernmental Panel on Climate Change (IPCC) indicates that cities consume about 75% of total global energy consumption, in addition to an expected rise in urban traffic by about a third by the year 2050 (LIVE, ON, 2017).

It is evident from the above that the establishment of smart sustainable cities in Egypt, including the new administrative capital, has become a good opportunity to enhance tourism competitiveness, as it is a source of attraction for tourists who visited the new administrative capital through better management of services and resources, by managing operations without human intervention, such as lighting and electricity rationalization, and humidity sensing and control applications, To maintain the ideal temperature, smart sustainable cities also include “digitizing government agencies, with technological systems, concerning issuing licenses, extracting official papers, automating courts and the commercial registry, and other bodies that deal directly with the public. Thus, smart sustainable cities are a step towards improving the efficiency of services. And the quality of life, but it needs to develop the infrastructure, and maximize the current resources, to accommodate its needs of smart solutions, and the new Egypt has not hesitated to pursue the progressive development and has already begun to enter the era of smart sustainable cities (International Labor Organization, 2017).

7.9. The Administrative Capital Museum

The government has developed ways for transporting artifacts in preparation for the start of displaying them according to the scenario for the museum display prepared for them, and the installation work is now underway for the display and screens for multimedia films, and the preparation of the schemes and models that will be included in the display to clarify the characteristics of each of the ancient Egyptian capitals. The subject of the presentation and the nature of the tranquil architecture, its religious buildings, and its most famous landmarks. Where an interactive panoramic film is being prepared on the capitals of Egypt throughout the ages from the oldest capital, Memphis, to the New Administrative Capital, as well as several other technological media such as mobile phone applications (Mobil Apps) for heritage where display techniques will be used. Associated data in 3D visualization while providing detailed information about the artifacts to encourage visitors to interact with the story of the show (Construction Review Online. 2020).

It is worth mentioning that the Administrative Capital Museum has so far received more than 550 artifacts from the pieces that will be displayed in the museum, and civil protection establishments, the insurance system, and surveillance cameras are being completed. Most of the architectural jobs of the museum building have also

been completed, interior lighting fixtures, statue base works, and other fabrication works have begun, and work is currently underway to develop detailed divisions for collections of artifacts by the Supreme Committee for Museums Scenarios, and to identify places for displaying statues and exhibits and distribute them to each other. Topics of museum presentation (Ray Haber\Railly News, 2021).

7.10. Implementation of the Peace Electric Train:

For the third metro line, its implementation has been completed. Of the total project, 16.5% has been completed, which works to connect the city of Cairo with the Administrative Capital, and all the areas around it, and its importance is to increase industrial development, population growth, and trade to promote the mass transit organization. The length of the electric train is about 70 km, including the construction of 12 stations on the track, and the work area with about six bridges, and two tunnels for the electric train (Construction Review, 2021).

7.11. Capital Park Central Parks:

This project will be designed with a length of 10 km, and an area of about 1,000 acres, which is the main factor that will make it the first largest park in the world and these parks will be divided from east to west into three complete planning sectors. It has a distinctly urban character, as well as a visual character (Egypt Independent, 2020).

7.12. Al-Fath Al-Alim Mosque:

It will be one of the largest mosques in the world and it can contain 17,000 people. The mosque is located on the ring road, and its area is about 106 acres, with four minarets in the Fatimid style, and its length is 95 meters, and it has 21 domes.

7.13. Administrative Capital City Services

The Administrative Capital City has many Services which attract tourists from all over the world. These services are as follow (Ministry of Housing, Utility and Urban Communities, 2021).:

- a) The administrative capital contains the Green River, which is about 35 km in length and is the largest green river in the world, interconnected with the city's neighborhoods, and similar to the Nile River.
- b) It has a spacious and free amusement park where they can enjoy all activities for free.
- c) It has a special security center in the administrative capital to contribute to the security of the place well, as it contains more than six thousand surveillance cameras.
- d) An international airport will be established within it, with an area of about 16 km.
- e) Medical centers, exhibitions, and conference centers will be included in the Administrative Capital City.
- f) The City of Arts and Culture will be established within the Administrative Capital with about 127 acres, containing a house for a music and opera theater.
- g) A wax museum was established to house the statues of Egyptian dignitaries.
- h) A center for artistic creativity for talented youth with creative services.

- i) Sculpture, design, and graphic arts within the New Capital City.
- j) A Museum of New Egyptian Art for Our Time

8. Methodology

This segment discusses the methods used to interpret the evidence the investigator has gathered. As the heading suggests the effect of the new administrative capital on enhancing tourism competitiveness in Egypt.

8.2. Research Design

This research applied the qualitative approach where the data was analyzed which collected from the Egyptian tour guides' opinions, workers in tourism, and tourists who visited the new administrative capital.

8.3. Research Sample

The participants in this research were 50 Egyptian tour guides, 30 hotel and restaurant managers, 20 holiday village managers, and 20 tourists who visited the new administrative capital. The researcher can connect with them through the Egyptian Tourism Group on Facebook. The survey was done by using Google Forms.

8.4. Research Instruments

For the tool, the survey was done by using Google Forms. Consisting of two questionnaires, the first includes 11 questions, and 4 of them were general questions about the participants, while the 9 questions were related to the research. The second questionnaire has 17 questions, 4 of them were general questions about the participants, while the 13 questions were related to the research. The questions target participants regarding the effect of smart sustainable cities (New Administrative Capital) on enhancing tourism competitiveness in Egypt. Participants were asked to rate some statements on a scale from 1 to 5 (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree).

8.5. Data Analysis Method

After collecting data from the questionnaire, the data was gathered and transferred to an excel sheet. The data were 11 questionnaires for hotel and restaurant Managers, Holiday Village Managers and Tour Guide, and 17 questionnaires for the tourists who visit the Administrative Capital around the world. Graphs were used to try to display the results in a comprehensive manner.

9. Results

The Egyptian hotel and restaurant Managers, Holiday Village Managers, and tour guides' responses and observations of the effect of the New Administrative Capital on enhancing tourism are shown in the results segment, and each figure explains one of the questionnaire questions. Their responses were gathered in each graph for each question to promote comparison and calculate the percentage.

First the results of Questionnaire Distributed to Egyptian Hotel and Restaurant Managers, Holiday Village Managers, and Tour Guides

Table 1

The results of Questionnaire Distributed to Egyptian Hotel and Restaurant Managers, Holiday Village Managers, and Tour Guides

| Statements | Holiday Village Managers | | | | | Hotel and Restaurant Mangers | | | | | Tour Guide | | | | |
|---|--------------------------|-------|---------|----------|-------------------|------------------------------|-------|---------|----------|-------------------|----------------|-------|---------|----------|-------------------|
| | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
| In your opinion, Can Smart sustainable cities enhance tourism competitiveness? | 10 | 6 | 2 | 1 | 1 | 17 | 10 | 1 | 1 | 1 | 27 | 15 | 5 | 2 | 1 |
| In your opinion, Can the new administrative capital enhance tourism competitiveness in Egypt? | 13 | 5 | 1 | 0 | 1 | 1 | 7 | 3 | 1 | 1 | 25 | 13 | 4 | 5 | 3 |
| How would you rate the suitability of the New Administrative Capital as a tourism place attracting? | 11 | 5 | 2 | 1 | 1 | 14 | 14 | 1 | 1 | 0 | 30 | 15 | 2 | 2 | 1 |
| Does Providing All city services electronically raise tourist satisfaction in New Administrative Capital? | 9 | 10 | 1 | 0 | 0 | 20 | 7 | 03 | 2 | 1 | 17 | 23 | 5 | 3 | 2 |
| Does Providing All city services electronically raise tourist satisfaction in New Administrative Capital? | 12 | 7 | 0 | 0 | 1 | 15 | 10 | 3 | 2 | 1 | 28 | 19 | 2 | 1 | 0 |
| Does Providing All city services electronically raise tourist satisfaction in New Administrative Capital? | 8 | 9 | 1 | 1 | 1 | 16 | 10 | 2 | 1 | 1 | 33 | 17 | 0 | 0 | 0 |
| Count | 6 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Count A | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |

This table shows the results of the questionnaire Distributed to Egyptian Hotel and Restaurant Managers, Holiday Village Managers, and Tour Guides. It shows the different responses of the participates about the importance of the New Administrative Capital to enhance tourism in Egypt.

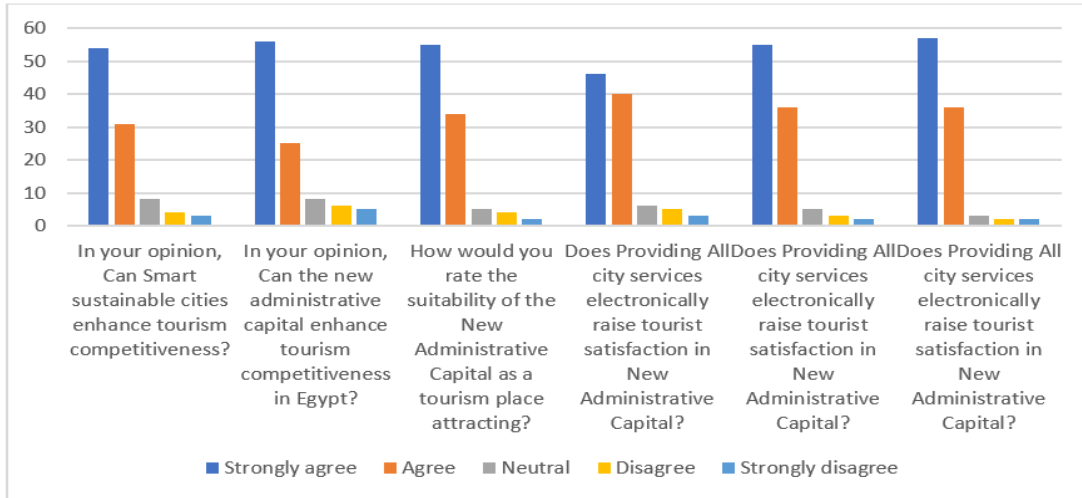


Fig.1.the results of Questionnaire Distributed to Egyptian Hotel and Restaurant Managers, Holiday Village Managers, and Tour Guides

This figure indicates that all participants agree that the New Administrative Capital to enhance tourism in Egypt.

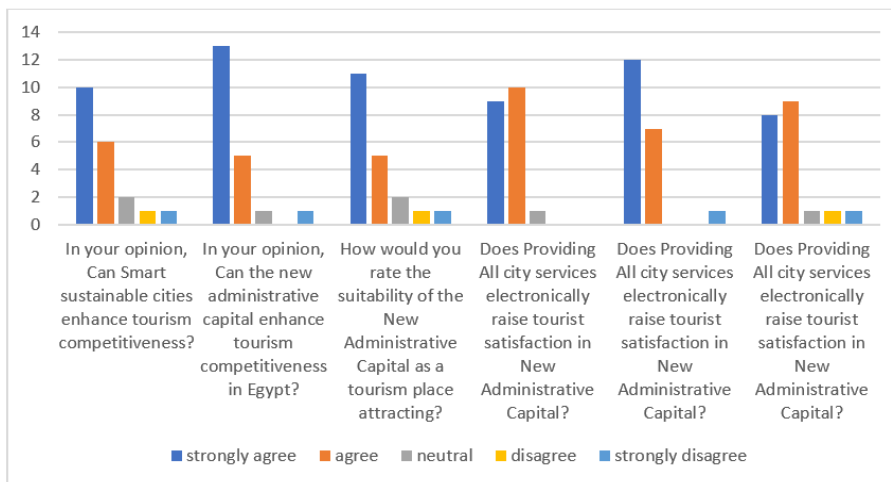


Fig.2.the results of Questionnaire Distributed to Egyptian Holiday Village Managers

This figure indicates that the Holiday Village Managers agree that the New Administrative Capital to enhance tourism in Egypt.

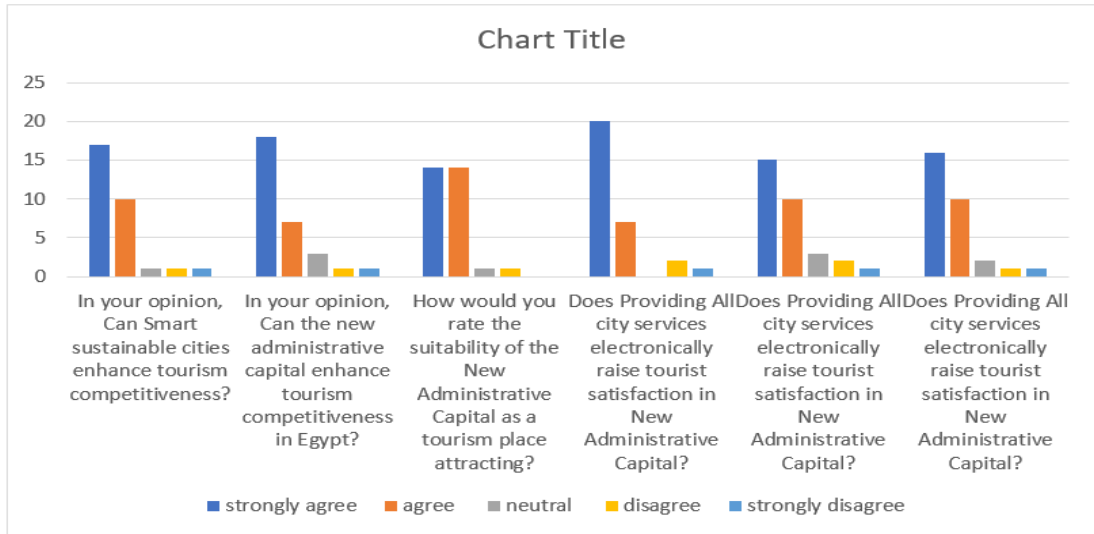


Fig.3. the results of Questionnaire Distributed to Egyptian Hotel and Restaurant Managers

This figure indicates that the Hotel and Restaurant Managers agree that the New Administrative Capital to enhance tourism in Egypt.

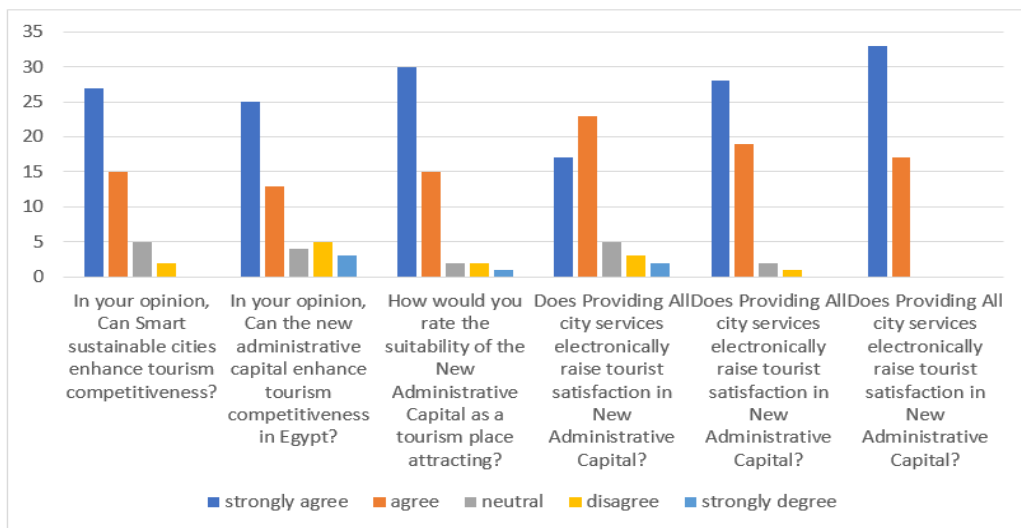


Fig.4. the results of Questionnaire Distributed to Egyptian Tour Guides

This figure indicates that the Tour Guides agree that the New Administrative Capital to enhance tourism in Egypt.

Second the results of questionnaires of tourists' satisfaction survey

Table 2

The results of Questionnaires of Tourists' satisfaction survey

| Statement | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|--|----------------|-------|---------|----------|-------------------|
| | 13 | 3 | 2 | 1 | 1 |
| How would you rate the suitability of the New Administrative Capital as tourism place attracting? | 11 | 5 | 1 | 2 | 1 |
| Does the New Administrative Capital have entertainment places different from that is exist in your country? | 7 | 4 | 3 | 4 | 2 |
| What is your assessment of the effectiveness of the means of transports? | 11 | 2 | 3 | 1 | 3 |
| How would you rate the suitability of the time taken to complete the service provided to you? | 9 | 3 | 2 | 2 | 4 |
| How would you rate the clarity of the mechanism and procedures for providing the service in the New Administrative Capital? | 6 | 4 | 4 | 3 | 2 |
| If yes, what is your assessment of the services and information provided through the website promoting tourism in Egypt? | 8 | 5 | 5 | 1 | 1 |
| Do providing services electronically make it more easily? | 6 | 4 | 3 | 4 | 3 |
| Do introducing services electronically help in saving time, dealing quickly and not wasting time on what is not necessary? | 11 | 3 | 2 | 2 | 2 |
| Does the New Administrative Capital provide a suitable service and provide amenities (seats/air conditioning/camera/toilets/car parking etc.) | 8 | 6 | 1 | 1 | 4 |
| If yes, Are there guiding and introductory panels for offices / places of service provision? | 7 | 4 | 4 | 3 | 2 |

This table shows the results of the Questionnaires of Tourists' satisfaction survey. They agree that the New Administrative Capital has many perfect services and entertainments. So, it helps to attract tourists and to enhance tourism in Egypt.

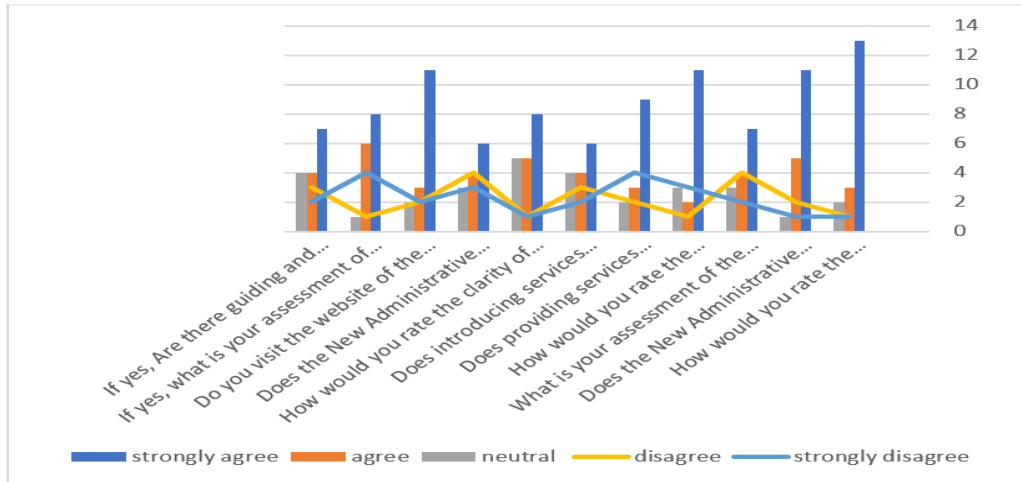


Fig.5. the results of Questionnaires of Tourists' satisfaction survey

These previous charts indicate that most participants of the tourists who visit the New Administrative Capital strongly agree that the New Administrative Capital achieves inclusive, safe, resilient, and sustainable cities and societies which attract them to visit Egypt. They also assured that they get the best services from means transports and entertainment places, amenities (seats/air conditioning/camera/toilets/car parking. The smart sustainable, technological progress and digital transformation make the New Administrative Capital the most important tourist place in Egypt.

10. Discussion

The present study asked the following questions:

The answer to the first question.

What is the effect of smart sustainable cities (New Administrative Capital) on enhancing tourism competitiveness in Egypt?

The New Administrative Capital achieves a sustainable tourism sector and enhances its competitiveness and making it more advanced and modern. It is not just a construction project; it is also a tourism project that is based on achieving sustainable tourism development through the formulation and implementation of structural reforms aimed at raising the competitiveness of the Egyptian tourism sector and in line with global trends. The New Administrative Capital supports the idea of the importance of technological progress and digital transformation in the tourism industry because technology is a tool for improving infrastructure resources through the application of a modern digital infrastructure that attracts tourists from all over the world; And more sustainable, especially when powered by clean, renewable energy.

The answer to the second question.

What are the opinions of Egyptian hotel and restaurant Managers, Holiday Village Managers, and tour guides about the effect of the New Administrative Capital on enhancing tourism?

The study results demonstrate the different perspectives toward the New Administrative Capital on enhancing tourism. The findings of the study indicated that there are differences between the participants in the three jobs around the New Administrative Capital on enhancing tourism. The tour guides are the highest department that agrees with the New Administrative Capital is very important in enhancing tourism, then the hotel and restaurant Managers, but the Holiday Village Managers are the lowest results accepting the ideas of enhancing tourism through the New Administrative Capital.

The answer to the third question;

What are the tourists who visited the New Administrative Capital' opinions about the effect of the New Administrative Capital?

From the result of the questionnaire, the researcher concluded that the tourists who visited the new administrative capital agree with the new administrative capital provides a suitable service that attracts them to visit Egypt again. In addition, they assured that the New Administrative Capital has a more secure and convenient mobility system far less cost than the individual automobile. It helps to ensure that passengers have a choice of multimodal transport system: It may incorporate the subway, bus transfers, trains, and speed trains, which could optimize public transit, and this leads to attracting the tourists to visit Egypt.

11. Conclusion and Recommendations

According to some suggestions of participants and the researcher, there are some points to enhance the Egyptian tourism by improving the New Administrative Capital which are:

- Building new cities to encourage tourists to visit Egypt.
- Increasing the promotion of the importance of the new administrative capital in attracting tourists to Egypt.
- Benefiting from the experiences of leading countries in tourism and encourages domestic tourism to reduce the flow of local tourists abroad.
- The need to build an encouraging culture to promote tourism, and to deepen awareness of the importance of tourism and its returns, not only among sector owners and researchers but also among ordinary citizens, while directing citizens' attention to preserving the environment and protecting heritage.
- Working to enhance the quality of the tourism industry, as it is considered the criterion of precedence in today's world and winning in the future, and whoever owns quality owns the tourist.
- Enhance travel planning via all-in-one mobile transportation applications, provide real-time information on capacity, routes, and locations from the transportation department, as well as monitor traffic occurrences.
- Quick and Convenient, Smart Airport International Travel.

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**Questionnaire Distributed to Egyptian Hotel and
Restaurant Managers, Holiday Village Managers, and Tour
Guides**

Dear _____:

Thank you for your participation in this questionnaire survey, about the impact of Smart sustainable cities on enhancing tourism competitiveness. Your responses are confidential and will be used only for the study. Your cooperation is greatly appreciated.

**1. What is your
Gender?**

Male

Female

2. What is your Age?

Less than 30 Years

30 - Less than 40 Years

40 - Less than 50 Years

50 – Less than 60 Years

60 Years and Over

3. What is your occupation?

hotel and restaurant managers

holiday village managers

tour guide

**4. How many years have you been in a
tourism career?**

1- Less than 5 Years

5- Less than 10 Years

10- Less than 15 Years

15- Less than 20 Years

20 Years and Over

| Statement | Strongly agree | Agree | Neutral | Disagree | Strongly disagree |
|--|----------------|-------|---------|----------|-------------------|
| 5. In your opinion, Can Smart sustainable cities enhance tourism competitiveness? | | | | | |
| 6. In your opinion, Can the new administrative capital enhance tourism competitiveness in Egypt? | | | | | |
| 7. How would you rate the suitability of the New Administrative Capital as a tourism place attracting? | | | | | |
| 8. Does Providing All city services electronically raise tourist satisfaction in New Administrative Capital? | | | | | |
| 9. Does New Administrative Capital contribute to tourism marketing and promotion in Egypt? | | | | | |
| 10. Does New Administrative Capital contribute to improving the tourists' view of Egypt? | | | | | |

11. Are there suggestions or observations that you would like to submit regarding tourism that could contribute to the development of the mechanism of tourism work in the future? If it exists, please mention it in the following lines

.....

Thank You

Questionnaires of Tourists' satisfaction survey

Dear:

Please kindly fill out this questionnaire, which aims to measure the extent to which you are satisfied with the services provided to you during your visit to the New Administrative Capital in Egypt, as an affirmation of our quest to achieve your requirements and continuous improvement, thank you for your cooperation, please choose the appropriate answer.

1. What is your Gender?

Male

Female

2. What is your Age?

Less than 30 Years

30 - Less than 40 Years

40 - Less than 50 Years

50 – Less than 60 Years

60 Years and Over

3. Educational level

.....

4. Nationality

.....

5. Do you visit the website of the New Administrative Capital?

Yeah

No

| Statement | Excellent | Very good | Good | Acceptable | Weak |
|--|-----------|-----------|------|------------|------|
| 6. How would you rate the suitability of the New Administrative Capital as tourism place attracting? | | | | | |
| 7. Does the New Administrative Capital have entertainment places different from that is exist in your country? | | | | | |

Continued

| | | | | | |
|--|--|--|--|--|--|
| 8. What is your assessment of the effectiveness of the means of transports? | | | | | |
| 9. How would you rate the suitability of the time taken to complete the service provided to you? | | | | | |
| 10. How would you rate the clarity of the mechanism and procedures for providing the service in the New Administrative Capital? | | | | | |
| 11. If yes, what is your assessment of the services and information provided through the website promoting tourism in Egypt? | | | | | |
| 12. Do providing services electronically make it more easily? | | | | | |
| 13. Do introducing services electronically help in saving time, dealing quickly and not wasting time on what is not necessary? | | | | | |
| 14. Does the New Administrative Capital provide a suitable service and provide amenities (seats/air conditioning/camera/toilets/car parking etc.) | | | | | |
| 15. If yes, Are there guiding and introductory panels for offices / places of service provision? | | | | | |

16. What other needs do you want to meet in terms of service procedures and the mechanism for providing it?

.....

17. What are your future expectations that you aspire to be met by the New Administrative Capital?

.....

Thank You



مجلة اتحاد الجامعات العربية للسياحة والضيافة (JAAUTH)

المجلد 21، العدد 2، (ديسمبر 2021)، ص 162-186.
الموقع الإلكتروني: <http://jaauth.journals.ekb.eg>



المدن الذكية المستدامة وأثرها في تعزيز التنافسية السياحية:

دراسة حالة للعاصمة الإدارية الجديدة

سارة عاطف وهبة

كلية السياحة والفنادق، جامعة بني سويف، مصر

| معلومات المقالة | الملخص |
|---|---|
| الكلمات المفتاحية المدن المستدامة المصرية؛ التنافسية السياحية المصرية؛ العاصمة الإدارية الجديدة. | لا شك إن إنشاء المدن الذكية المستدامة في مصر يمثل أهمية كبيرة في تعزيز القدرة التنافسية للسياحة في مصر. والهدف من هذا البحث هو توضيح أهمية التوسع وإنشاء المدن الذكية في مصر مع التطبيق على العاصمة الإدارية الجديدة في تنشيط السياحة في مصر وجذب السياح من جميع أنحاء العالم، وتسعى الحكومة المصرية إلى تشييد 40 مدينة ذكية ضمن مدن الجيل الرابع التي تمتلك أحدث التقنيات العالمية والتطبيقات التكنولوجية تستهدف بها تحقيق طفرة عمرانية، وتغيير وجهة نظر العالم عن العقار المصري والاستثمار فيه وتقديم دفعة قوية لتصدير العقارات وسياحة المؤتمرات، وطبقا لهذا المفهوم عن المدن الذكية والمستدامة، فإن مصر في طريقها لكي تكون مركزا لعدة أنشطة مثل المؤتمرات الدولية وسياحة المؤتمرات وكافة القطاعات الطبية والتعليمية والتجارية والذي بدوره سيساهم في زيادة أعداد السائحين وتنمية الطلب السياحي، إن التوسع في إنشاء المدن المستدامة يوفر تحولاً آمناً وذكياً ومرناً على مستوى المدينة، وتعتمد على تبني تحول تكنولوجيا المعلومات والاتصالات في كل شيء وهذا يخفف من العديد من المخاطر والتحديات. |

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