Evaluation on the Perception of the New Portable Set for Hajj Course (P.A.H.A.M) Based on Design Characteristics

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Abstract. This paper is about the perceptions of the pilgrims to the innovation of the portable training set for hajj course (P.A.H.A.M). The acronym P.A.H.A.M come from the Malay word “Praktikal Haji Mudahalih” as a tool in helping the hajj and umrah pilgrims to better understand the concept while doing the hajj and umrah practical. In Malaysia, one of the managing bodies of pilgrimage for Muslims in is Pilgrims Fund Board. It provides a series of courses every year to help in boosting the understanding of the pilgrims before leaving for the Holy Land. During the practical session, they will provide the replica model to help pilgrims to familiarise themselves with the actual situation in Mecca. However, the current replica model was built using an iron structure that is relatively heavy, not portable and embarks more cost of transportation and labour. Therefore, this paper discusses the perceptions of the pilgrims on the characteristics of Portable Training Set for Hajj Course (P.A.H.A.M) compared to the existing set in order to increase the understanding of pilgrims. A total of 53 samples of hajj and umrah pilgrims participated in this study consisted of the general public. From the data analysed using Statistical Software for Social Sciences (SPSS v19), the results of the survey showed that more than 90% of respondents agreed that this portable training set meets the characteristics such as easy to handle, more safety in crowd, portable, stability, light weight, suitable in-door and out-door activity, easy to clean, and more structured with average score 4.00 (agreed) and above. In conclusion, it is expected that this Portable Training Set for Hajj Course (P.A.H.A.M) can be used by Muslim’s communities in Malaysia particularly and Muslim countries in general to better understand the hajj and umrah activities before leaving to the Holy Land.

1. Introduction
Hajj is a duty of every Muslim who is physically and financially capable to perform. Every year, it is a major religious event in which more than two millions individuals from all over the world gather at the same time in the Mecca area in the Kingdom of Saudi Arabia. Pilgrimage undertaken to the Holy Land in Mecca during the month of Zul-Hijjah to perform certain rituals with certain conditions [1].
Malaysia, one of the bodies that manage the hajj for Malaysian Muslim citizens is Pilgrims Fund Board. This board already provides a series of courses every year to assist in understanding the Hajj pilgrims before departing for the Holy Land. During practical session, they provide the replica model to help pilgrims to familiarise themselves with the actual situation in Mecca. This replica model consists of one unit of Ka’bah, one unit of Hijr Ismail, 3 units of Jamarat (Al-Ula, Al-Wusta, Al-Aqaba) and one unit of Maqame Ebrahim. By using this replica model, it help the pilgrims in order to better understand while doing the simulation of hajj practicals. However, the current replica model was found built using an iron structure that is relatively heavy, not portable and embark more cost of transportation and labour. Therefore, this paper will discuss the perceptions of the pilgrims on the characteristics of Portable Training Set for Hajj Course (P.A.H.A.M) compared to the existing set in order to increase the understanding of pilgrims.

There are positive impacts on the student learning performance when using simulation in teaching pilgrimage because it can attract students to understand better [2]. By using this training set for hajj course as a simulation tool, it is the effective way of learning. This is supported by Hodson, (1999) [3] where he also agrees that simulation has proven to be an effective way of learning, which enable students to be more innovative and creative.

Alessi, M. S. dan Trollip (2001) [4] also suggested that simulation is a good way for users to perform certain activities. The method of simulation can also be considered as an effective method as it is almost similar to performing the real pilgrimage, which involves cognitive, affective and psycho-motor domains. Students are able to learn effectively through personal involvement and experience, the "hands-on" opportunities for self-discovery [5]. But the current replica model was found built using an iron structure that is relatively heavy and not portable, requires more labour for installation and unloading, requires a large space for storing the structure especially for the Ka’bah, requires longer time for installation and transhipment and it embarks expensive cost of transport. Therefore, this study try to gain response on what are the level of importance of product characteristics and how their evaluation of the P.A.H.A.M set in term of cost reduction and lastly to increase the level of understanding among pilgrims while practical session.

2. Methodology

2.1. Sample
A total of 53 respondents were randomly selected in Malaysia Technology Expo 2015 at the Putra World Trade Centre (PWTC), Kuala Lumpur. Respondents were asked to fill out a questionnaire based on their perception on the sample displayed. The respondents consisted of 21 men (39.6 %) and 32 women (60.4 %) with the majority of respondents aged 21-30 years at 55% (29), followed by the respondents aged 31-40 years (24 %, 13), 51-60 years (8 %, 4), 20 years and under (7 %, 4) and 41-50 years (6 %, 3). From the total respondents, only 23 % (12) had experience in performing hajj and/or umrah and the rest of 77% (41) respondents never had the experience.

2.2. Questionnaire
The questionnaire was used in this study. There were two parts of this questionnaire. First part was the respondent demographic information to determine the age, gender, and the respondent experience on participating the hajj and/or umrah practical session. The second part was the survey on their perception and the evaluation of the design for a Portable Training Set for the Hajj Course (P.A.H.A.M) to help increase the pilgrims understanding. The Likert scale was used in this part where the scale used was 1 (Not important) to 5 (Very important) for rating the characteristics need for practical set. Meanwhile, the scale of the perception of the model design using scale 1(Strongly disagreed) to 5 (Strongly agreed).

2.3. Statistical Analysis
These survey rating data were measured and analysed using Statistical Package of Social Science (SPSS 19) for reliability analysis. Model Cronbach’s Alpha was used to measure the degree of internal consistency and how well each individual item on a scale correlates with the sum of the remaining items. In the social sciences research, a Cronbach’s Alpha more than 0.700 is considered acceptable. Obviously, alpha more 0.800 is preferred and is considered “good reliability” [6]. The survey data on the importance of product features and product evaluation to increase the understanding and pilgrims focus shows very good inter reliability result where alpha value obtained 0.931 as shown in the table 1.

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|---------------------------------------------|------------|
| 0.931            | 0.931                                       | 22         |

2.4. Current product
From observation and surveys conducted, it was found that the current set of Practical Hajj Set (Figure 1) used the iron material structure whereby this material may lead to the following characteristics; Heavy and not portable, requires more labour for installation and unloading, requires a large space for storing the structure especially for the Ka’bah, requires longer time for installation and transhipment and expensive on transportation cost. To address these issues, a new invention has been made to improve the existing practical set.

![Figure1: Current model of practical Hajj set](image)

2.5. Portable Training Set for Hajj Course (P.A.H.A.M)
Portable Training Set for Hajj Course (P.A.H.A.M) was developed using inflatable concepts in order to increase the understanding of pilgrims while training. The acronym of P.A.H.A.M is from the malay word “Praktikal Haji Mudahalih”. This set consists of; One unit of Ka’bah (10% from actual size), one unit of Hijr Ismail (10% from actual size), one unit of Maqame Ebrahim (50% from actual size), three units of Jamarat (5% from actual size), and special blower for each model (Figure 2).
3. Results and Discussions

3.1. Survey results
From the product characteristics and evaluation survey data, it was shown that, more than 90% of respondents agreed that this portable training set meets the characteristics with average score 4.00 (agreed) and above. The data obtained showed that 98.2% of respondents agreed that this set is suitable for use outside the building ($\mu = 4.64$) and inside the building ($\mu = 4.62$). While 98.1% of respondents agreed this set was portable ($\mu = 4.69$), easy to clean ($\mu = 4.68$) and structured ($\mu = 4.58$). In addition, 96.2% of respondents agreed that this set is also easy to handle ($\mu = 4.53$), and stable ($\mu = 4.40$). A total of 94.3% of respondents agreed that this set is light in weight ($\mu = 4.58$), and 92.5% of respondents agreed with the safety characteristic in this training set ($\mu = 4.45$), due to its inflatable concept. Table 2 below shows the overall results according to the characteristics of the product.

Based on the results of the description and the observations of the respondents against this portable training set (P.A.H.A.M), a total of 98.1% of respondents believe that this set is able to help improve understanding of hraj and/or umrah pilgrims and 90.6% agree that this set also able to assist pilgrims.
in enhancing their focus during the practical session because of their shape and colour almost same with the real Ka’bah, Maqame Ebrahim, Hijr-Ismail and Jamarat.

Table 2: Survey data on the product characteristics and product evaluation (n=53)

| No | Product characteristics       | Percentage of Agreed | Mean, µ (Std dev., σ) | Level of Importance | Product Evaluation (P.A.H.A.M) |
|----|--------------------------------|----------------------|-----------------------|---------------------|-------------------------------|
| 1  | Easy to handle                | 96.2%                | 4.57 (0.605)          | 4.53 (0.575)        |                               |
| 2  | More safety in crowd          | 92.5%                | 4.49 (0.608)          | 4.45 (0.637)        |                               |
| 3  | Portable                      | 98.1%                | 4.64 (0.558)          | 4.69 (0.503)        |                               |
| 4  | Stability                     | 96.2%                | 4.51 (0.576)          | 4.40 (0.599)        |                               |
| 5  | Light weight                  | 94.3%                | 4.49 (0.639)          | 4.58 (0.663)        |                               |
| 6  | Suitable in-door activity     | 98.2%                | 4.57 (0.572)          | 4.62 (0.527)        |                               |
| 7  | Suitable out-door activity    | 98.2%                | 4.64 (0.484)          | 4.64 (0.522)        |                               |
| 8  | Easy to clean                 | 98.1%                | 4.70 (0.540)          | 4.68 (0.535)        |                               |
| 9  | Structured                    | 98.1%                | 4.64 (0.522)          | 4.58 (0.535)        |                               |

3.2 Comparison of current set and proposed training set
Shahir et al. (2015) [7] had made comparisons for the current set and the improvement set (Table 3). By the advantages of the inflatable concepts, only less than 15 minutes is required to install the whole set of this Portable Training Set for Hajj Course (P.A.H.A.M) rather than more than 2 hours needed for the existing product using iron structures. Meanwhile, this portable training set also needs small space for storage, one labour for loading, unloading, and installing set, easy to move because of light weight, shape and appearance are more realistic, and this set is suitable to be used for indoor and outdoor activity. As the course is conducted at many different locations, it also can help the company that conduct the course to reduce the costs of transportation and installation at the same time increases their productivity.

4. Conclusion
This portable training set for hajj course is very beneficial to pilgrims in order to increase their knowledge and understanding of hajj and umrah and also help them to increase their awareness of the real situation in the Holy Land. Based on the results, more than 90% of respondents agreed that this portable training set fulfill the design characteristics with average score 4.00 (agreed) and above. 98.1% of respondents agreed and believed that the portable training set for hajj course (P.A.H.A.M) can help to improve understanding of the pilgrims. Almost 90.6% agreed that the model (P.A.H.A.M) also help to improve pilgrims’ concentration during training sessions conducted. With this innovation, it could help the company that conduct the course to reduce the costs of transportation and installation at the same time increases their productivity. This Portable Training Set for Hajj Course (P.A.H.A.M) also has potential to be commercialised to all travel agencies that provides umrah courses in their packages, secondary schools that have Hajj and umrah syllabus, also the local higher institutions that have hajj and umrah in their curriculum. In addition, this innovation also has the potential to be marketed throughout the Islamic countries such as Indonesia, Brunei and it is possible to penetrate the South-east Asian market.

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Table 3: The comparison of the characteristic for current and proposed training set (P.A.H.A.M) [7]

| No | Characteristics                  | Existing Practical Set                                      | Portable Training Set (P.A.H.A.M)               |
|----|----------------------------------|-----------------------------------------------------------|-----------------------------------------------|
| 1  | Installation time                | Need more than 2 hours to install                         | Need only less than 15 minutes to install all set. (Inflatable concept) |
| 2  | Space for storage                | Require large space                                       | Require small space                           |
| 3  | Transportation                   | Need lorry because of long iron structure and heavy       | Need only car (light and easy to carry)       |
| 4  | Number of labour required for loading, unloading and installation | Require more than 2 labours                             | Require only 1 labour                         |
| 5  | Portable                         | Difficult to move (Heavy weight)                          | Easy to move (Light weight)                   |
| 6  | Shape compared to actual         | Less realistic                                            | More realistic                                |
| 7  | Place for installation           | Suitable to be used only outdoor                          | Suitable to be used for indoor and outdoor   |

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