CHALLENGES AND REWARDS: DEVELOPING A LUXURY TOURISM APP FOR THE SAUDI ARABIAN MARKET

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1.   Introduction

Abstract: *The tourism industry's vital role in national economies has garnered significant attention from researchers and governments worldwide. Recent developments underscore the importance of this sector in the Kingdom of Saudi Arabia, as it is now central to the nation's 2030 vision for economic diversification, aiming to reduce dependence on oil revenues. This strategic shift has prompted the Saudi government to introduce numerous tourism initiatives, particularly in major cities like Riyadh and Jeddah. In 2019, the official Saudi tourism website https://sauditourism.sa/en/Pages/default.aspx) was established to serve as the national platform for tourism in the country. This paradigm shift towards tourism as a key economic driver in Saudi Arabia has also drawn the global media's attention. This paper examines the implications and prospects of Saudi Arabia's emphasis on tourism as an economic cornerstone within the context of its 2030 vision, analyzing the potential impact on the national economy and global perception of the Kingdom's tourism sector.*

Keywords: *Tourism industry, Saudi Vision 2030, economic diversification, national economy, Saudi Arabia.*

The significance of the tourism industry to the national economy is highly considered by several researchers and governments (Gorbuntsova, Dobson, & Palmer, 2019; Jurigova, 2016; Kumar, 2019; Litwin, Ngan, & Atembe, 2019; Ohlan, 2017). Recently, the importance of this sector is also considered by the Saudi government as a pillar of the 2030 National vision of the Kingdom of Saudi Arabia (Saudi Vision 2030, 2018). This Vision aims to transfer the state's economy to a higher level and not to rely entirely on oil and focus on other economic channels such as the tourism (Walker, 2018).

This trend led the Saudi government to propose several tourism projects in many cities, especially the largest cities, such as Riyadh – the capital – and Jeddah. Also, they established the official Saudi tourism website in 2019 (https://sauditourism.sa/en/Pages/default.aspx) to be the official national channel of the tourism in Saudi Arabia. The national focus on the tourism industry was also noticed by the global media (Calder, 2018).

The recent shift of considering the tourism industry in Saudi Arabia opened the door to several ideas and projects to boost the Saudi tourism and to reach the government's goals, especially after lunching

the tourist visa program to visit the country3. Therefore, this project that will align with this vision through an application that helps all visitors of Jeddah city to identify and access to the most important landmarks of the city tourist, cultural, sports, religious and commercial maps through Google maps, Bing maps or similar. Jeddah was chosen to implement the project as the most visited city for tourism purposes in Saudi Arabia after the religious cities of Makkah and Madinah. This led Jeddah to be considered as the capital city of tourism in Saudi Arabia (Municipality, 2019).

2. The Current Gap

Although the applied effort to boost the tourism industry in Saudi Arabia, and in Jeddah city in particular (Municipality, 2019), the Saudi General Authority of Tourism lunched a website (https://enjoy.sa/en) to explore the local events in the city of Jeddah, but the market still needs a lot of effort to align with the developed countries in this field.

For instance, utilizing the e-tourism solutions should be considered in Saudi Arabia, as there are heaps of global studies and projects from e-ticketing to tour planning and guiding, exposing the top attractions, understanding customer (tourist) needs and hopes, and managing risks in order to take the most benefits from the tourism industry (Agarwal et al., 2013; Alghamdi, Zhu, & Saddik, 2016; Hung et al., 2013; Titan, Sanjaya, & Ferdianto, 2016).

The significance of Jeddah city as one of the main ports of Saudi Arabia in the west coast that has a very rich commercial history and act as a main point for tourists, especially for Muslims who consider it as a main hub that is located between the main two religious cities of Makkah and Madinah, makes Jeddah a target in research and development (Alsumairi & Hong Tsui, 2017; Calder, 2018; Getz & Page, 2016; Jafari & Scott, 2014; Zamani-Farahani & Eid, 2016). This global interest motivated the authors to contribute in the field by proposing a sight guidance mobile application to the top attractions of Jeddah that would give the tourists the most of their visit experience. The application is proposed to rely on one of the popular mobile maps, such as Bing or Google Maps. There are several mobile applications currently in the tourism market. However, most of these are still required to add several features to fulfill some of the local requirements of Jeddah, and Saudi Arabia in general.

3. Analysis of Related Work

From the astrology to finding the way to the destination, to the guide, to paper maps, to the digital maps, were the stages of development and the technology was used to facilitate the life of the individuals. Digital maps are basic and necessary for several applications and websites. These maps eliminate the need to call or inquire regarding the address or to describe the proper way to reach a specific location (Kim & Han, 2014; Toledo-Moreo et al., 2018). Digital maps solved this problem by saving time when time is crucial.

In order to propose a satisfying solution to the market, it is wise to explore some of the current solutions and analyze them. Table 1 discusses four well-known applications in the local and the global market, which are Sawah, Yamsafer, TripAdvisor, and Roadtrippers.

Table 1: Brief comparison among four tourism mobile applications

Features	Application			
	Sawah[4]	**Yamsafer[5]**	**TripAdvisor[6]**	**Roadtrippers[7]**
Language	Arabic	Arabic/English	English/Arabic	English
Maps	Yes	Yes	Yes	Yes
Restaurant	Yes		Yes	Yes
Hotel and flight Booking		Yes		Yes
Gas/Fuel				Yes
Cafes	Yes			Yes
Mosques				
Museums			Yes	Yes

Each of the selected applications will be discussed in the following lines.

2.1. Sawah

Sawah is one of the regional applications that helps users to allocate the preferred site if the user knows where to go in Jeddah city. For instance, the user must search by the specific name of the place and if one or more letters were missing or the name was wrong, the application will result an error or different result. The accuracy of Sawah application need to be improved. The categorization of the places in the application is not very clear, which could lead to the user dispersion. Categorizing the contents in each section sometimes does not match the type of each section. For example, in the breakfast section, there are some places that also provide lunch and dinner. However, they only exist in the breakfast section.

https://play.google.com/store/apps/details?id=com.sawah.sawah
https://play.google.com/store/apps/details?id=yamsafer.yamsafer.me
https://play.google.com/store/apps/details?id=com.tripadvisor.tripadvisor
https://play.google.com/store/apps/details?id=com.roadtrippers

Also, the application does not consider non-Arabic speakers as the tourist could hope. It focuses on Arabic only and many visitors do not speak Arabic. Additionally, Sawah does not use digital maps, and this drawback might lead the user to find another solution.

Sawah application also has some limitations when it comes to Jeddah city. The landmarks of the city are not identified as main features. Also, several services are not considered, such as fuel stations, mosques and museums, which are among the most important places for visitors to see the culture of the country as well as the Islamic and ancient history.

2.2. Yamsafer

Although Yamsafer is acceptable in term of suggesting and recommending hotels in the city, this application focus on flights and accommodations only. It does not serve the visitor to find the landmarks of the city and the other tourist places. If Yamsafer is classified for hotel reservations, it may be distinguished but it is classified as an application for visitors to the city, which might not lead to the desired results, as one of its weaknesses is when the user need to find some local restaurants and tourist attractions in the city.

2.3. TripAdvisor

TripAdvisor is one of the well-known global applications (TripAdvisor, 2015). There may not be any obvious issue for the normal user but there are problems in the counterfeit reviews in this application.

It is claimed that TripAdvisor uses algorithms to review the comments and filter them before posting them (Longwell, 2018). Although the filtration process is recommended to remove the offensive and illegal posts, it also deletes some of the negative reviews from clients. There are several reports that discuss the deletion of bad comments about the service, especially if the advertiser is the owner of the business. Also, it would delete clients' comments regarding specific warnings about unsafe property where there were crimes, such as theft or rape (Longwell, 2018). After the TripAdvisor was mentioned in the media in such cases, the overall trust started to decline, and the TripAdvisor corporation is supposed to use its valuable experience to return its normal spot in the tourism market.

2.4.   Roadtrippers

Perhaps the earliest applications for the idea to be implemented have been used or rely heavily on maps larger than the rest of the applications. During the journey between the two sides, the program shows some places that the user may need, which is a good feature. The downsides of Roadtrippers start by the localization support in which the application does not support Arabic language. Additionally, it does not consider Saudi Arabia in its database like the other applications. As a result, the user cannot use its features to explore the nearby places.

4.   **The Proposed Solution**

The current situation expresses the needs to improve the e-tourism solutions in Saudi Arabia and in Jeddah city in particular, where tourists here cannot find a reliable mobile application. The absence of dedicated applications for the Saudi tourism that covers the local landmarks and attractions is obvious. Therefore, it is the time to assist tourists by proposing a such application to get the most of their experience with less time and money consumption. This application should be at least bilingual, as the market has several applications that support tourism within the city of Jeddah and work as a tour guide but do not provide the information in other languages; such as English; which cannot help the non-Arabic speakers.

Currently, the official Jeddah tourism website started to have English content, but still requires major improvements to make the tourism experience more fun and easier. The applications should help in spreading the local cultures of Jeddah and Saudi Arabia to the world. Additionally, it would boost and support the local businesses by exposing them to the tourists who are expected to buy goods and services from the visited locations.

The proposed solution should address – but not limited to – the following issues:

•   The quantity of the delivered information about Jeddah and the other Saudi tourist destinations.
•   Providing a better support for Arabic and English languages in the same application.
•   Most of local mobile applications do not provide sufficient contents regarding landmarks that should be addressed.
•   Providing digital maps to navigate.
•   The transparent ability to write reviews and rate the places.
•   Sharing places via different channels including social media.
•   Exploring the nearby landmarks and attractions.
•   The ability to book the activity online, which would be one of the main sources of income of the application.

5.   **Methodology**

A structured online survey was conducted as a preliminary study to explore the Saudi market that would help developers in the prototyping process. Seventy participants responded to the survey. It indicates the extent of people relying on technology, mobile applications and navigation during the travels and visits. The brief conducted study contained the following questions:

•   Gender?
•   Age?
•   Do you consider yourself as a frequent traveler?
•   From your travel experience, did you need assistance from a tour guide?
•   Do you need to use digital maps to navigate while travelling?
•   Do you use mobile applications to find the tourist attractions?
•   Did you find any difficulties while searching for tourist attractions?

The study attracted 35 females and 35 males who completed the entire survey. The gender was considered to examine if the result is biased to a specific gender. However, the balanced result between both genders let to treat the next questions normally. The incomplete entries were excluded from the study. The age group chart of the participants is shown in figure 1.
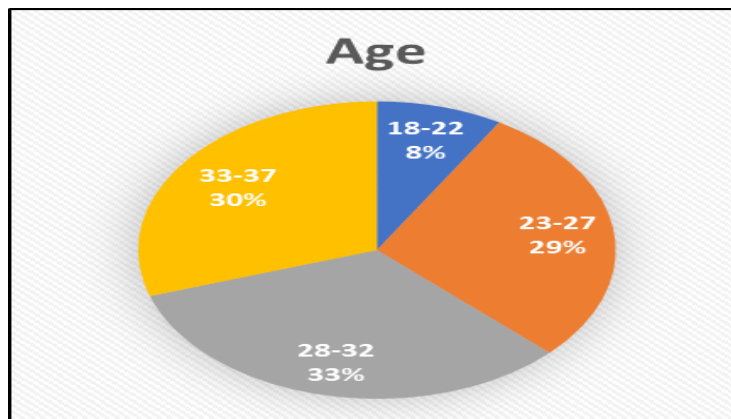
Fig 1: The age groups of participants

The chart indicates that 32.9% (23 participants) are aged between 28 and 32 years, which was the largest group. The second largest group is for participants aged between 33 and 37 years, indicating 30% (21 participants). The third group was 28.6% (20 participants) which is aged between 23 and 27 years. The smallest group was for people aged between 18 and 22 years, with 8.6% (6 participants).

6.   **Result**

In order to get to the valuable entries, participants were asked to express whether they consider themselves as frequent travellers or not. The result shows that 97.1% (68 participants) considered themselves as frequent travellers, while 2.9% (2 participants) did not. This result would indicate the passion of travel among the local community that would highlight the potential market of the tourism industry in Saudi Arabia.

The next step aimed to explore the need for a guide while travelling within the country of Saudi Arabia. Participants were asked if they needed assistance from local tour guides during their trips. The result

indicates that 54.3% (38 participants) did not need assistance, as they know the local landmarks beforehand. However, 42.8% (30 participants) answered with Yes, which still should be considered, because they are local people and still required some assistance. Maybe this is the key that exposes the market need for an integrated mobile application to fill the current gap. In between, 5.7% (4 participants) did not go through any travel experiences.

The next question attempted to explore the dependability on using digital maps while travelling even within Jeddah to navigate to restaurants, malls and landmarks. As expected, 91.4% (64 participants) depend on digital maps even if they live in the same city, while 8.6% (6 participants) do not use it. This result supports the claim to introduce a comprehensive tourist guide solution with an updated digital map navigation option.

To explore the market more, participants were asked to express whether they use mobile applications to assist them in locating the landmarks and the other attractions. 84.3% (59 participants) admitted their frequent use of the mobile applications to help them in their travel experience, while 15.7% (11 participants) do not use it. This result would lead the reader to ask regarding the reason of this paper's claim to propose a new e-tourism solution to the market if the majority are using the current applications in the market. The conducted survey contained a question to answer the expected reader's thought by exploring the satisfaction of using the current applications in the market. Before obtaining the result, if the majority are satisfied, this would neglect the claim of proposing a new mobile application to the Saudi market, while the dissatisfaction level would help in deciding the market needs to a new etourism solution or not.

Only participants who uses mobile applications to assist them while the travelling locally (59 entries) were considered to answer this last question, which is −Did you find any difficulties while searching for tourist attractions?‖. Their answers show that even the local people, who know many locations, 42% (25 participants) still expressed facing difficulties while using the current applications. This lead to close this study with an open question, which is: if 42% of the locals find difficulties in their experience of using the current applications, what about the foreign visitors to the country?

7. A Briefly Suggested Solution

Deciding the targeted user groups and people who will be using this system depends on several factors, such as their needs and intentions of using the application. In general, users of the proposed system can be categorized into three categories, which are general user, special needs user, and the admin team. As shown in figure 2.
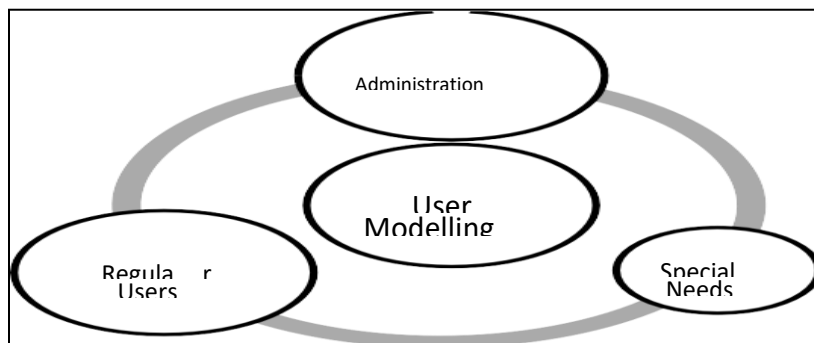
Fig 2: System's Users

As several other applications, the user can use the application on the smart phone from anywhere, which is more convenient that accessing websites that depend mainly on using laptops and personal computers. It is expected that hungry customers to such a solution are looking for accurate, comfort, easy access and fast responding mobile application to help both locals, and tourist to retrieve and explore landmarks and top tourist attractions, train stations, airports, restaurants and malls.

Figure 3 shows that regular users and users with special needs would be categorized into three groups to fulfill their needs. Those proposed categories would work with any offered solution in the market to get the most assistance experience. The three categories are:

2.5. Local Users from The Same City (e.g. Jeddah):

Users in this category will mostly use a search tool to gain some information regarding specific spots without the need to use the digital map, because most users would be familiar with places and locations based on their background. Therefore, the search tool will be used to retrieve simple information.

2.6. National Users from Other Cities in The Country (Saudi Arabia):

Users in this category will need to gain access and use the map guide to get descriptive information and pictures in Arabic language. This category would also benefit users from neighbor countries who can speak and read Arabic language.

2.7. Global Users:

Users in this category will need to access to language change option, using English language instead of Arabic to make use out of the system.
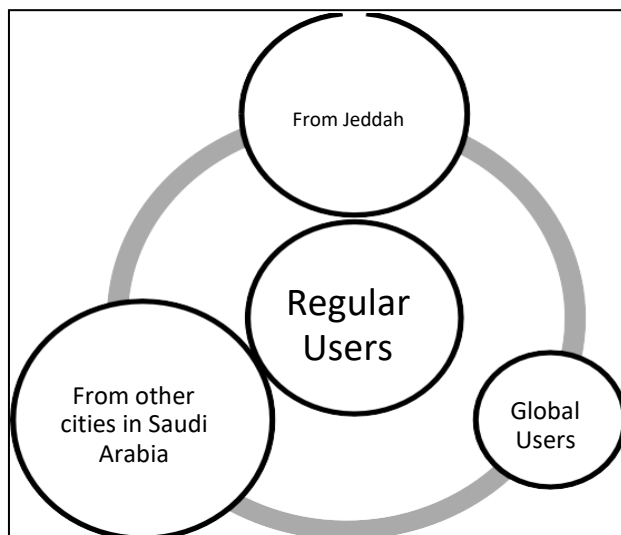

Fig 3: Geographical-Based classification of The System's Users

8. Conclusion

The tourism industry in Saudi Arabia is shifting rapidly, especially in large cities, such as Jeddah. However, the lack of finding a proper application to guide tourists would be considered as an odd situation that should be solved. This paper highlighted this issue to the market players to introduce an appropriate solution that would assist tourists in locating the top attractions and landmarks in Jeddah and in Saudi Arabia in general.

The view claimed in this paper could assist the giant players in the market to consider their future plans. This would be a call to the Saudi Authority of Tourism and to the top e-tourism solution providers to consider the potential of the tourism market in Saudi Arabia that would generate a considerable business to benefit local and international tourists, local economy, local government, and the international e-tourism service and solution providers in the market.

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