

Gamanak – The Travel Planner with Social Media Mobile Application

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Abstract— Travelling is an immensely popular hobby for most people nowadays since it allows them to be relieved of their stress and enjoy various activities among friends and family. It is a form of adventure which allows them to discover new places, meet people of various ethnicities, learn new languages and relish the beauty of the world. While all these make traveling sound amazing, planning such a journey can turn out to be a very tiresome task which requires a lot of time and effort. The modern world has many solutions for this and out of them, digital solutions come out on top. Most mobile applications developed to overcome this issue require partial or full subscription payments while the free applications are inefficient. The main purpose of this research was to provide a solution to the aforementioned problem by developing a free mobile application facilitated with electronic word of mouth, digital references, predefined mechanisms of selection and added features such as reminders. Interviews and questionnaires were used as the main research methodology to gather information from the targeted users. The findings of the study indicated that a majority of the target population would prefer to use an application which uses social media and electronic word of mouth to convey travel details. Overall, it will promote the tourist industry in the country especially after the COVID-19 pandemic.

Keywords— Travel app, Electronic Word of Mouth, API, Social Media, Travel Planner.

I. INTRODUCTION

Social media has made a huge impact for every industry. Today, the Traditional Word of Mouth has become the Electronic Word of Mouth. This has made it possible to believe by seeing rather than believing what is heard. Travel is also used as a hobby and to relieve stress in people who lead busy lives. The most important thing when making a trip is to plan it and tourist will have to bear some cost for this. There must be justice for the cost and the time it takes. Social media can be linked to travel planning and a mobile application can solve this problem. This research shows that “Gamanak” mobile application helps traveller to use social media as a way to successfully plan and make their trip effective. It also automatically suggests the places that the traveller wants during the trip and also reminds the user the meal on time.

II. LITERATURE REVIEW

Phones were invented as a result of the need for communication [1]. Sweden introduced mobile phones with portability in the early 1980s [2]. In modern times, the mobile phone has become an integral part of human life. Mobile phone use has become a common feature in the world from young children to adults. In present, 3.5 billion people use mobile phones, and Statista estimates that by 2021 it will be 3.8 billion. The Apple iPhone was able to revolutionize the evolution of mobile phone. The smartphone was introduced 15 years before the introduction of the Apple iPhone. Called the ‘Simon Personal Communicator’, it was created by IBM [3]. With the introduction of Apple iPhone, smartphones become popular. Designed just for making calls, the phone has now become a multi-functional device. Smartphone is an advanced device that can perform similar functions to a computer. Applications were also created for smartphones for variety of functions, such as a computer.

In today’s fast-paced world of technology, it is common to use technology in almost every activity. Technology has had a huge impact not only on people’s lives but also on businesses. It can be seen through the internet that this technology is also involved in the tourism industry. Many websites and mobile applications for the advancement of the tourism industry can be found on the internet. People who lead a very busy life spend very little time with their loved ones. Although different strategies are used to relieve busyness and stress, among them, traveling is one of them. Lack of proper planning about the trip can be ineffective. Tourists have to spend some time to prepare such a plan. There are many remedies on the internet to minimize that extra time. As well as tourists can download mobile applications to plan a trip.

The community can see the distance travelled from one place to another via Google Maps as well as the time taken by each mode of travel. For example, the shortest route from Colombo to Galle is 125km [4] and it is very clear that even other alternative routes can be taken through different modes of travel. Today, social media has a huge impact on every industry. Many of the beliefs that exist in society are things that have existed through word of mouth. Word of mouth has the potential to influence the whole world. As word of mouth has become electronic [5], humans are using word of mouth online. It is most trustworthy today than it was in past

because of the ability to prove its precision through pictures and videos. It appears through social media and is a kind of marketing method that exists in the society today. According to EMarketer, in terms of marketing in Asia, by 2020, 75.2% [6] of all social media will be marketed through Facebook, and it appears that the economy can be built through free social networks. It has been indicated under Figure 1.

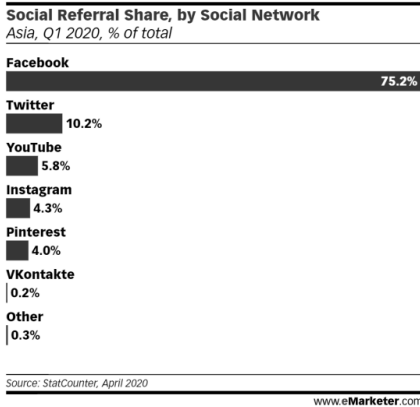


Figure 1 - Social Referral Share, by Social Network [6].

According to a survey conducted by the Sri Lanka Tourism Development Authority in 2019 and 2020, 507,311 [7] foreigners visited Sri Lanka from January to July, a decline due to effect of the outbreak of COVID-19. It presents under Figure 2.

Month	2019	2020	% change 2019/20
January	244,239	228,434	(6.5)
February	252,033	207,507	(17.7)
March	244,328	71,370	(70.8)
April	166,975	0	-
May	37,802	0	-
June	63,072	0	-
July	115,701	0	-
August	143,587		
September	108,575		
October	118,743		
November	176,984		
December	241,663		
Total (Up to July)	1,124,150	507,311	(49.7)
Total	1,913,702		

Figure 2 - Arrival Report Summary – SLTDA [7].

III. RESEARCH QUESTIONS

1. How does social media affect the tourism industry?
2. How can a mobile application help to plan a trip due to human’s busy life?
3. How to avoid forgetting meals during the trip?

IV. METHODOLOGY

A. Planning

Travel can be seen today as one of the methods used to relieve stress [8]. seen today as one of the methods used to relieve stress. Many tourists are reluctant to travel here due to the time taken to plan. There is a need to make the trip effective as there are costs involved. This research discusses the creation of a mobile application to utilize the concept of social media as a solution to plan and make the trip effective.

This research has shown how the electronic word of mouth can be used as a social media tool for the tourism industry, as well as a smart phone application that can help community make an effective trip and save time in their busy lives. According to the Sri Lanka Tourism Development Authority [6], the tourism industry in Sri Lanka is one of the most sought-after destination for both locals and foreigners.

Influencers on social media or tourists upload photos of places they have visited. Responses to them and seeing them saw more people going to those places and uploading photos. It was revealed that this will have an impact on the tourism industry through social media.

B. Requirement gathering and Analysis

Travellers and non-travellers above the age of 18 and of both genders were the intended target population of this application. The sampling frame included the whole target population since simple random sampling was conducted. The research methodology for requirement gathering consisted of interviews and questionnaires to gather data regarding the likes and dislikes of each individual.

After surfing and conferring the data collected in this way, authors were able to identify user expectations.

C. Design

The Authors hope to create a travel mobile application for travellers through this article, which will provide a great service to the tourism industry as well as travellers. Simply put, this mobile application is a social media application for travellers. Below is the Figure 3 presents flowchart of the mobile application.

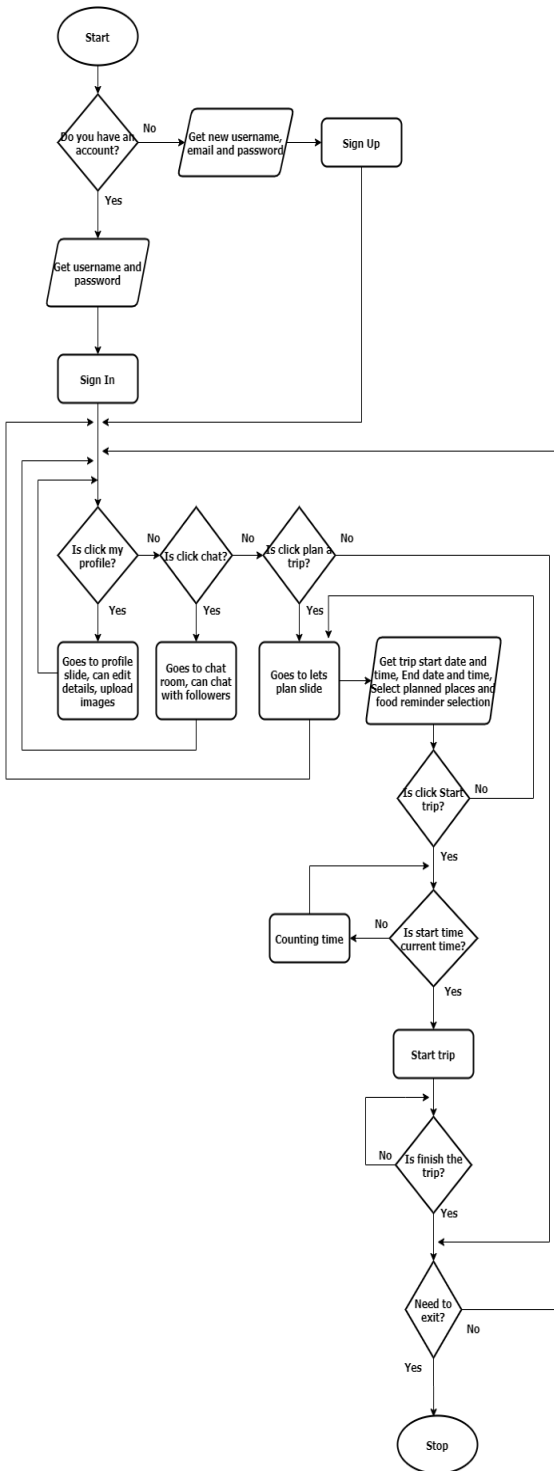


Figure 3 - Flowchart of Mobile Application

Authors hope to create this mobile application to minimize the time it takes to plan a trip and to improve the tourism industry. First of all, after installing the application on the phone, the details of how this application works will be presented. The presentation of this will be as in the flowchart above. This mobile application allows users to register for free and plan a trip. When describing this mobile application, the user can register through the email address and see the pictures of other places visited by tourists. It is displayed on the user's home slide. It has been indicated under Figure 4.

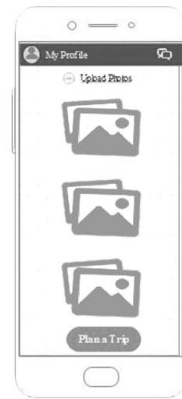


Figure 4 - Home Slide - Mobile Mockup

Authors hope to give this application a function which allows every user to like any uploaded picture. Images uploaded by users are displayed on other users' home slides. Those images can give travellers who want to visit some idea of the places they plan to visit and this will help make the trip more effective.

Authors also hope to add the most popular post feature to this application and for that, the reversed Bubblesort algorithm will be used to present the most popular post. Clicking on that button will take to the user's profile, where the user will be able to upload his/her data as well as images and edit data. It presents under Figure 5.

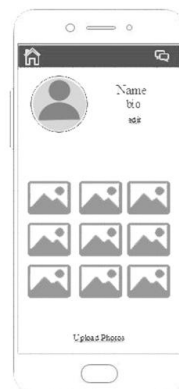


Figure 5 - Profile Slide - Mobile Application

However, authors will design this mobile application to save the user time as well as make the user’s visit more efficient through various special features. Another feature to be included is the ability to plan the trip with a single button. The user can access the plan a trip slide by clicking on the plan a trip button as shown in Figure 4-Home slide – Mobile Mock-up.

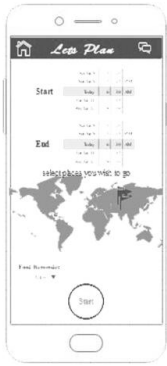


Figure 6 - Plan a Trip Slide - Mobile Mockup

As shown in Figure 6-plan a trip slide – Mobile Mock-up, the user is asked for some information in order to plan the trip. First and foremost, plan the start date and end date of the trip. Also, the start time and end time should be given by the user. The authors hope to enable this application function so that the user can mark the places they want to see using the Maps API. It is assumed that this will enable the user to use the phone’s touch screen facilities such as zoom, pinch. Eating right is a hallmark of a healthy person. User may miss it on time while travelling. This application reminds the traveller to get meals on time and reminds the relevant time automatically. Authors hope to add to this application the ability to change those times at the user’s discretion. After completing this information and after clicking the Start button, the application will confirm if the given start date and time are the same as the current date and time. And if it is the same, then the trip will start. If unequal, the time count is until the future date. It notifies the user at start-up time by a notification.



Figure 7 - Through Travelling Slide - Mobile Mockup

After the trip starts, the user can see his whereabouts and destinations while traveling. Authors hope to automatically suggest and customize the buttons where the user thinks they want to be near the user’s location. It has been indicated under Figure 7. All the nearby places are shown on the map given via google maps. Authors hope to use an API for the map used for this application.

Food reminders also take place during the trip. Hotels and rooms suitable for overnight stays are automatically suggested for a few days’ journey and authors hope to add the convenience of chatting with hotel and room owners through this application through the chat room.

D. Implementation

This application is designed according to the drawn Flowchart and Mock-ups. Mobile application requires an interface as well as a database to store data. Currently, Flutter is used to create mobile application for creating interfaces, and database runs over the internet. This uses Firebase.

E. Testing

Authors hope to test this research in response to the mobile application being made available to several people at once. It intends to make changes in the application with that response.

V. RESULTS AND DESCUSSION

This travel application is intended to be a social media for tourists as well as for advancement of the tourism industry. The traditional Word of Mouth today has become the Electronic Word of Mouth and influencer marketing has taken off. Influencer marketing is done by person who has large followers [9]. It is “the art and science of engaging people who are influential online to share brand messaging their audiences in the form of sponsored content” [10].

Electronic Word of Mouth allows another traveller to see a place he/she has visited by uploading it to this application through an image rather than telling another user who sees it. The idea that the user gets from it is more of an image than a word. The idea of going to that place is effective only after the user discovers that is a good place to visit. This application will help the tourists as well as the tourism industry.

A. Advantages to User

This application is free and will help the busy community as well as frequent travellers. Community can use this application to plan a moment away from their busy lives and travel with loved ones. This application allows the user to visit desired location and to see and understand the location visited by another user. User

satisfactions can be maximized by automatically suggesting locations that the user deems necessary during the journey from the start of the trip to the end. Also, forgetting about meals during the trip will no longer happen due to this application. It also has the ability to remind the user of their own meal schedule according to the to avoid skipping meals. If user traveling for a few days, user can book resting information with hotels and room owners through this application.

B. Advantages to Tourism Industry

Using this application, locals as well as foreigners can clearly identify the suitable places to visit. Accommodation companies such as hotels can register through this application to market their businesses. It also gives the tourism industry the ability to do influencer marketing.

Even in large companies, marketing is done extensively through social media [11]. Today, most travel applications can be downloaded online, but most require payment to get the most out of them. But this application is full of capabilities that allows user to get all benefits for free. Also, a special feature of this application is the meal reminder feature which is not available in other travel applications. Authors also hope to provide the user with the ability to customize it. Authors believe that this application will be able to make an impact on the tourism industry by using influencer marketing. Another feature here is that it automatically suggests the places that the user thinks user want while traveling.

VI. CONCLUSION

The technological advancement in world today has had a huge impact on every industry. Travel is one of the various strategies used to relieve stress. Although community tend to travel to relieve the stress of a busy society, they often have to devote some time to planning and travel, which can often lead to the loss of the idea of travelling. The travel application authors hope to create from this research will enable the user to plan an effective trip without wasting time. The research shows that the impact of social media on tourism can be demonstrated and this application can be used to develop the tourism industry. The main purpose of this is to create a mobile application that will help the traveller to travel effectively using the Electronic Word of Mouth.

VII. ACKNOWLEDGEMENT

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