Museum Guide Mobile App: The Case Of The Near East University Classical Car Museum

Burcu TURAN*, Hafize KESER
* Near East University, Department of Computer Education and Instructional Technology, North Nicosia, Cyprus

Abstract

Mobile technology has already become a part of our daily live. The development of mobile technologies provides the opportunity to reflect these in the museums that reveals our cultural and historical heritage. Rev.u program, which was developed by the researcher using the mobile app museum guide enable visitors to listen the features of the automobiles in English and Turkish languages as well as promote the museum. Thus, the app uses not only visual but provides information to the visitors who are unable to speak Turkish. The research is based on 32 visitors of Near East University’s Classical Car Museum. Following the museum visit, museum guide mobile application research, qualitative research methods, semi-structured interview developed by the researcher with the "Museum Guide Mobile App Visitor Satisfaction and Dissatisfaction Interview Form" is used. Descriptive analysis method is used to analyze the data. The research has shown that the application is useful and may also utilise in other museums.

Keywords: Mobile Directory, mobile learning, museum guide, mobile application

1.Introduction

The emergence of new technologies in the second half of the 20th Century reached in a position to change the circumstances in the World (Agaoğlu, 1989; Tuncay & Uzunboylu, 2010). As a result of these technological advances, educational development has become apriority in the World (Tas, 2004). The penetration of technology and computers in today's academic life has become necessary to use new techniques and methods in teaching (Alakoc, 2003). Educational technology in several ways to the lives of students and educators as well as contribute (Turan, 2010). Technology has become a part of social development in a way that the previous
teachings to be updated and set with a new learning technologies (Martin, Diaz, Sancristobal, Gilcastro & Peire, 2011). These new technologies are internet and mobile devices (Penaloza, Mendoza, Gress & Vargas, 2009; Thiam, 2013).

According to one study, students follow the innovations in technology purchase and use their budgets to the extent allowed concluded that we are not only (Ozdamlı, Cavus & Uzunboylu, 2007). And m-learning and training opportunities are provided everywhere, always provides more flexibility for students (Cavus & Momani, 2010).

As such, people are enabled to get information anywhere at any time with independent mobile applications to save time (Donmez, Gelibolu & Inceoglu, 2006).

Mobile technology enables to learn at every stage without being aware of it. Learning independent of time and place has been facilitated through learning on the move and new perspectives on learning have become easier. Therefore, the benefits of a variety of mobile devices for the use of education can not be ignored (Bulun, Gulnar & Guran, 2002).

Museums are natural, historical, artistic, scientific institutions where valued objects stored, preserved and studied (Maccario, 2002). Museums are attracted by visitors more than in the past. Nowadays, most of the visitors tend to see the beauty of the country or the region’s history and culture. In this process, the functions of museums have become increasingly diverse (Yılmaz, 2011). Museums are no longer such organizations for the collection of the objects for storage and display (Uralman, 2006), rather a place of anticipation (Yılmaz, 2011). And education given in museums gives children the opportunity to question their existence (Baykasoglu, Ozder & Yalçınkaya, 2012).

Progress in communication Technologies and the wide spread use of the internet, makes the cultural institutions such as museums to reach their target audience easier. The museums became sensitive on identifying the target audience, and presenting the exhibitions to masses by utilising communication technologies to increase the intelligibility. Computer technology, projectors, interactive applications and simulators to be used for exhibitions, made it necessary for a change in the museums’ exhibition areas. The establishment of communication infrastructure, internet and wireless network applications that support applications would assist visitors to communicate with the museums and exhibitions fast and practical (Boyraz, 2012).

As a result of the expected development of new mobile technologies and the anticipated new developments in the museums brings into mind that the mobile technologies may literally turn into a tourist guide. Museum guide mobile application is a mobile based application audio guide in Turkish and English that provides information to visitors.

On this study, the researcher will apply Museum Guide Mobile Application on the visitors of Near East University Classical Car Museum and observe their views on the implementation of the tool.

OBJECTIVE AND EMPHASIS

Nowadays, mobile applications are used in many areas, including museums. Available Museum mobile application is only the contact and location information of the museums. The research tools developed includes the audio information of the objects in the museum in Turkish and English. It is important that the visitors will be able to listen to these information with their own mobile. In addition, the application developed by the researcher, an optional module provides the visitors are able to take photo and upload it with their comments to the system.

This module enables visitors to share photo archive, requests, complaints and suggestions. The research also represents data record as a unique aspect of the mobile application.

This study provides information on the audio mobile application tools in Turkish and English developed by the researcher, that is applied on visitors of the Near East University Classic Car Museum and the visitors' views on the implementation of the tool. For this purpose, the visitor’s opinions are sought on the Museum guide mobile application developed by the researcher.

2. METHOD
2.1. Preparation of media

Following the review of the literature on the subject, the materials are obtained from the Near East University Classical Car Museum and mobile application design Rev.u program is used. Apple Voice Memo application of materials used during the creation of a voice. Mobile application is related to the content of automotive design theme is selected. Using Windows Live Movie Maker program was added to the combined visual
and audio content mobile application. Mobile system features are installed that enables visitors to take photos and share their comments in the application. Thus, the opinions of visitors of the museum will be observed on the implementation of Mobile Museum Guide and their images will be available on the database.

Pic 1. Museum guide mobile app screenshots

2.2. THE RESEARCH MODEL

Data for this study were obtained using qualitative research, research questions to be used in a self-report open-ended "Museum Guide Mobile App Visitor satisfaction and dissatisfaction Questionnaire" is developed. During the development of the questionnaire, several educational software evaluation forms available in the literature examined (Oztekin, 2001; Yalin, 2000; Uşun, 2000; Şahin & Yıldırım, 1999). Attention was paid to the preparation process of the interview questions to be asked as per main titles. To what extent the measurement instrument represents the opinions of visitor's satisfaction and dissatisfaction are determined with reference to expert opinion. Pilot study of the questionnaire is performed on the Near East at the University’s three faculty members who were visiting the museum and changes have been done on two misleading questions for the final version. The questions in the questionnaire are as follows:

1. What are the features that satisfy you on the Mobile museum guide application?
2. What aspects have difficulty using a mobile museum guide application?
3. Do you think the implementation of the museum guide application required in all museums?
4. How did you feel using Mobile Museum Guide application on your visit?
5. What do you think about visual materials on mobile museum guide?
6. What do you think about auditory materials on the mobile museum guide?
7. What are your suggestions on the implementation of mobile museum guide?

2.3. THE WORKING GROUP

Throughout the implementation of the research study, Near East University Classical Car Museum had 32 visitors. Ten out of those visitors are Technical High School students. Visitors gender analysis is given in Table 1, while Table 2 shows the analysis of different nationality.

Table 1: The results of the analysis of the sample group according to gender.

| Gender | Male | Female |
|--------|------|--------|
| f      | 27   | 5      |

There are 27 men and 5 women in the study group visitors.

Table 2: The results of the analysis of the sample group according to nationality.

| Gender | TR   | North Cyprus | Nigeria |
|--------|------|--------------|---------|
| f      | 11   | 19           | 2       |

By nationality in the study group, 27 citizens of Turkey, Northern, 19 citizens of North Cyprus and 2 citizens of Nigeria. Most of the working group consists of citizens of Northern Cyprus.

2.4. Application

At this stage, Museum guide mobile application research is applied during given time by voluntarily participated 32 visitors of the Near East University Classical Car Museum.

As a result of the application prepared by the researcher visitors "Museum Guide Mobile App Visitor satisfaction and dissatisfaction Question Form" data were obtained using a semi structured interview method. Visitors "Museum Guide Mobile App Visitor satisfaction and dissatisfaction Question Form" themes are separated from the data analyzed through descriptive analysis by the researcher.
3. RESULTS

The researcher personally conducted the distribution and respond of the questionnaire and made aware of the visitors on the importance of the research. The questionnaire was distributed to visitors at the beginning of the application and the forms were collected at the end of the application.

Visitors are given enough time to talk about the research, for that reason it is believed that they answered sufficiently. A total of 32 visitors completed the questionnaire. And the data subjected to content analysis and interpreted. Content analysis data were categorized and evaluated.

Question 1: What are the features that satisfy you on the Mobile museum guide application?
Respondents' answers to Question 1 presented in Table 3.

Table 3. The results of the analysis on the respondents' answers to the question 1.

| f  | Answers                                                                 |
|----|-------------------------------------------------------------------------|
| 28 | While visiting the museum, instead of reading, listening to the characteristics of the cars enabled me to understand easier. |
| 2  | I was always searching someone who could speak English at school and everywhere. It is very satisfying that you use this application in the museum. |
| 1  | With Mobile application, the museum is no longer regional, rather gained an international dimension. |
| 1  | I didn’t find anything particular satisfying during the application. |

28 visitors stated more easily learned by listening rather than read. 2 respondents said they were satisfied that the application is in English. While touring the museum explaining the features of the car rather than read the papers, listen to the opinions facilitate understanding has the highest frequency value.

Question 2: What aspect shave difficulty using a mobile museum guide application? Respondents' answers to questions presented in Table 4.

Table 4. The results of analysis of participants' responses to Question 2

| f  | Answers                                                                 |
|----|-------------------------------------------------------------------------|
| 2  | Some parts of the Turkish audio recording was not audible.              |
| 2  | Some sections did not have English characters, I had trouble finding it. |
| 28 | The application was not difficult to use at all.                        |

28 visitors said mobile application was not difficult to use at all. 2 visitors said, they did not find English characters, some sections. And 2 visitors said some Turkish records are not easily understood. As a result, it is seen that the strain of visitors when using the application.

Question 3: Do you think the implementation of the museum guide application required in all museums? Respondents' answers to Question 3 is presented in Table 5.

Table 5. The results of analysis of participants' responses to Question 3

| f  | Answers                                                                 |
|----|-------------------------------------------------------------------------|
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| 1  | With Mobile application, the museum is no longer regional, rather gained an international dimension. |
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28 visitors stated more easily learned by listening rather than read. 2 respondents said they were satisfied that the application is in English. While touring the museum explaining the features of the car rather than read the papers, listen to the opinions facilitate understanding has the highest frequency value.
14 visitors said mobile application should be implemented in all the museums, 9 visitors can be used in all areas, 8 visitors can be applied in some museums, 1 visitor said that is not necessary.

Question 4: How did you feel using Mobile Museum Guide application on your visit? Respondents' answers to Question 4 is presented in Table 6.

Table 6. The results of analysis of participants’ responses to Question 4

|   | Answers                                                                 |
|---|-------------------------------------------------------------------------|
| 16 | This application is very good for those who doesn’t speak Turkish. It shall be used in all areas. |
| 15 | Without this application, I would leave the museum without knowing the particulars of the cars. It was fun to learn with this technology. |
| 1  | The use of mobile museum guide application did not help me.             |

16 visitors said Mobile Guide application is very good for those who doesn’t speak Turkish. It shall be used in all areas. 15 visitors said it was fun to learn with this technology, and 1 visitor says mobile application did not help to him. As a result, the museum's visitors have learned through practice.

Question 5: What do you think about visual materials on the mobile museum guide? Respondents' answers to Question 5 is presented in Table 7.

Table 7. The results of analysis of participants’ responses to Question 5

|   | Answers                                                                 |
|---|-------------------------------------------------------------------------|
| 22 | Visualization of the application were well prepared.                    |
| 10 | Visual application was perfectly fine but the photos of the cars on the application could have been better. |

22 visitors said mobile application’s visual material was prepared very well. 10 visitors said car pictures could have been better. Most of the participants of the visualization of mobile applications is well prepared and understood.

Question6: What do you think about auditory materials on the mobile museum guide? Respondents' answers to questions presented in Table 8

Table 8. The results of analysis of participants' responses to Question 6

|   | Answers                                                                 |
|---|-------------------------------------------------------------------------|
| 30 | Audio recording application is professionally produced.                |
|  2 | Turkish part of the audio recording had interruption.                  |

30 visitors said mobile application’s audio material was prepared professionally. This suggests that adequate levels of audio materials.

Question 7: What are your suggestions on the implementation of mobile museum guide? Respondents' answers to the questions presented in Table 9
Table 9. The results of analysis of participants’ responses to Question 7.

| f  | Answers                                                                 |
|----|-------------------------------------------------------------------------|
| 28 | Such applications should be developed for all the tourist attraction and historical sites. |
| 20 | The application shall be translated into more languages.                |
| 11 | The usage of the application shall be utilised more in educational museums. |
| 5  | Similar educational mobile application shall be increased.              |
| 4  | The photos taken in the application shall be available when leaving the museum. |

20 visitors said mobile application must be translated into other languages. 11 visitors said mobile applications should be used in educational museums, 4 visitors said while we can get photos from the museum. 5 visitors said such applications should be developed for all the tourist attractions and historical sites. As a result of such applications can be applied to all tourist attractions and may be translated into other languages have emerged.

4. DISCUSSION AND RECOMMENDATIONS

In this study, visual and audio mobile application designed to provide information about the contents of the museum. Many of the participants had the opportunity to use the museum's guide mobile application and stated that it is useful and should be used. According to the participants, the mobile application provides not only regional, at the same time global information on museums, thus similar applications should be utilised in other facilities. In addition, the participants expressed the need to develop similar applications for all historical and tourist attractions.

As a result of the research the following recommendations emerged:

• The application shall be available to more visitors in their language.
• It is more accurate to use Museum guide mobile application for educational museums that could facilitate learning.
• The results of the research when analyzed received a positive image from the visitors, the mobile applications shall be developed according the findings of the study, considering the new dimension of this field.
• In order to attract the user’s attention, mobile application shall provide visual materials as well as auditory materials.

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