Mansoura University
Faculty of Tourism and Hotels

Smartphone Applications Enhancing role

of Tourist Guide

By

Sherihan Ibrahim Ibrahim GadAllah

Lecturer in Tourist Guiding Department
High Institute of Tourism and Hotels
King Marriott Alexandria

الملخص:

تعتبر التليفوانات الذكية من اكثر الاشياء استخداما في الوقت الحالي لكل الفئات. وتعتبر تطبيقات التليفونات الذكية من اكتر الاشياء التى يهتم باستخدامها معظم الفئات العمرية المختلفة و الفئات المختلفة. توجد في الوقت الحاضر مجموعة كبيرة من تطبيقات الهواتف المحمولة المختلفة التي تدعم المسافرين قبل الرحلة وأثناءها وبعدها. ومع ذلك ، تركز غالبية هذه التطبيقات إما على التوصية بمناطق الجذب السياحي أو على تقديم بعض الخدمات السياحية مثل حجز تذاكر الطيران او حجز الاقامة في الفنادق ، كذلك فان التطبيقات الخاصة بالارشاد السياحي فهي تعتمد على المعلومات المقروءة او المسموعة من خلال التسجيل الصوتي . يعتمد المبدأ الأساسي للتطبيق موضوع الدراسة على مساعدة السائح في اختيار المرشد السياحي من خلال تطبيق " My Tourist Guide" ومحادثته عبر" video call" مما يتيح الفرصة للسائح للتواصل بشكل مباشر والتفاعل مع المرشد السياحي .

الكلمات المفتاحية: تطبيقات الهواتف الذكية، استخدام التقنيات الحديثة ، الارشاد السياحي

Abstract

Technology and artificial intelligence are changing traveling and guiding scenario. Smartphone is considered the most used nowadays for all categories. Smartphone applications are important in our life. There is now a variety of mobile applications available to assist passengers before,

during, and after their trip. The majority of these smartphone applications, however, focus on either recommending tourist destinations or providing certain tourist services, but there are few studies that look at a holistic approach that addresses both needs. The mobile tourist guide is described in this paper as an application that allows for direct contact between the tourist and the tourist guide. This application helps the tourist to choose the tourist guide to accompany him during his visit in Egypt through a video call or conference call.

Keywords: Mobile Applications, tourist guiding field, using technologies, smartphone applications.

Introduction

Technology and artificial intelligence are changing traveling and guiding scenario. Smart phones have evolved into mobile computers that can access a wide range of information services at any time and from practically anywhere. Smartphones have the potential to greatly alter the travel experience as the number of users and their penetration into people's lives grows. Smartphones can influence visitors' behavior and emotions by providing a variety of information needs. In particular, quick information assistance for smartphones enables tourists to handle problems more effectively, share experiences, and keep memories. Many applications enable users to obtain tour guidance information as needed anytime and

anywhere, including tourist guide applications using speech installation technology.

In the presence of artificial intelligence and mobile applications, it has become easier for a tourist to get full information in a quick and easy way. The tourist can put an image of artifact or even the name of the archaeological site and then search and get all the information and all the full data as he is looking for. And since the role of the tour guide cannot be overlooked not only in giving information about antiquities but also its most important role in interacting with the tourist and giving information about the antiquities or archaeological site in terms of historical background, economic and social life and ancient Egyptian religion.

The problem of the study:

The study's problem revolves around the necessity of using technology in the field of tourist guiding. Using smartphone applications to improve the tourist guide's function .The study seeks to answer the following questions:

-What is the importance of smartphone applications?

- What impact does technology have on enhancing of the tourist guide's role?

- What function may smartphone applications play in supporting the role of a tourist guide?

Importance of the study:

The importance of the study is to highlight using smart phone applications to enhance the role of the tourist guide during direct contact (connection) between the tourist and the tourist guide faster and easier. This study will achieve to help the tourist to find an application present service to make it easy to contact direct to a tourist guide via video call.

The objectives of study:

The main objective of this study is to take advantage of using smart phone applications to enhance the role of the tourist guide. The aim of the research is to keep the presence of the human tour guide with all its characteristics such as belonging to Egypt and live interaction with the tourist.

 So, the study attempts to achieve these objectives:

-Recognize the advantages of smartphone applications in the field of tourism.

-Recognize this smartphone application (My Tourist guide).

-Know how (My Tourist guide) application enhances the role of the tourist guide and helps tourists to connect direct with tourist guides easily.

Literature review
1. Smartphone applications

Mobile phones have evolved into smart computers (smartphones) that can access a wide range of information services at any time and from practically anyplace[1]. Smartphones have evolved to include stronger input capabilities, larger screens, unlimited reliable internet access, and powerful location awareness. The SP app must be simpler, non-interfering, and battery-free, as well as a useful tool for crisis management and relief centres during and after a seismic disaster. The Android was chosen for implementation advantages.

1.1 Advantages of smartphone applications

Smartphones now provide access to thousands of mobile applications that provide with a wide range of services such as communication, entertainment, news, social networking and travel. The advantages of smartphones encourage their adoption. Smartphones

---

[1] Wang, Dan, Sangwon Park, and Daniel R. Fesenmaier. "The role of smartphones in mediating the touristic experience." *Journal of Travel Research* 51, no. 4 (2012): 1-2

and their applications seem to offer great potential to help tourists by accessing information online anytime, anywhere. A number of studies have been conducted to identify mobile services valued by tourists and show that the use of smartphone applications have substantial influence on the travel process [2].A website component can be used in mobile interventions to help with data transfer and viewing. The introduction of smartphones, which combine mobile phone characteristics with computer capabilities, has narrowed the gap between the benefits of both technologies. Apps are downloadable programs that run on the smartphone's operating system[3]. As a result of the growth of mobile devices and a virtual medium and its environment in which the mobile devices are played, many scholars have questioned which medium or technology really depicts the physical and social reality as it is[4].The

---

[2] Wang, Dan, Sangwon Park, and Daniel Fesenmaier. "An examination of information services and smartphone applications." (2011): 1-2

[3] Rosser, Benjamin A., and Christopher Eccleston. "Smartphone applications for pain management." *Journal of telemedicine and telecare* 17, no. 6 (2011): 308-312.

[4] Lee, Keumsil, Hyung Ryong Lee, and Sunny Ham. "The effects of presence induced by smartphone applications on tourism: Application to cultural heritage attractions." In *Information and communication technologies in tourism 2014*, pp. 59-72. Springer, Cham, 2013.

smartphone has become a necessary tool for customers in their personal and professional lives[5].

1.2 Uses of Smartphone applications in tourism field.

Tourism is an intertwined throughout the entire live experience in tourism, which is an experiential product. Furthermore, unlike tangible objects, which often need a single purchase decision; tourism is a consuming system in which tourists are constantly participating in a multi-faceted decision process[6]. As a result, visitors are continuously looking for information to help them make better judgments. Within three stages of tourism consuming, namely preconception, planning, expectation creation, decision-making, transactions, and anticipation, information processing activities have recently been found. Information is used for connectivity, navigation, and decision-making[7].

Tourists leave their home and go to new locations, interacting with the items and people in those locations, and documenting their travel memories in the form of

[5] Liebana-Cabanillas, Francisco, Elena Carvajal-Trujillo, Ángel F. Villarejo-Ramos, and Elena Higueras-Castillo. "Antecedents of the intention to use NFC mobile applications in tourism." *Journal of Hospitality and Tourism Technology* (2020).
[6] Ibid.
[7] Wang, Dan, Sangwon Park, and Daniel Fesenmaier. "An examination of information services and smartphone applications." (2011): 2

photographs and movies. The tourism industry has become a hotbed for smartphone-based systems. Indeed, as smartphones and other mobile devices become more capable, tourism has emerged as a prominent application sector. When a visitor reaches new or unforeseen destinations, smartphone applications make it simple for him or her to obtain information or locate locations all around them. As a new mode of city navigation, smartphone applications enable a digitally vision of the world, linking travellers to more meaningful material in tourism hotspots. Smartphones and tablets have cameras and sensors.

Recently Smartphone applications have arisen as a new tool for travellers to create experiences. Given the potential influence of smart phones and smart phone apps, it is argued that understanding how mobile applications allow users to design their trip experience is critical[8]. The smartphone has quickly become a popular tourism travel tool due to its advanced processing capabilities and widespread availability. The smartphone is significantly affecting our existing use and comprehension of the transportation network and tourism travel, with an increasing number of users and a wide variety of applications appearing[9].Travelers have seen regular communication and information

---

[8] Ibid

[9] Dickinson, Janet E., Karen Ghali, Thomas Cherrett, Chris Speed, Nigel Davies, and Sarah Norgate. "Tourism and the smartphone app: capabilities, emerging practice and scope in the travel domain." *Current issues in tourism* 17, no. 1 (2014): 84-101.

interchange in recent years as a result of the spread of mobile devices. For example, in the context of tourist visits, each person frequently takes a smartphone to obtain information about tourist attractions. Existing applications present valuable information based on the user's present location, preferences, and previous visits when they visit a specific destination. the tourist guide can ask the user for feedback on each visit.

2. The Smartphone application (My Tourist guide).

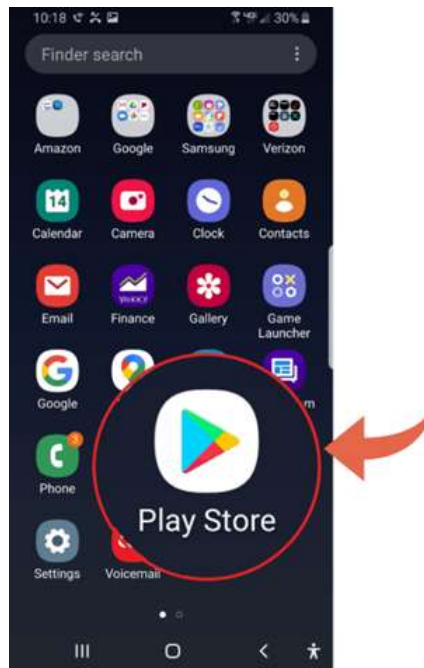### 2.1 About (My Tourist guide) application.

In this paper, I present the study of creating an android application for tourist guiding in Egypt. The application's name is (My tourist guide) and it has many abilities such as helping tourist in his visit to Egypt and assisting him to choose and find the preferred tourist guide for him. Tourist can choose from profiles of many tour guides according to other tourists' reviews. The application has selective options like select language, site, gender, date, time and cost. Tourist can compare between tour guides profiles to pick up his suitable choice according to other tourists recommendations. These recommendations are collected by (Rate Us) option.

(My Tourist guide) App is an application presents a service to tourists during their visit to Egypt. This application helps tourist to contact directly, easily and quickly with a tourist guide via video call technology.
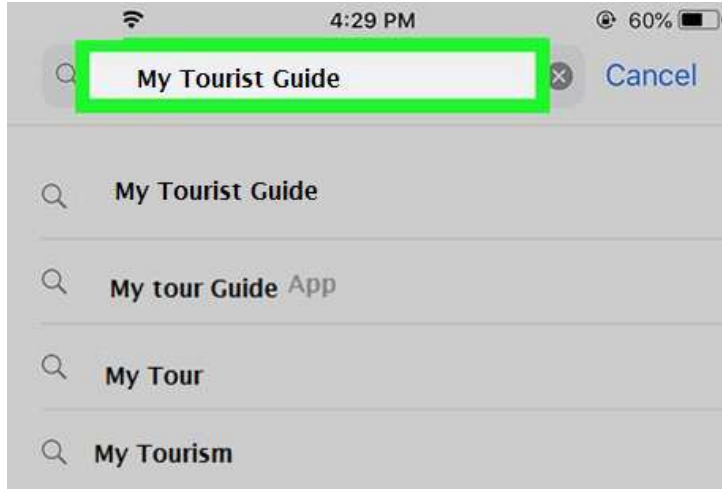
Usage of (My Tourist guide) Application.

Tourist can install (My Tourist guide) App through Google Play Store. Follow steps to install this application and use it to find a tourist guide during his trip in Egypt.
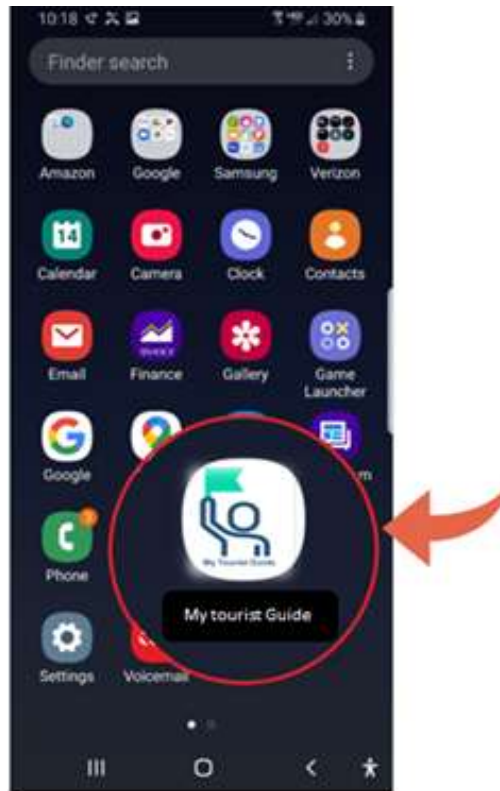
He can open Google Play Store (fig no.1); search the App (My Tourist Guide) (fig no.2); choose (My Tourist Guide) App and install the application. He can open the application (fig no3), sign up. He can sign in and select options.

(Fig no.1) open Google Play Store

(Fig no.2) search the App (My Tourist Guide)

(fig no3) open the application icon

2.2 How this application (My Tourist guide) will enhance the role of the tourist guide.

This application will play an important role in enhancing the performance of the tour guide by facilitating the communication of tourists and the tour guide through video calls that helps to retain the role of the human tour

guide with the presence of new technology and artificial intelligence.

Communication is one of the strongest skills a tourist guide needs to have. They should be able to communicate and project their voices and speak clearly, to help prevent any misunderstandings from their different visitors and groups.

A professional tourist guide must also be able to pronounce words correctly and know how to command the attention of several people at once. This application can improve communications via arrange more structured video calls. Besides, video calling also humanizes these communications.

video calling or video conferencing allows mobility, contributing positively to retention the role of tour guide because it make them have the flexibility to work remotely due to real-time face-to-face interactions through video calls .

Conclusions

The role of tour guides in the tourism industry distinguishes itself by its capacity to manage and orchestrate visitor experiences, enhance destination image and achieve the goals of tourism industry.

Tourist guides are the most effective part in the tourism industry: their understanding and interpretation of a

destination's tourist attractions and daily life can turn a sightseeing tour into an experience.

There are currently a number of smartphone applications available to help travellers before, during, and after their trip. The majority of these smartphone applications, however, focus on either recommending tourist places or delivering specific tourist services. This application assists the traveller in selecting a tourist guide to accompany him throughout his journey to Egypt via video call or conference call.

In the presence of modern technology and artificial intelligence, the tour guide must improve his performance and be ready to enhance his skills. Universities must conduct additional studies and latest researches of tour guiding training in order to understand the ability of learning and training to enhance the ability of tour guides to face technological advances and artificial intelligence. The government must support tourism guides and provide training for them. It is very important to provide suitable education and training for tour guides in all tourist destination regions.

References:

- Cohen, Erik. "The tourist guide: The origins, structure and dynamics of a role." *Annals of tourism research* 12, no. 1 (1985): 5-29.
- Dickinson, Janet E., Karen Ghali, Thomas Cherrett, Chris Speed, Nigel Davies, and Sarah Norgate. "Tourism

and the smartphone app: capabilities, emerging practice and scope in the travel domain." *Current issues in tourism* 17, no. 1 (2014): 84-101.

- Liebana-Cabanillas, Francisco, Elena Carvajal-Trujillo, Ángel F. Villarejo-Ramos, and Elena Higueras-Castillo. "Antecedents of the intention to use NFC mobile applications in tourism." *Journal of Hospitality and Tourism Technology* (2020).

- Milicchio, Franco, and Mattia Prosperi. "Accessible tourism for the deaf via mobile apps." In *Proceedings of the 9th ACM International Conference on PErvasive Technologies Related to Assistive Environments*, pp. 1-7. 2016.

- Ribeiro, Fernando Reinaldo, Arlindo Silva, Fernando Barbosa, Ana Paula Silva, and José Carlos Metrôlho. "Mobile applications for accessible tourism: overview, challenges and a proposed platform." *Information Technology & Tourism* 19, no. 1 (2018): 29-59.

- Rosser, Benjamin A., and Christopher Eccleston. "Smartphone applications for pain management." *Journal of telemedicine and telecare* 17, no. 6 (2011): 308-312.[1]
Lee, Keumsil, Hyung Ryong Lee, and Sunny Ham. "The effects of presence induced by smartphone applications on tourism: Application to cultural heritage attractions." In *Information and communication technologies in tourism 2014*, pp. 59-72. Springer, Cham, 2013.

- Smirnov, Alexander, Alexey Kashevnik, Andrew Ponomarev, Maksim Shchekotov, and Kirill Kulakov. "Application for e-tourism: intelligent mobile tourist

guide." In *2015 IIAI 4th International Congress on Advanced Applied Informatics*, pp. 40-45. IEEE, 2015.

- Smirnov, Alexander, Alexey Kashevnik, Sergey I. Balandin, and Santa Laizane. "Intelligent mobile tourist guide." In *Internet of things, smart spaces, and next generation networking*, pp. 94-106. Springer, Berlin, Heidelberg, 2013.

- Wang, Dan, Sangwon Park, and Daniel Fesenmaier. "An examination of information services and smartphone applications." (2011): 1-2

- Wang, Dan, Sangwon Park, and Daniel R. Fesenmaier. "The role of smartphones in mediating the touristic experience." *Journal of Travel Research* 51, no. 4 (2012): 371-387.