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HAJJRAH: AN INNOVATIVE APPLICATION FOR PILGRIMS OF HAJJ AND UMRAH

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ABSTRACT

This paper describes an application system named HAJJRAH which offer solutions to common problems faced by pilgrims in performing the obligatory and supplementary activities of Hajj and Umrah. Background of pilgrimage and problems faced by various agencies who manage pilgrims were also provided in this paper to give an understanding on the problem surrounding the need of HAJJRAH application. Analysis of market study among potential user and industrialists are presented in this paper to justify market needs and strength of the application's business idea. Results of the analysis shows that the features provided by HAJJRAH application accommodates and address common problems faced by most pilgrims and various agencies who involved in managing the pilgrims during Hajj and Umrah.

Keywords: hajjrah, pilgrimage, dua, pilgrims, business idea.

INTRODUCTION

Islam is one of the major religions of the world with 21% percent of the world populations are muslims. ("Major Religions Ranked by Size," 2005). The five pillar of Islam are foundation of a Muslim life and they are religious duties expected for every Muslim. The five pillar of Islam are the testimony of faith, prayer, giving zakat (support of the needy), fasting during the month of Ramadhan and the pilgrimage of Makkah at least once in a lifetime for those who are eligible. ("Islam Guide: What Are the Five Pillars of Islam?," n.d.).

There are two types of pilgrimage in Islam which are Umrah (minor pilgrimage) and Hajj (major pilgrimage). As mentioned before, every individual muslim is obligated to perform the Hajj at least once in a lifetime. However, they can choose to perform it several times if they are financially and physically able. Both Umrah and Hajj are performed in Saudi Arabia in the holy city of Makkah. Umrah and Hajj are types of pilgrimage that were made obligatory in the holy Quran, based on the following ayat:

"And complete the Hajj and Umrah for Allah..."
(Quran 2:196)

Umrah is a minor or small pilgrimage. It has a total of five steps. Hajj has a total of 6 obligatory steps. However there are additional steps that have to be performed to perfect your Hajj. All of these steps in Hajj and Umrah have a certain time period and place that the pilgrims have to adhere to. If they do not follow the specific steps in performing the ritual, the practice will be considered void. (Yusaf, 2006)

PROBLEM BACKGROUND

Muslims who perform their pilgrimage duties at Mecca and Madinah face similar problems regardless of their principles, age or where they come from. Among common problems faced by these pilgrims concern on memorizing the prayers or dua', and steps involved in performing the pilgrimage activities. The dua' has to be recited perfectly and the sequences of step have to be executed correctly for the pilgrimage duties to be accepted. There are many steps and dua's to remember. Difficulties in remembering each step and reciting the dua' are common for most pilgrims.

Guide books with steps and dua' to be recited for the pilgrims are available. However, the problem with these books is that they come in different versions and presentation layout. Moreover, to accommodate the demand of a lighter version of guide books, these guide books are in small pocket-sized versions. These small versions become a problem to read as the characters are small. In crowded areas especially during Hajj season, it is very difficult for pilgrims to open and read a book. Keeping track of certain dua's and also looking at where you are going is not an easy task when you are reading and holding a small guide book.

Situations become more difficult during peak hours of pilgrimage duties when many pilgrims swarm the Holy City of Mecca and Madinah to perform the pilgrimage duties. This creates situation where pilgrims often get separated from their groups or lost in a large crowded area. Searching for lost pilgrims often consume a lot of time as Mecca and Madinah are a large space.

FEATURES

Problems faced by pilgrims as mentioned in previous section have motivated the development of HAJJRAH, an application embedded in smartwatch such as



Samsung Gear or Iphone Watch, to assist pilgrims in performing their pilgrimage. The application assists the pilgrim by giving steps and description in performing the pilgrimage. During Sai', the number of times the pilgrim have walked from Safa to Marwa are counted by the embedded pedometer in the smartwatch. The pedometer will also helps pilgrims to remember how many times they have circled around Kaba' for Tawaf. The HAJJRAH applications is also equipped with audio dua' and zikir to help pilgrims memorizing and reciting dua' while performing their pilgrimage. Another important feature of the HAJJRAH is the ability to track and locate its users. This application is beneficial for Hajj and Umrah group travel agencies as it assist organizers in tracking their pilgrims group member when performing pilgrimage.

MARKET STUDY

A market study was carried out to further investigate market needs and strength of business idea regarding the usage of HAJJRAH application. Questionnaires were distributed and interviews were conducted to get information of the market needs. Apart from the market need, the analysis also examined several other issues such as industry-related issues, awareness of similar product, target market and customer-related issues, and feedback from the industry.

Findings and discussion obtained from Questionnaire

Background respondents

A sample of 30 respondents who had performed pilgrimage, ages between 30 and 70 involved in the market study. As revealed in Figure-1, there are various ages of different gender performing the Umrah and Hajj. Thus, market segment of HAJJRAH application is for all age of different gender, who perform Umrah and Hajj.

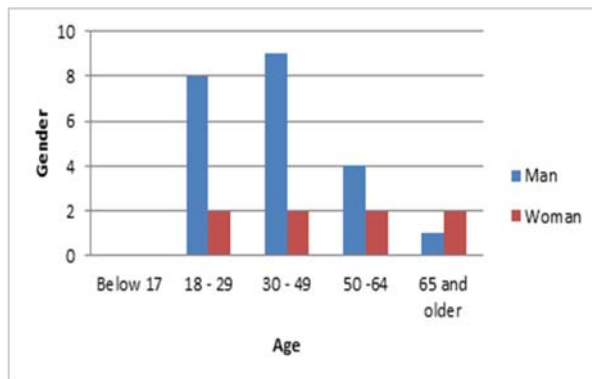


Figure-1. Pattern of respondents who performed Umrah and Hajj based on Gender and Age.



Figure-2. Screenshot of the application's tracking and guidance features.

Identified problems faced by Pilgrims in performing Umrah and Hajj

Common problems faced by majority of the respondents when they performed Umrah and Hajj, were identified in the market study. The identified common problems are associated with forgetfulness of reciting zikir, doa, steps of performing the pilgrimage and got lost during the pilgrimage. Problem that matter most to the respondent is getting lost during the pilgrimage. Two third of the respondents mentioned that they got lost during the pilgrimage. This is due to the big location where the pilgrimage activities take place. Makkah is a big location with many roads and buildings that looked the same. During the hajj season, the roads were gridlocked. This situation creates confusion to a lot of pilgrims especially for first timer pilgrims. Most pilgrims who lost their way often ask people or use map as an alternative to get back to the right direction.

The identified problems were considered and sought through the features offered by HAJJRAH application.

Awareness of similar product

In the market study, majority of the respondents were not aware of any similar application to HAJJRAH. They have heard of existing mobile application that provides guided steps to perform pilgrimage but they have no knowledge on any embedded application which is attached to a smartwatch like HAJJRAH application.

Target market and customer-related issues

Features of HAJJRAH application, as visualized in Figure-2 were exposed to the respondents. Feedbacks received were positive and encouraging. Most respondents agreed that the step by step zikir and dua' provided by HAJJRAH application would help pilgrims in performing Umrah and Hajj, smoothly.

The technology that enables HAJJRAH application to be embedded in smart watches and blue tooth with ear phone has attracted most of the respondents.



The innovative idea using existing technology seems to have the ability to penetrate existing market needs.

Another feature of HAJJRAH application that received positive feedbacks from the respondents is the capability to track and locate its users. A smart watch with an embedded HAJJRAH application with capabilities to track and locate its user links to a safety network. A lost pilgrim can be tracked and his location can be checked anytime online. The feature offered by HAJJRAH application effectively decrease the time it takes to find lost pilgrim.

Overall customer feedback

Most of the respondents agreed that HAJJRAH application helps pilgrims in performing pilgrimage. Wearing a smart watch with embedded application like HAJJRAH and a connected blue tooth ear phone is very convenient compared to using conventional way i.e. reading a book. The product obviously enables pilgrim to keep in focus when performing Umrah and Hajj.

Feedback from industry

The strength of business idea within HAJJRAH application was then examined among the industrialist who directly involve in various business related to pilgrimage of Umrah and Hajj. Categories of the industrialist, involved in the market study are as shown in Table-1. Similar questions posted to the respondent, mentioned in previous section were pointed out again to the industrialists.

Table-1. Categories of industrialist involved in the market study.

	Industrialist	Occupation
1	Educator Department Software Engineering)	Lecturer
2	Educator (Department Software Engineering)	Lecturer
3	Educator of Islamic Studies	Hal Ehwal Islam Assistant
4	Educator of Islamic Studies	Pembantu Operasi Faculty of Islamic civilization
5	Tabung Haji	Agent from Tabung Haji Travel
6	Tabung Haji	Agent from Tabung Haji Travel
7	Travel Agency	Agent from Tiram Travel, Johor Bahru
8	Ex- pilgrimage	Retired
9	Ex- pilgrimage	Engineer
10	Ex- pilgrimage	Teacher

The face to face and phone interview results were summarized and reviewed.

Most problematic issue during pilgrimage

Most industrialists gave similar answers to this question which are memorizing the steps to perform Hajj and/or Umrah, separation of pilgrims from specific group, searching for lost members of their group and also physical health. These feedbacks are in in-line with previous feedbacks received from respondents who were the pilgrims of Hajj and Umrah.

Benefits of HAJJRAH in tracking and locating lost pilgrims

Most of those interviewed industrialist gave positive responds towards the tracking and locating lost pilgrims. Majority of them commented that it is an important feature that should be implemented.

Some respondents suggested that implementation of HAJJRAH should comply with international laws. On-site rules and regulations are other important aspects that should also be considered and followed, if required.

Other concerns

The market study, conducted to get feedback from industrialist received very good respond. Apart from the responses on problematic issues and features on tracking lost pilgrims, other views were also received. Amongst the views are the usage of audio functions for the recitation of dua and zikir which to some industrialists, they felt that it is a very useful feature especially to the elderly people who needs assistance in reading these dua's and zikir.

An important concern highlighted by some industrialist is regarding the usage of smart watch when performing Hajj and Umrah. Permission regarding policies and international restrictions from the local authority pertaining the usage of the smart watch during pilgrimage should be sought.

BUSINESS ANALYSIS

Evaluation of HAJJRAH application continues with business analysis using Eliminate-Reduced-Raised-Reduced (ERRC) approach. Table-2 shows a summary of the ERRC for HAJJRAH Application.

**Table-2.** Summary of ERRC for HAJJRAH application.

Eliminate	Reduced
<ul style="list-style-type: none"> ▪ Manual book ▪ Nationality wrist band 	<ul style="list-style-type: none"> ▪ Forgetfulness in reciting dua's during pilgrimage <ul style="list-style-type: none"> ▪ Baggage weight ▪ Manual tracking labor
RAISE	CREATE
<ul style="list-style-type: none"> ▪ Concentration in performing pilgrimage ▪ Speed in tracking and locating pilgrims 	<ul style="list-style-type: none"> ▪ Audio recitation ▪ Network safety via tracking facility <ul style="list-style-type: none"> ▪ Haji/Umrah combination ▪ Wearable device accessibility

HAJJRAH application eliminates the usage of conventional manual book. With HAJJRAH application embedded in a smart watch and the usage of Bluetooth earphone, the hassle of holding a manual book and wearing nationality wrist band are avoided during pilgrimage. Reciting zikir and dua when performing pilgrimage becomes easier with the assistance of audio facilities provided by HAJJRAH. As an addition, the audio facility also overcomes the forgetfulness of steps in performing pilgrimage.

Getting lost which is very problematic to most pilgrims is addressed by HAJJRAH application with feature that is able to track and locate pilgrims. The facility is beneficiary to individual who perform pilgrimage and to agencies that directly involve with managing pilgrims. The time to find the right direction and to find missing people is reduced by using this innovative application.

CONCLUSIONS

The discussion on HAJJRAH application and its market study reveal the contribution of this innovative product which is twofold. First, it assists pilgrims to achieve better concentration in performing pilgrimage with the reduction of hassle in reciting dua, memorizing steps and finding right location using innovative features provided by the application. HAJJRAH application also assists the management of pilgrims by various agencies, particularly in tracking and locating lost pilgrims. Features of this innovative applications offer assistance and solutions to many Muslims around the world in performing a meaningful spiritual event in their lives.

ACKNOWLEDGEMENT

The study described in this chapter is supported by Universiti Teknologi Malaysia (UTM), Ministry of Higher Education (MoHE) under the GUP grant (Vot-Q.J130000.2513.00G85). The authors would like to acknowledge Research Management Center UTM (RMC) for their financial support in making this study a success.

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