# Visitor Experience's on Digital Media Technology for the Museum Exhibition in Malaysia: A Preliminary Findings

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Abstract:-By exploring the museum's user experience on recent digital media technology for the exhibition of the Malaysian Museum, the aims of this paper are to be getting and further clarifying the museum's visitors' experiences towards digital media technology. The preliminary study was conducted at four museums managed by the Department of Museum Malaysia and located around Klang Valley. A pilot study involved 100 questionnaires answered by the museum's visitors using random sampling techniques. The visitors experienced the permanent museum exhibition was measured through a digital media and multimedia, intangible and tangible artefact, and printed visual narration. The results gathered from the pilot study established that most of the museum visitors were not highly experienced the real digital experience since the existing exhibition are not offered fully digital media technology. The outcomes discovered giving a suggestion to the museum specifically on issues of visitors' experience that need enhancement for the better museum experience.

Keywords: museum experience; digital media technology;

#### I. INTRODUCTION

Museums have a history of several centuries that play as an institution that keep knowledge alive for all of us. Therefore, the rapid development of digital technologies has created a new environment for us and a museum was known as a non-profit permanent institution that be developed and open to the public for community service that acquires, preserves, identifies, communicates, and displays material evidence of people and their environment for study, education and enjoyment.

The evolution of technology moreover creates a high expectation to all of us. The traditional image where visitors stroll in the museum halls observing the exhibits and reading the tags next to them is now being challenged by digital technologies. For instance, with the advent of digital technologies in museums, visitors can enhance their on-site visiting experience by discovering and involving directly with what they see. It means that for, a museum to meet these increasing demands due to digital technologies, it should become more creative and innovative to display their collections in a way that has more of an impact on the visitor.

Therefore, the role of user experience (UX) design, as argued by Shah, N. F. M. N., & Ghazali, M (2018), is one of the critical aspects of human-computer interaction between humans and technology. As reported by Othman et al. (2018) in a recent study, the visitor interacts with the exhibit and has their own experience. With this, it shows that the visitor assimilates the knowledge so that later experiences are affected. From the argument, clearly explained the relationship of user experience design, technology, and interaction are essential elements to produce an enjoyable experience toward a product.

Besides, designing a user experience is all about ensuring that no aspect of the user's product experience occurs without your conscious, explicit purpose. According to Hekkert (2006), we distinguish three components or levels of product experience: aesthetic pleasure, attribution of meaning, and emotional response. Product experience as the whole set of effects elicited by the interaction between a user and a product, including the point to which all our senses are aesthetic experience, the meanings we connect to the product experience of meaning and the feelings and emotions elicited by emotional experience (Hekkert, 2006, p. 160).

Evolution of Digital Media Technology in Museum

Museums have survived various historical vicissitudes since archaeologist Leonard Wooley discovered the first known museum in 1925. However, most new museums are a private collection of elitists and others of their ranks, including scholars who are considered guardians of knowledge and guardians of civilization. Nevertheless, the situation has long since change as museums are now accessible to the public. Today, studies toward the usage of digital technology in museums is rising rapidly. Within this, museum institutions started to digitize their collection of an artefact, for presentation and preservation and combined physical museum exhibitions with digital content for visitors. According to Allison (2015), technology brings history connected to us closer because it found in human-computer interaction that can enhance users' experiences and provide more intuitive and usable systems from re-conceptualize the past and simulate reality.

Roosevelt (2015) stated that the more we know about our history, the better we prepare for the future. Although the museum digitization movement had been rising for over a decade since the beginning of the 21st century, visitor experience key point had been negligent in the development of digital museum due to low visibility of its impact and difficulty in quantifying its outcomes. (Hansen & Fernie, 2010) states that the museum has been encouraged to use ICT to integrate into museums. Digital media, the virtual museum, has become a platform where the museum connects with their audience outside the museum building. The museum plays an essential role as a centre of reference, especially on the past and history of a country's cultural identity and civilization through the exhibition of many materials and artefacts and cultural institutions.

Heritage sites and objects may suffer from natural degradation and damages over time (E. Paquet, H. L. Viktor, 2005). Besides, the commerciality of heritage tourism, especially those sites listed by UNESCO, may be particularly endangered due to their world heritage status that attracts a significant number of visitors to the point of detriment (A.

Drost, 1996). As a consequence, conservation and preservation work is necessary to take into consideration the environmental and human factors in heritage sites and artifacts (D.A. Guttentag, 2010). A glance at the situation, the preservation, awareness, and engaging visitors and tourists need to digitizing initiatives by the cultural institutions in Malaysia.

Exhibits in museums entirely based on static photos, illustration, and textual documents. Furthermore, according to Tan Yen Nee (2014), most of the artifacts in the museum are kept inside the glass cabinet (Figure 1) with respective historical information display stand placed in front of it. However, there is no interactive manner between the artifacts and the visitor, which causes them to have less interest in visiting the museum. Additionally, to (Rahim, Normala, et al, 2016) studies stated that all museum exhibitions in Malaysia needed to be reinforced due to low acceptance by most visitors and recommended incorporating other aspects such as collaborative features, embedded with augmented technology etc.







Fig.1: Artifacts in the museum are kept inside the glass cabinet and text with visual Tan Yen Nee (2014)

#### II. METHODOLOGY

A preliminary survey was conducted for this study to identifying the difficulties experienced by museum visitors while visiting the museum(Figure 2). A 100 sets of questionnaires survey through random sampling were distributed to the visitors via kiosk and printed form. For this preliminary study, only four museums that be managed by the Department of Museums Malaysia situated around Klang Valley. The museum participated are included the National Museum, the Orang Asli Museum of Craft, the Malay World Museum of Ethnology, and the National Textile Museum. The survey questions are covered on museum exhibitions elements.





Fig. 2: Visitor Questionnaire Survey Session

### III. RESULTS AND DISCUSSION

Data collection through the questionnaire survey showed that the highest visitors to the four museums participated in the study is more to young adults between the ages of 19 – 25. This show the significance of claimed by Jones (2005), who was claimed that young adults'thinking and behaviour are indicative of their social context. Moreover, most of the events that associated with adult status involved changing the social relationships. Furthermore, the majority of local museum visitors are come from the Malay community and followed by the Chinese. Additionally, For the museum visitors as tourists, the survey data were revealed that tourist visitors are includes many countries around the world, involving Russia, Philippines, India, China, Indonesia, and Thailand.

The analysis of the data gathered also indicated that most visitors do not come to the museum for the first time. They

come to see the museum exhibition for several times to experiencing something new that can expand their knowledge further. The visitors also spending their time in the museum within a maximum of 1 to 2 hours. The visitors responded most to the museum's artefact are the objects read and learned, as Tan Yen Nee (2014) notes, the majority of the museum's artefacts were stored in the glass wardrobe, with historical information displayed and shown in the museum, based on photographs.

The results also established that 72 percent of visitors were agreed that they are highly interested in the content of the exhibition where 64 percent of visitors have said, it is easy to understand the meaning of the exhibition. Still, the least agreed is to engage emotionally with museum exhibitions as a 39 percent visitor. Figure 3 shown the results gathered from the pilot study.



Fig. 3: Visitor experience toward museum exhibition

Besides, there is no indication of the museum's tour guide noticed by the visitors. However, the museum provides the service, but the application process makes it less efficient for visitors and interaction on the visitor's understanding of the exhibition. A tour guide should draw on personal stories and narration and should encourage visitors to share their views on the exhibitions (Nina Simon, 2010). Most visitors reported that the museum exhibition did not have the efficient use of audio and video that would capture their attention and that there was no computer-based audio with visual-based material. Overall, visitors gave an average of 60 percent

toward their museum experience but less than 50 percent on the interaction and digital engagement in the museum.

## IV. CONCLUSION

In conclusion, our progress towards the future museum in Malaysia, most young adults are known as millennials identified with the emergence of social media. The emergence comes as disinterested and greedy, frustrated, distracted, and unmotivated, turned to a world of immediate gratification, living a post-worthy and filtered life, and changing the way we market. Further research needs to be done to give enhancement toward museum experience in Malaysia.

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