

## **Towards Activating an Integrated Digital Platform for Egyptian Tourism Sector: A new E-model of Tourism Management**

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### **Abstract**

E-tourism, often known as travel technology or "e-travel," is a phenomenon in which visitors and businesses use information and communication technology to change procedures and value chains in the tourism industry. Tourism, being a service business, is particularly influenced and revolutionized by technological advancements. Its products are typically complicated and intangible; their production and consumption experiences are inextricably linked; its service stocks are perishable; and the experience varies according to the particular tourist at different times. Furthermore, because the business is so complex, it necessitates a considerable deal of coordination between different types of services and the transmission of detailed information in order to eliminate ambiguity during service interactions. To generate sales and profitability, its businesses must respond quickly to sell unsold stocks. The key research issue is how the use of a digital platform affects the tourist experience. Based on the tourist journey procedure model, the study examines visitor behavior with a special focus on the visit cycle (pre-visit, on-site, and post-visit phases). First, a quantitative study was used to empirically test and validate this model. This investigation helps us to gain insight into tourist behavior, which is helpful in making tourist attractions' smarter.<sup>1</sup> The outcomes of the study show that the suggested digital platform, "Comprehensive online system," has an impact on the tourist trip by offering new perspectives on the influence of digital platforms with technical and marketing consequences for Egyptian tourism destinations.



**Keywords :** *Integrated Digital Platform, Tourism Sector, Comprehensive online system, Digital tourism.*

## Introduction

Tourism is rapidly gaining popularity and becoming a part of everyday life. Today, there are several internet platforms dedicated to tourism, benefits from the application of smart technology, and advancements in the digital world. Digital technology and platforms are changing the way the tourism industry does business from beginning to end. Tourists may access digital platforms from anywhere in the world, and service providers can use them to boost the tourism industry's growth and competitiveness. Several low-income economies stand to benefit from the digital transformation, while others risk being left behind if they do not seize the opportunity. (Gao, 2020)

The extensive use of smart technology or digital platforms is a crucial component in the tourism industry within the broader framework of digitization, which is no longer a trend but rather a daily reality. These technologies make tourists more engaged and more demanding of their experiences at a destination or a particular tourist attraction. In order to meet this challenge, tourist attractions and destinations must adapt and integrate smart infrastructure and technology into the services they provide to visitors while also creating an appealing and memorable travel experience. (Herzog and Wörndl, 2021)

Digital platforms are changing every aspect of the tourism industry, including how locations promote travel, create products, collect data, access markets, and draw tourists. It is difficult for low-income economies to use tourism as a development tool because of the rippling effects of this digital disruption on the travel and tourism sector. How can international partners, national leaders, and enterprises collaborate more



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effectively to manage digital for the development of sustainable tourism in developing markets? (Jayapa, 2019)

Online travel and hospitality platforms will keep developing, which will have intriguing side effects. While many internet platforms for the hospitality industry are now mature, there are still a few larger platforms for additional services like renting a car, chauffeur services, catering, reserving attractions, event management, and so forth. While we are having this conversation, we have no doubt that additional platforms that are equally competitive and exciting are being created. (Wang, 2022)

## **Objectives of the Research**

- To support the digital transformation of Egyptian tourism service providers via using a new e-tourism platform.
- To boost innovation in the performs of reservation and consumption of tourism experiences and activities in the suggested platform icons.
- To encourage the creation of quality content in the suggested model-IDP with a focus on the authenticity of the destination to be promoted.
- To design an integrated digital platform which includes a comprehensive system serves Egyptian tourism sector and tourists from all over the world.
- To explore the whole contribution of integrated digital platform to travel decision making and aligning of its to Egyptian destination management

## **1. Literature Review and Theoretical framework**

### **1.1. Development of Digital Tourist**

The evolution of information and communications technology is inextricably linked to the dynamics of e-tourism. In the past, airlines used a card system to make bookings, and hotels used colored tapes on walls to keep track of inventory. Airlines began a wave of adoption as soon as the first electronic general-purpose computer, ENIAC, was introduced in



1946. In the same year, American Express built its first automated booking system. (Alcázar, 2015). In the 1960s and 1970s, other travel businesses, airlines, and hotels began to use ICT to construct computer reservation systems. Such airline and hotel networks began to merge into worldwide distribution systems in the 1980s, allowing travel companies to book a variety of services. The widespread use of the Internet in the 1990s introduced new distribution channels and ways of directly reaching tourists, causing the Internet to begin reshaping the tourism industry's structure. (Morrison, 2019)

In the early 21st century, social media and mobile technologies intensely transformed the ways that tourists access data and conduct transactions. Therefore changing the control structure and balance between tourists and businesses. (Buhalis, 2016) In the early 2010s, the outlook of the application to tourism of marvelous volumes of online data has the potential of transforming “big data” into knowledge, dramatically improving the tourism experience and offering a profounder understanding of behavioral forms and the structure of this industry. (Nyheim et al, 2019)

## 1.2. Current Technologies and Digitalization in Tourism

In e-tourism, various types of technology are used. As a result, three sub-areas have emerged: operational tools and systems used by tourism, the hospitality industry, or government agencies to improve efficiency and competitiveness; digital platforms used by tourists to search for information, plan their vacations, make purchases, and share their experiences; and distribution and business tools that propose distribution channels and facilitate tourist-business interactions. (Benckendorff et al, 2020)

In recent times, there are several examples of digitalization processes in the tourism industry:

- **Digitalization of Regular Operations** - Creating digitization into your internal corporate activities, such as linked calendars, email systems, and



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automatic billing processes, is referred to as "digitalization of routine operations. (Neuhofer et al, 2018)

- **Big Data** - The use of software devices to collect and analyze large amounts of data in order to determine a tourist's interests and personalize products to their individual requirements. (Wang, D. et al, 2021)
- **Website Optimization** - Having your own website and employing technology to measure performance, monitor your business health, and improve it for your target market is known as website optimization. (Subramani, 2017)
- **Social Media** - Managing social media accounts as well as creating and implementing campaigns based on big data visions.
- **Mobile Connectivity** - Ensure that all of your products and services are accessible through mobile devices. (Buhalis and Amaranggana, 2021)
- **Online sales** - Using e-commerce platforms, sell excursions, tours, vacations, and other experiences online, either through your own website or through an online travel agencies "OTAs". (Yoo, 2019)
- **Application of Modern Technologies** – Adopting technologies such as AI (artificial intelligence) – chat bots are an example – and VR (virtual reality) – a virtual travel experience, for example. (Morrison, 2019)  
A tourism business' journey to full digitalization is a common one. Traditional tourism businesses place a strong emphasis on internal operations and providing value to visitors. As they progress toward increased digitization through digital marketing and online sales, inclusive digitalization transforms into 'smart' tourism, characterized by high levels of innovation, quick and real-time e-commerce, and strong linkages with visitors and suppliers. While this brings numerous opportunities, it also presents a number of drawbacks. (Chaudhari and Thakkar, 2020)

### 1.3. Statistical Highlights for Digital Tourism in 2021–2022

Today's tourism sector has a close relationship with the internet. One of the earliest industries to embrace digital change was this one. After fashion and cultural goods, e-tourism is now the third most significant



industry on the Internet. (Holjevac, 2016) There are numerous options to travel at affordable rates, and tourists are becoming more independent in how they plan and prepare for their vacations. The market has grown considerably in size as a result of globalization. The tourism industry is affected by new technology; thus marketing and communication strategies must now take this into consideration. (Dan, 2021)

Here are the key trends and figures for the tourism sector in 2021 and 2022:

#### **1.3.1. The place of the Web in the Tourism Sector**

Every day, travellers utilize the Internet to do product searches and conduct online transactions.

- In 2021, 55% more tourists booked their vacations online than they did in 2020 (at 50%). (Xiang, 2021)
- 79% of travellers have gone online for information to plan their weekends and holidays.
- According to the Federation of e-commerce and distance selling, 46% of the sector's tourism industry will be conducted online in 2021. (Dilara, 2021)

It is challenging to update these crucial statistics for the tourism industry in 2022 in the wake of the coronavirus outbreak. It is still challenging to quantify its influence on traveller behaviors. According to statistics, there was a net decline in the number of visits to travel-related websites in March. (Herzog and Wörndl, 2021)

- Between March and January, website traffic for travel companies decreased by 25%.
- The typical session length has shrunk by 17%.
- A 15% increase in the number of pages visited.
- Fevad reports that in March, online travel sales dropped by 60%. However, participants in digital tourism are hopeful about the upcoming months. (Boes et al, 2020)
- A recovery is anticipated by 72% of respondents during the second half of 2021.
- 24% believe it will happen in the first half of 2021.



### **1.3.2. Key Trends and Figures for Mobile Tourism**

The primary navigational device is becoming the smartphone. Travel bookings on mobile are also on the rise in the tourism industry, according to statistics. Particularly when making last-minute or on-the-go reservations. (Chaudhari and Thakkar, 2020)

- 58% of people conducted information searches on their mobile device or tablet rather than a computer.
- Tourism industry experts affirm this trend. According to Misterfly's digital director Frédéric Pilloud, mobile will account for 55% of their reservations by the end of 2021.

### **1.3.3. Innovative Technologies in Tourism Marketing**

In order to determine the most recent trends in tourism, Booking conducted a poll and spoke with 22,000 people in 29 different countries. Booking predicts that "travellers will let technology drive their selections even more in 2022." (Dilara, 2021)

- Of those polled 59% say they want to rely on technology to provide them advice on novel situations.
- 46% of people are open to using a travel app to plan and book their trip. Therefore, big data and artificial intelligence-based apps would be the future of connected tourism. We can learn about the traveler through the analysis of data from transactions, social networks, and Internet user activity. Then, it will be simple to offer experiences that are more in line with their preferences and reading preferences. (Delic and Nguyen, 2019)
- In 2021 and during the next five years, marketers anticipate that new technologies will affect tourism communication, according to a Sojern survey. They predict a growth of: (Buhalis and Amaranggana, 2021)
- 20% in the area of augmented reality;
- 17% of the role played by data;
- Voice search and artificial intelligence account for 13% of market share.



#### 1.3.4. The Platforms, the Giants of Digital Tourism

The market leaders are the OTAs "Online Travel Agencies". These online travel firms, which group numerous services (hotel bookings, transportation, activities, etc.) on their platform, hold a 71 percent market share worldwide. (Benckendorff et al, 2020)

- 49% is held by the Booking group.
- 20% by Expedia.

These tourism industry pioneers for 2021 are aware that investing in SEO is crucial to their communication plan: (Herzog and Wörndl, 2021)

- \$8 billion is invested in SEO by Booking.
- In contrast, Expedia spends 6 billion for revenue of roughly 140 billion. Four times a year, Fevad and Médiamétrie provide viewership data for European e-commerce websites. The top 3 tourist platforms on the market as of 2022 are as follows: (Boes et al, 2021)
  - Booking remains the leader, far ahead of the others. It is cited by 40% of respondents;
  - Oui.sncf is in second place with 30%;
  - Airbnb in third with 24.8%.

#### 1.3.5. Trends and Key Figures for the Tourism Sector on Social Networks

Facebook and Instagram are indispensable networks today for aiming an audience. In the tourism sector, their spread and effect are mainly strong:

- In 2021, 1,000,000 travel-related hashtags are searched per week.
- The hashtag “travel” is number 3 in frequency of use.
- 34% of respondents use social networks for travel inspiration and 51% of millennials (18 – 34 years old). (Chaudhari and Thakkar, 2020)
- 62% of Instagrammers choose a destination by getting inspiration online according to Julie Pellet, at Instagram communications.
- 68% of Pinterest users search in relation to the place they plan to visit according to Adrien Boyer, the director for France.
- 70% of millennials choose their destination based on Instagram posts



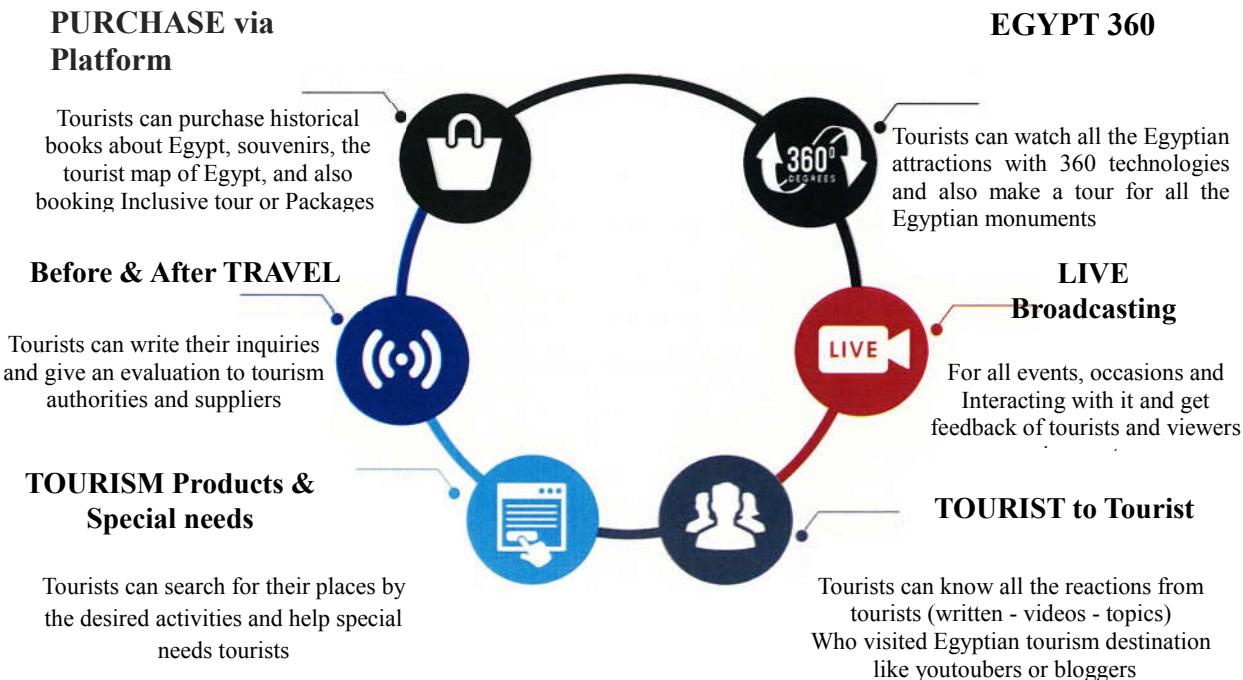
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- 64% of travelers post travel photos on networks and 73% of millennials. (Delic and Nguyen , 2021)

## **2. Suggested Framework/Model for Integrated Digital Platform-(IDP)**

The IDP is a smart attractive spot that develops with cutting-edge technologies in mind, with the goal of improving visitor experience quality and combining unique service and management concepts. The efficient and effective administration of IDP, the provision of smart services and value programs to visitors, and the efficient and effective promotion of the tourist attraction should be the key profitability. (Wang, D. et al, 2021)

The basic outcome would be the development of tourist attraction, local society, and economy in a coordinated, long-term manner. Visitors can co-create their experience in IDPs through the digitalization of critical business processes, service design and value proposals, as well as marketing communications. The IDP's strategy's goal should be to improve the tourist experience by making it more appealing, fascinating, and memorable. As a result, IDPs serve as a tool or medium for achieving the aforementioned objectives. (Kladou, 2020)

**Fig. 1 describes how tourists use the proposed new e-model of an integrated digital platform at various stages.**



**Fig. 1: Suggested Integrated Digital Platform- IDP (Wang, D. et al, 2021)**



### **3. The Locations and Tools which Tourists can find or Use the Integrated Digital Platform-IDP in Egyptian Destination**

#### **3.1. The impact of the model-IDP on Museums and Airports**

##### **3.1.1. Tourist Sites and Museums**

Museum Informatics investigates the sociotechnical issues that arise in museums when people, information, and virtual interactions. It was created to address the many issues that museums and museum visitors face in today's information culture. It looks at not only how new technologies are being used in museums, but also how advances in information technology have changed the very essence of tourist attractions, both for those who work in them and for those who visit them. It provides museum services to visitors at any time or location. Specific exhibitions, such as 360° virtual tours or augmented reality technologies, long-term fairs, guided exhibitions, visiting the museum with a friend, lectures and open discussions, excursions in one's cultural location, information facilities, and tourism site training are the first services.

##### **3.1.2. Airports**

Passengers will be more concerned about their health and make safety requests in the post-COVID-19 environment. To rebuild passenger and employee trust, airports will need to support solutions and services that respond to the most serious health concerns. It is apparent that an enhanced digital passenger experience will be critical in the future. To ensure a better customer experience throughout their travel and provide the most comprehensive display of services, airports will need to quickly transition to digitalization. 360° IDP is a digital platform solution that promotes safe and intelligent passenger journeys at and around airports, providing airports with a secure infrastructure to enable all passenger digital services and increase non-aeronautical revenue. It's a simple-to-integrate platform, with a linked and accessible approach that makes it



flexible to the airport's specific needs. This system provides airports with the necessary digital airport communication functions and adds contemporary innovations like a mobile app, social media, and parking reservations on top of that. In a comprehensive and centrally managed strategy brimming with cutting-edge capabilities

### 3.2. The instruments or Tools Used in this Model-IDP

#### 3.2.1. Smart Watches

A form of technology which is set to make a large influence in the next years is that of wearable devices. The smart watch in particular is likely to become another main mobile revenue stream for massive user electronics producers such as Apple and Samsung. While a wearable mobile device from Apple has been rumored for quite some time. Various tech analysts imagine the so-called Apple iwatch to hit the market early next year. When it comes to notifications and activity tracking, smart watches excel. (Dan, 2021) Tourists who use the watch for these purposes will find it quite useful. Furthermore, the Maps would direct tourists on foot who are confident in their route to their destinations. Users are guided by buzzes that indicate which way they must turn. The watch also shows the number of trip phases to Egypt, as well as distance, and slope. People who are health-conscious would also appreciate an hourly reminder to get up and move.

#### 3.2.2. Mobile Application

All businesses have changed as a result of technological advancements. There is no exception in the tourism industry. According to a new study by eMarketer, travel-related mobile applications are the sixth most downloaded app category, and nearly 60% of Smartphone users use travel apps on a daily basis while planning trips (Morrison, 2019). The days of travellers relying on travel agents to put together vacation packages in Egypt are long gone. Some of Tourists now want to create their own tourism packages using portable and user-friendly mobile apps, thanks to the availability of digital tools. Travelers can use Mobile App



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during the platform for online ticketing, hotel booking, destination data, locating local attractions and food outlets; discovering new destinations in Egypt; finding reviews about a destination they plan to visit; sharing photos from their trip; and providing feedback on a destination, airline, hotel, or event. Apps like Wikitude provide up-to-date information about the sights and landmarks they're viewing in an entertaining way. It uses your phone's camera to display relevant photographs and content on top of your screen.

### **3.2.3. Websites**

Tourists can explore a full selection of exclusive experiences on a chosen Egyptian destination and make a reservation in just a few clicks via the digital platform for experiences, which is directly linked to the vital website:

- Web and mobile applications that promote lesser-known destinations.
- All local tour and experience services should be digitalized.
- Carry all of your local tour and activity operators under one roof and provide them with a means to sell local experiences all in one place.

## **4. The Services Provide- ICONS by the Digital platform: a new e-model!**

The digital platform will be under the supervision of the Egyptian Ministry of Tourism and in cooperation with travel agencies, airlines, hotels and all official authorities related to tourism industry in Egypt

### **4.1. Smart operations:**

It is a service that enables the tourist to create an integrated tourism package, either by himself or OTAs, from arriving at the airport until returning to his homeland, which the package will include:

- Choosing the time of arrival, airline ,and hotel
- Setting a timetable for visited places and how to reaching these places, with alerting the tourist of the timings.



- The system includes audio guides for attractions in more than one language.
- Showing the prices of different destinations in Egypt.

#### 4.2. Notifications for any Problem:

When the tourist is faced to danger or encounters any problem, this service enables him to send his location via GPS and the problem he faces through the system to the tourism authorities. Each tourism-related authority has its own section or icon on the system, for example:

- If any harassment occurred to the tourist, the tourist will be able to send a distress or message that includes the problem and its location via GPS to the ministry of tourism and tourism police, which will be received by the section of these authorities on platform.
- If tourist is injured, he can send a distress or a message about his location to the Egyptian Ambulance Authority, which will receive this message through its section on platform, while benefiting from the ECL service.
- The system will save the last coordinates or places which the tourist has visited.
- Tourist can send his suggestions and complains to Egyptian tourism authorities, suppliers and travel agencies.

#### 4.3. ECL- Egyptian Cloud:

It is an abbreviation for Egyptian cloud, which is an on line, service on platform that enables the tourist to register his personal data such as:

- Health data (which helps the Egyptian ambulance Authority when any injuries occur).
- Passport copy. (Which tourist may need when his passport is lost, or the tourism police need it when any problem occurs).
- Inserting contact numbers and emergency of tourist. (This service helps the Egyptian authorities to communicate with tourist or anyone related to the tourist when any problem occurs).
- Preferred attractions and restaurants, length of stay, the expected budget, evaluation of services, and number of visits (also these data will help ministry of tourism to make tourism statistics).



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- Providing a free space to tourist-like "hard memory" on platform to store important documents and files during travel.

**4.4. Findit:**

It is a service that enables the tourist to search for lost luggage and personal items by inserting his ID that obtained from the ECL service on platform, or searching for lost items that do not have an ID that was found by the police, airports or citizens

**4.5. BBY:**

It is a service that enables the tourist to reserve domestic and international tickets, hotels and Nile cruise, as well as purchase historical books of Egypt, souvenirs, Egypt's tourist map, and packages on the website. These packages can serve all the tourist needs from:

- Mobile phone line.
- Purchase entry tickets to tourist sites.
- Map of Egyptian attractions.
- Creating special itinerary for tourist inside Egypt.
- Through this service of platform which sends offers and discounts to the tourist via his e-mail or by SMS.

**4.6. EGY 360:**

It is a modern video and photo technology which creates panoramic views and photos by tourism authorities that are shown simultaneously in all directions on the platform. The tourist can tour for all attractions and know details of sightseeing anywhere in Egypt.

**4.7. EGYPTNOW:**

It is a live broadcasting service for all events and occasions that take place in Egypt, as well as interacting, communicating with other tourists and with organizers of events, as well as knowing the tourists reactions and feedback at the same time.



#### 4.8. Feedback:

The tourist can know all the reactions of other tourists (in writing - videos - topics) about sightseeing, transfers, accommodations, etc., from the trusted websites globally which find on platform like expedia, skyscanner, booking ...etc.

#### 4.9. EGYPT Talk:

This service is like a social network on digital platform for tourists and those interested in Egypt. It supports the following facilities:

- Enabling tourists coming to Egypt to recognize other tourists coming to Egypt at the same time and communicate with them.
- Communication with the Egyptians and vice versa.
- The ability to add topics, photos and videos of their visit to Egypt and sharing it online.
- A special department on Egypt Talk icon for practicing of languages between the tourists and Egyptian, in addition to asking questions to the Egyptians to know what foods, restaurants, heritages Egyptians people prefer it.
- A special department on Egypt Talk icon for Egyptians only to give lectures, advice on how to deal with tourists and raising tourism awareness

#### 4.10. Reports & Statistics:

The system will prepare permanent reports and statistics to tourism authorities include the most visited places, tourists' assessments, services' feedbacks, problems or obstacles which faced tourists, the most nationalities accessing platform, and the tourist revenues which spent during staying in Egypt through the BBY service on digital platform.



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## 5. Impact/influence of Digital Platform on tourist journey in Egyptian tourism Destination

As previously stated, tourists have increasingly used smart technologies during their visit cycle in recent years; they use them at all stages of the consumer experience, or 'tourist trip.' Tourists are influenced by the services given by digital platforms in all tourism contexts and situations. According to this study, online systems have the following impact on the visitor experience at attractions in terms of traveller journey phases (i.e., pre-visit, on-site, and post-visit) as follows. (*COMCEC, 2021*)

### 5.1. Phase one: Pre-visit

Tourists utilize the digital platform-IDP before their visit to search for information on essential tourism facilities, choose the tourist attractions that fit their desires from an enormous number of sightseeing, and book all tourism services required for their visit in advance. Tourists trust the assessments of genuine experiences and recommendations by their peers and influencers on social media during this time of seeking, comparing, and preparing, because the tourism product purchase has a certain risk. (*Smith, 2019*). A growing number of visitors use digital platforms to access 'common knowledge of all tourists,' and travelers rely on other user-generated content to inform their decisions. This information on tourist sites is based on real-life experiences shared by other tourists in SMS, and it is quite useful in reducing the risk of poor decision-making. (*Chaudhari and Thakkar, 2020*)

### 5.2. Phase two: On-Site

Tourists' usage of digital platforms in tourism activities, such as mobile tourism guides, mobile suggestion systems, navigation strategies, and congestion management systems, is the most direct manifestation of human-computer interaction. (*Kim, 2017*) This integrated digital platform-IDP improves tourists' ability to co-create and co-manage their visit experience process, bringing more emotion and action to the tourism experience activity and therefore increasing tourists' participation. When



tourists feel more connected to tourism activities, they are more likely to have favorable emotional reactions throughout their visit, which increases tourists' desire. (Delic and Nguyen, 2021)

Tourists are given explanations by electronic tour guides rather than manual tour guides, who limits tourists to a specific scope and expands tourists' capacity to wander freely on the basis of receiving the most ideal and relevant explanation but there is a fee to be paid on the platform for this service via "BBY icon". During a tour, mobile devices (smart phones and tablets) can be utilized for data access, communication, and self-entertainment. This IDP, integrated digital platform can assist travelers in resolving issues, making the visit more flexible, and immediately providing (in real-time) feedback on their experience. (Nyheim *et al*, 2019)

### 5.3. Phase three: Post-visit

In addition, once the holiday experience is over, users will be able to remark on and endorse their experiences using the integrated digital platform-IDP. Tourists will document their travels on a digital platform and utilize this condensed online system to explain, reproduce, and revisit their excursions in order to generate a complete chain of perspectives that will influence their peers and new tourists. (Chaudhari and Thakkar, 2020)

The study discovered that writing and publicizing post-visit experiences can help visitors develop and build their tourism experience while also having an impact on potential tourists' decision-making behavior. Tourists immediately present their experiences on digital platforms in a variety of formats, which is useful information for tourists planning future trips and influencing their behavior. (Dilara, 2021)

The research framework/model is designed around the three stages listed above. (Figure 2), which depict the predictor forms (the three phases of a tourist visit) and reliant on forms (Smart and Unforgettable Stay Experience).

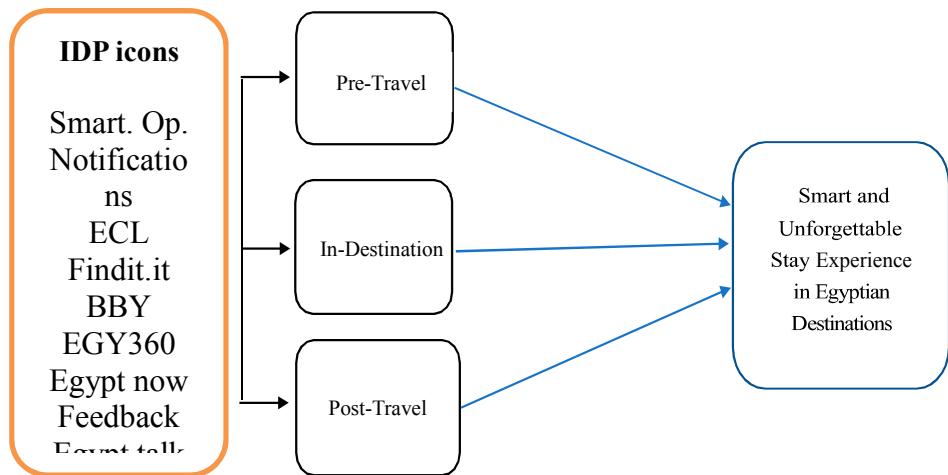


Fig. 2. Impact/influence of Digital Platform on tourist journey

## 6. Research Design and Methodology

The research tool (questionnaire) consisted of three sections: (i) part one on smart technology opinions, i.e. a new e-model of digital platform used during the visit experience; "uses/contents, tourist's expectation and tourist's experience", (ii) part two describing the research constructs (Impact of integrated digital platform-(IDP) on tourist journey, i.e., pre-visit, visit itself, and post-visit stages), (iii) part three about the all IDP-Icons which influence of the journey/visit experience, and which Icons of IDP are the most influential.

The research constructs and items were measured as follows in Section 2 of the questionnaire. On a 5-point Likert scale, a total of 12 items were rated from not at all influential/useful to very strong influential/useful, and from strongly disagree to strongly agree.



## 6.1. Data Collection

Data was gathered using the survey method. The study relied on a convenient sampling procedure less than one condition: they had visited Egypt at least once in the previous six months.

In total, the research team collected "620 questionnaires" from visitors aged 18 and up who had visited Egypt during the previous six months via "International Cairo Airport" and includes "33 questions". The surveys took place from January to February of 2022. The sample size is thought to be appropriate in terms of providing reliability and validity. Table 1 summarizes the profile of the sample/respondents.

**Table 1. Sample ( $n = 620$ ).**

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	264	42.6
Female	356	57.4
Age		
18 to 30	276	44.5
31 to 45	120	19.3
46 to 55	97	15.6
56 to 65	74	11.9
66 to 75	29	5.7
75+	24	3.8
Degree of education		
High school juniors	30	4.8
High school	50	8.1
Undergraduates	311	50.2
Postgraduate student	188	30.3
Other	41	6.6
Occupation		
Student	213	34.4
Teacher	108	17.4



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Worker	22	3.5
Freelancer	72	11.7
Civil servant	41	6.6
Admin/Office employee	47	7.6
Enterprise staff	82	13.2
Other	35	5.6
Visits to Egypt (in numbers)		
1	423	68.2
2	143	23.1
3+	54	8.7
Nationality		
Argentina	10	1.6
Bahrain	17	2.7
Brazil	12	1.7
Canada	22	3.5
China	34	5.4
Czech	16	2.6
Cyprus	29	4.6
France	45	7.2
German	77	12.4
Greece	38	5.6
Kuwait	19	2.8
Italy	65	10.5
Japan	32	5.2
Lebanon	42	7.1
Morocco	19	2.8
Palestine	28	4.5
Russia	91	14.6
Saudi Arabia	68	10.9
Spain	36	5.4
Sweden	14	2.3
Tunisia	22	3.4
Ukraine	79	12.7
United Arab of Emirates	65	10.5
United Kingdom	88	14.1
United States of America	42	6.7



- SPSS Version 25.0 was used to conduct the statistical analysis of the data. The analyses and results are discussed in the following section.

### **6.2. Results: Data Analysis and Discussion**

The results of exploratory factor analysis are shown in Table 2. (EFA). Each measurement item's factor load is between 0.655 and 0.921, which is higher than the industry standard of 0.500. These findings show that the measurement scale was extremely consistent and reliable internally.

**Table 2. Exploratory factor analysis- IDP**

Items	Constructs	Uses& Contents	Expectations	Tourist Experience
1.1 Exploring and arrangement		0.832		
1.2 Decreasing decision threat		0.769		
1.3 Growing interest in		0.854		
1.4 Structure un understanding		0.847		
2.1 Communication and navigation			0.826	
2.2 Improving accessibility and zoom			0.834	
2.3 Flexibility, trust, and pleasure			0.873	
2.4 Making short-term decisions			0.655	
2.5 Verifying and loading memories			0.921	
3.1 Recalling memories				0.872
3.2 Sharing experiences (posting reviews)				0.835
3.3 Assessing (making recommendations)				0.898

Note: Extraction method: Principal component analysis. Rotation method: Varimax with Kaiser normalization. Rotation converged in 5 iterations.

These findings suggest that the three research factors are valid. The link between the concepts must be significant in order to test the research model. To define the inter-relationships between the constructs, the Pearson product-moment correlation was used (see Table 3). The Pearson correlation value (R) for n = 620 (p 0.01) was between 0.465 to 0.711, indicating a substantial association. As a result, there was a substantial correlation between all factors, allowing us to test the research model's practicality.



**Table 3. Pearson correlation coefficient.**

<b>Constructs</b>	<b>Pre-Visit</b>	<b>On-Site</b>	<b>Post-Visit</b>	<b>Amv</b>
Uses& Contents-IDP	1	0.711 **	0.683 **	0.583 **
Expectations-IDP	0.711 **	1	0.664 **	0.521 **
Tourist Experience-IDP	0.683 **	0.668 **	1	0.465 **
Attractive& Memorable Visit	0.569 **	0.524 **	0.465 **	1

\*\* At the 0.01 level/Sig, the correlation is substantial (2-tailed)

Table 4: Displays the Regression Analysis Model and Outcomes

- The Durbin-Watson coefficient was 1.952, which is within the acceptable range of 1.00 to 2.00. The findings showed that the three stages of a tourist visit (the influence of an integrated digital platform-IDP on tourist behavior at the three stages of a tourist attraction visit experience) were strongly connected with the quality of the visit experience, as measured by an AMV.
  - The influence of IDP-Icons on increasing the quality of visit experience was studied using a simple linear model.
    - X1 ( $=0.421$ ,  $t = 6.843$ ,  $\text{Sig.} = 0.000$ )
    - X2 ( $=0.313$ ,  $t = 4.975$ ,  $\text{Sig.} = 0.000$ )
    - X3 ( $=0.95$ ,  $t = 1.473$ ,  $\text{Sig.} = 0.249$ )
- Explained 73.3 percent of the variance (see Table 4).



**Table 4. Model and results of regression analysis**

Parameter Evaluation

Model	R *	R2	Adjusted R2	Std	Durbin-Watson	F	Sig
1	0.843	0.733	0.723	0.764	1.952	67.387	0.000

PP, AP, and RP are predictors (independent variables), while AMVE is the dependent variable.

\* R stands for correlation coefficient; R2 stands for coefficient of determination; R2 stands for adjusted coefficient of determination.

Model	Regression Model			t	Sig.
	Understandardized Coefficients		Standardized Coefficients		
	Std. Error	Beta			
IDP ICONS *	0.537	0.362		1.594	0.111
Smart Oerations	0.529	0.080	0.421	6.843	0.000
Notifications	0.401	0.084	0.313	4.975	0.000
ECL	0.095	0.074	0.095	1.473	0.249
Findit	0.529	0.080	0.421	6.843	0.000
BBY	0.095	0.074	0.095	1.473	0.249
EGY360	0.401	0.084	0.313	4.975	0.000
EGYPTNOW	0.529	0.080	0.421	6.843	0.000
Feedback	0.401	0.084	0.313	4.975	0.000
Egypt.Talk	0.095	0.074	0.095	1.473	0.249
Reports& Statistics	0.529	0.080	0.421	6.843	0.000

The model appears to operate well based on these findings. The dependent variable is influenced by all IDP-Icons of the journey/visit experience, according to the findings:

- Smart operations, find.it, EgyptNow, and reports& statistics Icons are the most influential. The matching Sig. value of F for all icons or a service is 0.000, showing that the usage of a digital platform has a substantial impact on increasing the quality of the visitor experience.



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- EGY360, feedback icons, and notifications for any problems in the second phase.
  - Egyptian cloud-ECL, BBY, Egypttalk Icons have a substantial influence in the third phase, albeit to a lower extent extent

## **7. Conclusion and Recommendations**

- Tourists are one of the primary actors in markets that are technology-driven and consumer-dominated in the digital age and smart tourism management framework. Platform innovations and advancements have already changed how tourists look for, plan, and buy their travels, as well as how they experience and interpret them. Tourists employ smart gadgets in a variety of circumstances and places. Consumers are susceptible to outside influences at all stages of the travel or visit experience, and digital platforms have grown in importance, particularly in the essential first stage. The purpose of this study was to investigate how integrated digital platform "IDP" may affect tourists' ability to have an engaging and memorable experience while visiting tourist attractions. The study looked at this impact from the viewpoint of the visitor to Egypt.
- If appropriately constructed, integrated digital platform "IDP" is an instrument or media that can assist in meeting the needs and expectations of tourists in different destinations of Egypt. Tourism providers (and tourist sites) can leverage these technologies to create more convincing, aesthetically pleasing value proposition displays and to offer a pleasurable and memorable visit experience. Therefore, the study's findings offer some advice and direction for how tourist attractions should build and utilize an integrated digital platform (IDP) for marketing purposes in order to meet the expectations and needs of visitors and enhance their overall visit experience. According to this study, the effective use of IDP can help generate engaging and memorable experiences that are advantageous to all players in the framework for managing smart tourism.
- It cannot be overstated how important this model-IDP will become in travel over the years 2022 and beyond. Technology solutions will be crucial in educating the public and assisting with all travel decisions, from digital vaccine passports to real-time travel notifications. Requirements



for testing, quarantines, and forms will still differ between destinations as nations start to welcome back passengers who have received vaccinations. Supporting travellers throughout their journey will entail providing clear and up-to-date information on foreign travel rules, as well as fast updates should those needs change.

- Additionally, contactless technologies offered by digital platforms will keep travelling simple. Travel agencies have embraced cutting-edge technological solutions to keep customers safe and give them quick access to assistance and information. Travellers can benefit from options such as contactless check-in and boarding, the ability to order food or services using an app, and concierge support by Whatsapp or chat. We also anticipate that AR/VR technologies in the suggested model will become more significant, thanks to innovations like virtual tours of hotel rooms, airplane cabins, museums, and tourist attractions. These innovations enable more thorough location research, giving passengers peace of mind when making vacation arrangements.
- The suggested model of integrated digital platform-IDP will likely be supported by today's tourists, who will use them to interact with ICT resources. A tourist will generate and contribute a vast amount of data, such as data points from a tourism website's analytics, a hotel mobile app's log data, call centre logs, the volume of traffic at a destination, tourism service sales records, search engine inquiry volumes, social media discussions, location data from cell phones, GPS and photos, and so on.
- Digital Platform "IDP" has the ability to provide small tourism enterprises in growing destinations with direct access to a worldwide market of travel tourists for the first time, greatly boosting their prospects by establishing a new e-model of destination tourism management.
- Proposed a new e-model for the use of a digital platform in an Egyptian tourism location is changing the way the industry runs from beginning to end. A digital platform provides visitors with worldwide access and allows service providers to improve the tourism sector's growth and competitiveness. Many low-income economies stand to benefit from this



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digital change, while others risk being left behind if they fail to seize this opportunity.

- The use of IDP will convert Egypt into a smart destination that has a technology, innovation, sustainability, accessibility, and inclusion strategy that spans the full tourist cycle: before, during, and after the trip. A smart destination will consider people as well as tourists when planning tourism, taking into account multilingualism, cultural peculiarities, and seasonality.
- An integrated digital platform, or IDP, is a technology or a new technique that, if properly built, can contribute to meeting tourists' needs and expectations in Egypt. Tourism suppliers (and tourist attractions) will leverage these platform symbols to create more persuasive, aesthetically appealing value proposition displays and to give a pleasant and memorable visit experience.
- New e-tourism technologies and systems are always driven by the industry. As new platforms are invented and widely adopted by businesses and tourists, how to pick and choose among several information systems, and how different online data and perceptions can be used to inform future operational and marketing strategies, this area will continue to undergo its usual dynamics and model shifts.

## **References**

- Alcázar, C.H.; Sicilia, M. (2015), How web interactivity influences the image of a tourist destination. *J. Urban Regen. Renew.* 8, P. 356.
- Benckendorff, P., Xiang, Z., Sheldon, P. (2020), *Tourism information technology and digital platforms*, 3rd edn. CABI, London, PP.132-135.
- Buhalis, D., Amaranggana., A. (2021), *Digital Tourism Platforms enhancing tourism experience through personalisation of services*, Springer International Publishing: Cham, Switzerland, PP. 377–380.
- Buhalis, D.; Law, C.H.R. Progress in information technology and tourism management: 20 years on and 10 years after the Internet, (2016), *The state of eTourism research*. *Tour. Manag.*, P. 209.



- Boes, K., Buhalis, D., Inversini, G. (2020), Smart tourism destinations and platforms: Ecosystems for tourism destination competitiveness. *Int. J. Tour Cities*, P.108.
- COMCEC (2021) Effective Tourism Marketing Strategies: ICT-Based Solutions for the OIC Member Countries. Available from: <http://www.mod.gov.tr/Lists/RecentPublications/Attachments/85/Effective%20Tourism%20Marketing%20Strategies,%20ICT-Based%20Solutions%20for%20the%20OIC%20Member%20Countries.pdf>, [Accessed on 10 January 2022].
- Chaudhari, K., Thakkar, A. (2020), A comprehensive Survey on Travel Recommender Systems, *Arch Computer Methods*, Paris, PP. 27.
- Dan, W. (2021), A Framework of Digitalization Use for Travel, Available from: [www.seu.ac.lk/cedpl/.../research%20paper%20\(15\).pdf](http://www.seu.ac.lk/cedpl/.../research%20paper%20(15).pdf) [Accessed on 27 February 2021].
- Delic, A., Nguyen T. (2019), Group Decision-Making and Designing Group Computer Systems. Springer International Publishing, Cham, PP. 56–58.
- Dilara, T. (2021), Usage of Mobile Applications in Tourism, Quote paper, Available from: <http://www.grin.com/en/ebook/179766/usage-of-smartphone-applications-in-tourism> [Accessed on 5 Mars 2016].
- Gao, H. Big Data Development of Tourism Resources Based on 5G Network and Internet of Things System. *Microprocess. Microsyst.* (2020), *Comput. Ind. Eng*, P. 80.
- Herzog, D., Wörndl, W. (2021), A user Study on Groups interacting with Tourist Trip Recommender Platforms Systems in Public Spaces, In: Proceedings of the 27th Dec 2018 ACM conference on user modelling, 20 W. Wörndl and D. Herzog adaptation and personalization.
- Holjevac, I. (2016) A vision of tourism and the hotel industry in the 21st Century *International Journal of Hospitality management*, P. 129.
- Jayapal, P.; Omar, A. (2019), the Role of Value Co-Creation on Brand Image: A Conceptual Framework for the Market. In *Digital Marketing and Consumer Engagement: Concepts, Methodologies, Tools, and Applications*; IGI Global, Hershey: Hershey, PA, USA, P.P. 326



- 
- Kim, J.; Fesenmaier, D.R. (2017), Sharing tourism experiences: The posttrip experience. *J. Travel Res* 56, P. 28.
  - Kladou, S.; Mavragani, E. Assessing destination image: An online marketing approach and the case of TripAdvisor. *J. Destin. Mark. Manag.* (2020), *Clean. Prod*, P. 187
  - Morrison, A. (2021), *E-Marketing and Managing Tourism Destinations: Digital Platforms*, 2nd ed, Routledge, New York, P. 94.
  - Neuhofer, B.; Buhalis, D.; Ladkin, (2018), A. Co-creation through technology: Dimensions of social connectedness. In *Information and Communication Technologies in Tourism*; Springer: Cham, Switzerland; P.P. 339–340.
  - Nyheim, P., McFadden, F., Connolly, D. (2019), *Technology Strategies for the Travel and Hospitality Industry*. Prentice-Hall, Lodon, UK, P. 38.
  - Smith, W.W.; Li, X.R.; Pan, B.; Witte, M.; Doherty, S.T. (2019), Tracking destination image across the trip experience with smartphone technology. *Tour. Manag.* 48, P.P. 113–115.
  - Subramani, M.R. & Rajagopalan, B. (2017). Knowledge Sharing and Influence in Online Social Networks via Viral Marketing. *Communications of the ACM*, P.P.300–302.
  - Wang, D., Park, S., Fesenmaier, D. (2021), The Role of Digital Platforms in Mediating the Touristic Experience, *Journal of Travel Research*, Sydney, P.P. 6-7.
  - Wang, Y.; Tian, Q.; Li, X.; Xiao, X. Different roles, different strokes: (2022), How to leverage two types of digital platform capabilities to fuel service innovation. *J. Bus. Res.* P.P. 112-114.
  - Xiang, Z. & Gretzel, U. (2021). Role of Social Media in Online, Travel Information Search. *Journal of Tourism Management*. 31 (2): P.P. 179-188.
  - Yoo, C.W.; Goo, J.; Huang, C.D.; Nam, K.; Woo, M. (2019), Improving travel decision support satisfaction with smart tourism technologies: A framework of tourist elaboration likelihood and self-efficacy. *Technol. Forecast. Soc. Change*, P.P.330–332.