

Chapter 14

Mobile Application of Historical Information for Heritage Sustainability

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ABSTRACT

Oral history collections preserve memories, personal commentaries of historical significance through recorded interviews, as well as the unrecorded and generally unfamiliar memories of the past as evidence of history. To be preserved properly, the collections need special housing and management. The objectives of this mobile application are to preserve the oral history collection and to support the research and national heritage needs in Malaysia. The application is used to organise, access, and share information because no one really knows how many collections exist or what condition they are in. Current technology utilisation helps in providing access for students, researchers, and professionals to the national history collections. Researchers will gain knowledge of oral history methodology, planning, and evaluation through the use of these resources. This project covers the importance of digital preservation, the background of the collections and the relevance of the collections towards heritage sustainability which provides accessibility functions as what a digital repository would do. It supplies users with the transcription collections and information in an easy-to-understand layout. Furthermore, they can also identify location of the users in real-time to provide geography-specific content.

Key Words: Mobile App, Digital Preservation, Heritage, Oral History

1. INTRODUCTION

The number of mobile users today grow rapidly, thus, mobile devices usage in daily activities is undeniably essential. This is made possible through the development of mobile applications in various type of businesses and industries. Oral history is a history built around people and it thrust life into history itself and it widens its scope (Veale & Schilling, 2004). Oral History preserves the unrecorded and generally unfamiliar memories of the past as evidence of history. To be preserved properly, the collections of oral history need special housing and management. Therefore, Mobile Application of Historical Information (MAHI) is created to aid in preserving oral history collections while supporting the research and national heritage needs in Malaysia. MAHI promotes intellectual growth and creativity

by managing and facilitating access to the collection of audios and/or video recordings and transcription. The project is created as a preventive effort due to deterioration risk where physical collections may deteriorate with the time. Moreover, it could support research and heritage needs by providing retrieval to historical information. The user engagement level could also be measured through provision of transaction log, whereby user engagement and usage of historical information.

2. LITERATURE REVIEW

2.1 Mobile Application

In the modern age of information and communication system, mobile application creation and usage is rapidly growing sector. The uses and popularity of mobile application are increasing because so many people are using mobile application as communication medium, internet browsing, document management, entertainment etc. (Md. Rashedul Islam, Md. Rofiqul Islam, 2010).

Mobile application is a software application designed to run on mobile devices such as smartphones and tablet computers. It is a result of recent technological innovations. Mobile applications have appeared because of the convergence of media, information technology, Internet and advanced technologies. The opportunities for the future of mobile application are endless. It will only take some time to see, which of these innovations will be a part of our everyday life (Anachack Phongtraychack, & Darya Dolgaya, 2018).

2.2 Digital Preservation

Digital preservation involves copying of digital information into newer media before the old media becomes so obsolete that the data cannot be accessed (Lee et al., 2002). It consists of the processes aimed at ensuring the continued accessibility of digital materials (Adila Ismail and Habee Bullah Affandy, 2018). It also aims to optimize the information life-cycle management, from the creation, dissemination, use of the information objects (Barateiro, et. al., 2010). Thus, migration can be conducted to preserve the integrity of digital objects while maintaining retrieval, display and usage ability (Lee et al., 2002).

2.3 Heritage Sustainability

Conservation can no longer be based on the object's intrinsic quality. It must be founded on ability to recognise its aesthetic, historic, scientific, social values etc., or rather, it is society, the community that must recognise these values, upon which its own cultural identity can be built. Therefore, to ensure sustainability of heritage is not just tangible but also intangible (Marilena Vecco, 2010). Investment in cultural heritage (and other forms of culture) are often claimed to be beneficial for economy; in terms of cultural consumption, and increased employment and income (Einar Bowitz, & Karin Ibenholt, 2009).

3. METHODOLOGY

This project is designed to run on mobile device to fulfil the needs of current and future users. It follows the mobile application development process (INVONTO, 2021) consisting of five stages. Firstly, strategy phase; potential users, problems, objectives, and suitable mobile platform are identified. Secondly, analysis and planning phase; solution were strategies to ensure easy access, user friendly and fulfil the functional requirements of the mobile application for oral history collections. Thirdly, design phase; creating attractive user experiences by making interactive and user-friendly mobile application

design. Next, application development phase; the design is deployed into workable and usable mobile application. Lastly, the testing phase; few phases of testing were conducted, including functional, device, and user experience testing?

4. RESULT & DISCUSSION

MAHI provides access to oral history collections by using mobile technology. Mobile application is very beneficial because it is capable to notify content and usage of web browser has become optional. Using mobile devices are innovating way to engage students and younger audiences in oral history materials as the smartphone and mobile applications play a vital role in everyday life. Current technology utilisation helps in providing access for students, researchers, and professionals to the national history collections. Researchers will gain knowledge of oral history methodology, planning, and evaluation using these resources.

MAHI is significantly straightforward. It supplies users with the transcription collections and information they are looking for in an easy-to-understand layout that efficiently navigates them to the things they want to see. Furthermore, they can also identify location of the users in real-time to provide geography-specific content.

5. CONCLUSION

This project can be a good mechanism to promote access to collaborative project spaces and long-term archival options for audio and video-recorded cultural documentation. Oral history collections should be made available in digital format using mobile technology to support for present and future access as well as preserving historical information. As a result, it can become a platform for digital humanities activity within universities.

REFERENCES

- Adila Ismail, & Habee Bullah Affandy. (2018). Conceptual paper: Digital preservation strategies in archival institution. *MATEC Web of Conferences*, 150, Retrieved from: <https://doi.org/10.1051/mateconf/201815005052>.
- Anachack Phongtraychack, & Darya Dolgaya. (2018). Evolution of Mobile Application. MATEC Web of Conference 155, Retrieved from <https://doi.org/10.1051/mateconf/201815501027>
- Barateiro, J., Antunes, G., Freitas, F., & Borbinha, J. (2010). Designing digital preservation solutions: A risk management-based approach. *The International Journal of Digital Curation*, 5(1).
- Einar Bowitz & Karin Ibenholt. (2009). Economic Impacts of Cultural Heritage – Research and Perspectives. *Journal of Cultural Heritage*, 10 (1), 1-8.
- INVONTO. (2021). Mobile app development process: Step-by-step guide [2021] -. Retrieved from : <https://www.invonto.com/insights/mobile-app-development-process/>
- Lee, K., Slattery, O., Lu, R., Tang, X., & McCrary, V. (2002). The state of the art and practice in digital preservation. *Journal of Research of the National Institute of Standards and Technology*, 107 (1), 93-106.
- Marilena Vecco. (2010). A definition of cultural heritage: From the tangible to the intangible. *Journal of Cultural Heritage*, 11 (2010) 321–324.
- Md. Rashedul Islam , Md. Rofiqui Islam , Tohidul Arafhin Mazumder. (2010). Mobile Application and Its Global Impact. *International Journal of Engineering & Technology IJET-IJENS*, 10 (6).
- Veale, S., & Schilling, K. (2004). Talking history: Oral History guidelines. NSW. Department of Environment & Conservation.