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Technology Acceptance and Purchase Intention towards Movie Mobile Advertising among Youth in Malaysia

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Abstract

The study identified the relationships between technology acceptance and purchase intentions on movie mobile advertising among youth Twitter users in Malaysia. Technology Acceptance Model was used to predict the acceptance of computer-based technology based on technology use and usefulness among the group age in various fields. The objective of this study is to investigate the relationship between technology acceptance (use and usefulness) towards movie mobile advertising in Malaysia and purchase intention. Data was collected from 400 Twitter users in Malaysia using snowball sampling and was analyzed with statistical analysis (SPSS) using descriptive and correlation analysis. The findings of this paper advocate that technology acceptance; use and usefulness in movie mobile advertising contributed significantly towards movie purchase intention among youth aged 15 to 29 in the country. This paper introduces the contribution of use and usefulness in the study of communication utilizing mobile telecommunication technology among youth in Malaysia.

Keywords: mobile advertising; marketing; movie advertising

1. Introduction

Film production was introduced in Malaysia in the 1930s during the colonial era. The Malaysian government formed FINAS (National Film Development Corporation Malaysia) in 1981 to aid, to improve and to control the growth of the national film industry. From that moment onwards, the indigenous business of filming was

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transformed into a much proper and accepted national industry that is contribute to the nation’s percent of wealth (Ahmad, 2000). Malaysian film industry however contributes insignificantly to the Malaysian economy. Therefore, the onset and state of development of mobile digital media in the global marketing practices is expected to embody new opportunities and encounters to movie marketers. Chang & Villegas (2008) argued that smart phones have remarkable potential in terms of delivering advertisements because of its ability to instill high penetration rate. In fact, they claimed that it is the only advertising medium that consumers bring with them almost anywhere they go, with by logic is true.

Since the past five years, mobile phone subscriptions in Malaysia have shown an increasing trend (Eng & Masri, 2010). Not only in this country, immense potential of mobile advertising to succeed in conjunction with high penetration and subscriptions rate were also found in other countries (Adham, Said, Ramlee, & Hannien, 2008; Basheer & Ibrahim, 2010; Beneke, Cumming, Stevens, & Versfeld, 2010; Friedrich, Grone, Holbling, & Peterson, 2009; Gao, Sultan, & Rohm, 2010; Jayawardhena, Kuckertz, Karjaluoto, & Karjaluoto, 2009; Kim, Heo, & Chan-Olmsted, 2010; Laszlo, 2009; Merisavo, M., Karjaluoto, H., Virtanen, V., Salmenkivi, S., Raulas, M., & Leppaniemi, M., 2010).

In Malaysia, Noor, Sreenivasan & Ismail, H. (2013) recently did a study demonstrating significant relationships between the consumers’ attitude towards mobile advertising, subjective norms, perceived behavioral control and their intention to purchase products and services. Bidin, R., & Abu Bakar, S. (2013) also did similar study but much focused on movie mobile advertising. Positive attitudes towards movie mobile advertising and purchase intentions in Malaysia were found from the study.

Davis (1989); and Mohd Suki & Mohd Suki (2011) have also studied the use and usefulness of mobile advertising and found positive relations to purchase intention of products advertised. Due to that reason, it is essential to study the use and usefulness aspect of mobile advertising to ensure future promotional movie programs conducted via mobile devices can be accepted without prejudice in Malaysia. This study wanted to further understand in terms of use and usefulness of the subject matter towards purchase intention of movie tickets as attitudes towards the subject matter has been studied before in Malaysia and was recorded, positive. This is further enhanced by the speedy development of the use of social media that has created top of the plan for many corporate officials today. Many of social media network providers try to ascertain ways in which companies will be able to create money-spinning usage of applications of Facebook, Twitter and blogs. Therefore the objectives of this paper are to investigate Twitter users’ technology acceptance after receiving movie mobile advertisement, to investigate Twitter users’ purchase intention after receiving movie mobile advertisement and to determine the relationships between Twitter technology acceptances with purchase intention.

2. Movie Mobile Marketing

Rapid proliferations of mobile marketing around the world were caused by loads of factors. Such factors can be listed as the global connectivity, user-friendliness, interoperability of the Internet towards human race and many others. Abdullah (2004) found that Malaysian youths claimed that possessing a mobile phone is a fundamental part of their life even in the early stage of Internet development. The researcher claimed that since it is a basic needs nowadays, youth will naturally be dependent on technology as they’ve regarded the mobile phone as a way to stay connected besides the old tool for interaction, such as face to face meetings (Ito and Okabe, 2004). Studies from other scholars also suggested that the usages of mobile phones are fashionable and current. This situation is contrary to older generations who usually see the importance of mobile phones in the perspective of social or business purposes only and in no dire needs to constantly engaged to their mobile phones (Bianchi & Phillips, 2005).

Mobile marketing is a new lifestyle that offers superfluity of technology that motions mobility and convenience to its users, and in some occasions it offers better prospects to marketers in their quest to reach their customers wherever they may be (Rayfield, 2010). She further elaborated 9 types of mobile marketing namely; short message service (SMS); multi-media message service (MMS); Mobile Applications; Bluetooth Wireless Proximity Based Marketing; Location-Based Marketing; quick-response barcodes (QR Codes); Pay Per Call Mobile; Voice Marketing; and Mobile Banner Ads.

One famous mobile marketing medium is Twitter. Numerous researches conducted on the practices of Twitter as mobile advertising. Twitter is said as vital in terms of internal communication (Ehrlich &Shami, 2010; Riemer & Richter, 2010; and Zhao & Rosson, 2009); as an online listening tool (Van den Putte, & Bas, 2009); and as crowd
sourcing medium to understand a particular phenomenon (Ehrlich & Shami, 2010). In the situation of movie advertising, these social networks were taken seriously and regarded as an instrument to generate words of mouth electronically and as a new viral marketing device (Asur & Huberman, 2010). Nowadays, as it is already made known that consumers fundamentally have accepted and embraced the mobile life in the life cycle, the smartphone market is blasting to a maximum rate thanks to the love of Apple’s iPhone, RIM’s Blackberry and Google’s Android.

Companies and content providers are aiming to reach niche communities in rural areas with lower PC penetration. According to a report on Malaysia’s internet penetration (The Digital Media Across Asia, accessed August 20, 2012), Malaysia is one of the main users in the world with a 0.47% share of voice; the third biggest user of Twitter in Southeast Asia behind only Indonesia (2.34%) and Singapore (0.88%); and there will be an estimated total of 866,280 Twitter users in Malaysia by the end of 2013. Malaysian also mostly uses social networking sites for social engagement; to keep in touch with the people they concern; and to discover local the latest happenings in local scenes. As in figure 1, total mobile advertising revenues in Malaysia were predicted to rise from RM10.4 million at the end of 2008, and the forecasted 2012 total revenue was RM175.5 million.

The bonding between advertising movies through mobile phones has become a world hot niche. At first, mobile advertising has the critical role of updating movie-goers about play times for movies at their specific local theatres, which makes the medium of keen interest to film marketers. This then leads to the creation of various applications to cater for various other technological demands. Ahmad (2007) however, regards Malaysian filmmakers as failed capitalist for unable to balance production process (film making costs), distribution (advertising) and exhibition (sustainability of product in the market). He argued that poor ticket sales in local movie market could occur because most filmmakers are still opted for traditional paid media to advertise their products. This was further supported by Rosnan, Ismail & Daud (2010) that found difficulty to increase ticket sales in Malaysia was because many filmmakers are still using conventional advertising medium to promote movies in Malaysian small domestic market. Unfortunately, traditional promotional activities might no longer cut it for local films to do so (Vogel, 2001). As Hoskins & McFadyen (1991) suggested that films should be first successful in the local market in order to penetrate the international market, this problem has definitely become a big block in attracting international attention towards local productions. Thus, it is very important for Malaysian filmmakers and moviegoers to have awareness and right attitude in the promotion of movies using mobile marketing.
3. Youth and Mobile Advertising

The role of mobile advertising as an effective marketing tool in reaching the youth market has long been agreed (Scharl, Dickenger & Murphy, 2005). In the study, it was found that youth were open to trying new and interesting things. Youth were also found acting as innovators in adopting new technologies, according to a study by Kumar & Lim (2008). Similar to all forms of advertising, it is more efficient to have a directed campaign and the youth market demonstrates to have the greatest potential for mobile advertising campaigns. In a March 2013 survey, 38% of youth smartphone users ages 18 to 24 especially recalled viewing ads on a website or app while using their device. Younger consumers also showed more engagement with ads on mobile social networks, with 27% of younger respondents clicking on ads. This is a rising trend as young adult UK consumers are progressively likely to use smartphones. It is also estimated that 84% of UK consumers ages 18 to 24 will use a smartphone this year, and increase to 98% by 2017 ("UK young adults," 2013). Thus, results of a research conducted by Muk (2007) on American and Korean university students were no surprise. Muk found a positive relationship between consumer attitudes and beliefs and their intention to prefer to participate in mobile advertising. Additionally, the attitudes of Korean youth towards mobile advertising were more positive than American youth.

Studies on the subject matter was continued by other scholars such as Hanley & Becker (2008) matter by finding that the perceived risks of receiving mobile advertisements (annoyance) are not a barrier towards mobile advertisement acceptance among youth. It is also found that content credibility; product profiles, personalization, consumer pattern, previous experience, privacy and permission affect a consumer’s purchase intention, responses and behaviours. This is the result of a study did by Peng (2006). However, there were studies indicated that not all youth were receptive of mobile advertising. A study by Wais & Clemons (2008) for example found that the American youth perceived promotional messaging more positively when they receive it from friends and relatives as oppose from companies promoting their products. Chowdhury, Parvin, Weitenberner, & Becker, (2006) however claimed that when a mobile advertisement is pleasing and contains appropriate information that are useful for usages, consumers have a positive attitude toward the mobile advertisements.

4. Technology Acceptance Attitude: Use and usefulness

As time grows, so do human’s behavior, their intentions and expectations. The needs to further know the use and usefulness of a product and services before making any purchasing decisions has led Davis (1989) to pioneered The Technology Acceptance Model (TAM). This model expanded the Theory of Reasoned Action, developed by Fishbein & Ajzen (1975, 1980) suggesting that perceived usefulness (PU) and perceived ease of use (PEU) are also important in predicting behavioral aim in purchase intention. One using a particular system describes usefulness as the extent of an individual to believe that, it would later enhance his or her productivity. Meanwhile, perceived ease of use is defined as the extent an individual believes that by using a particular system, difficulties would be spared (Davis, 1989). Although these variables might look similar to one another, Adams, Nelson & Todd (1992) and Davis (1989) claimed that unlike perceived ease of usefulness, perceived ease of use has an uninterrupted effect on both perceived usefulness and technology usage.

Poustchi’s (2003) study on the acceptance towards mobile payment procedures found that 93% of the respondents regarded easy handling of the system as at utmost importance. 81% of the respondents specified that the ease of learning about a system is also vital. Davis (1989) coined the elements of perceived usefulness in influencing a purchase intention. It is the extent, which the user believes that using a system would improve their job performances, in a hassle-free process. If yes, then a person will commit to purchase the goods or services. Going hand in hand with the ease of use, various studies of TAM have also tested the influence of usefulness on user acceptance and/or purchase intention. 91% of the respondents in a study done by Poustchii’s (2003) found that fast, quick and hassle-free processing in mobile transactions is crucial. Such findings has enabled mobile content providers to foresee the importance of increasing the effectiveness and efficiency in other areas of mobile applications such as paying for digital content, Point of Sale (POS) payments, virtual POS, vending machines and topping up pre-paid mobile accounts.
Venkatesh & Davis (2000), further prolonged TAM model to Extended Technology Acceptance Model (ETAM) that integrates innovation diffusion theory, perceived risk and cost into the TAM to investigate what determines user mobile commerce (MC) acceptance. The extended TAM variables can be grouped into three broad categories: individual, device, and organizational characteristics. Individual characteristics include individual differences in affect, perceptions, and knowledge about the piece of technology. For example, personal innovativeness, IT knowledge, and attitude toward health information technology are individual differences between potential users. Device characteristics include constructs related to the device such as perceived compatibility, IT feature demands, and perceived system performance. Finally, organizational characteristics include things outside of the device and individual. For example, management support, training, and subjective norms.

As for the operational definition of the variables, purchase intention refers to a plan of acquisition towards a particular good and the process of how consumers make consumption-related selections (Solomon, M., 2009). Use refers to the extent of an individual believes that by using a particular system, difficulties would be spared and usefulness refers to the which the user believes that using a system would improve their job performances, in a hassle-free process (Davis, 1989). Movie mobile advertising refers to the interaction of movie products or services to mobile device and smart phone of customers. The mobile advertising scale sorts from short message service (SMS) text to interactive advertisement (Okazaki & Taylor, 2007). Youth refers to a period of transition from the dependence of childhood to adulthood’s independence and awareness of our interdependence as members of a community, grouped from age 15 to 29 (Headey, Muffelsb, & Gert, Wagnerc., 2010)

5. Methodology

An online survey of 30 questions using Google Docs was done to 400 Malaysian Twitter users. Snowball Sampling method was used as suggested by Morgan (2008) in order to recruit future subjects from among their acquaintances (youth, aged 15 – 29). According to Global (2012), current active Twitter users in Malaysia has amounted to 2.4mil (0.47% out of 500mil active users worldwide), thus the sample chosen for this study is 400 (p=.5, >100,000) by referring to table by Israel, Glenn. D (n.d) Malaysia Twitter users irrespective of age, gender and other characteristics were approached using the ChurpChurp and Movies hashtag (#ChurpChurp, #Movies). As Twitter consists of multi-aged users, it is impossible for the researcher to approach each and every one of its users, thus forcing the usage of Snowball Sampling method. The usage of this sampling procedure has allowed the researcher to collect data from respondents who have a large number of social connections similar to that initial respondent’s age group (15-29). One sample has managed to introduce to their colleagues in the specific youth age.

The research instrument in this study comprises of 4 sections, namely demographics, technology use, technology usefulness, and purchase intention. All sections except for Section 1 used 5 point Likert Scale ranging from 1 = “Strongly Disagree” to 5 = “Strongly Agree”. Data from 400 respondents were analysed with SPSS using descriptive statistics and correlation analysis. Results were categorized in descriptive statistics (percentages) for section 1 and correlation analysis (no correlation, weak, strong or perfect correlation) for the rest of the sections. Crosschecking with the subject matter Professors in order to get the standardization of the questionnaire and wording of the questions was done to get the instrument’s validity. Cronbach Alpha reliability test on 30
respondents for pre test gained high score (0.86) and the Cronbach Alpha score for 400 samples is 0.88.

6. Findings And Discussions

6.1 Respondents’ Characteristics

The demographic characteristics of respondents indicated that 58.3% of the respondents were male. Majority of them were Malay (89.5%), 42% of them spent 6-7 hours per day in online activities, and 50.7% were youth aged between 21–25. In terms of education level, 54.0% of the respondents hold a diploma, and 31.0% were STPM (Sijil Tinggi Pelajaran Malaysia) graduates.

6.2 Users technology acceptance on mobile advertising promoting movies

The first objective of this study is to investigate Malaysian Twitter users’ technology acceptance after receiving mobile advertisements promoting movies. Technology acceptance attitude is measured by the attitude towards technology use and technology usefulness using the value of X and SD. X represents the mean (also known as average) scores of the result. SD represents the standard deviation gives an idea of how close the entire set of data is to the average value. For attitude towards technology use, it is found that, respondents agreed that it was easy to set bookmarks on movie mobile advertisements in a smartphone ($x=5.0$, $sd=0.0$) and it was easy to web navigate on movie mobile advertisements in the devise as well ($x=5.0$, $sd=0.0$). Respondents also regarded movie mobile advertisements in Twitter as appropriate because it is easy to read information on latest movie via a smartphone ($x=4.52$, $sd=0.5$). In overall, respondents agreed that mobile advertisements promoting movies were usable in their quest to seek updates about latest movies in the market ($x=4.52$, $sd=0.5$). These findings are consistent with the findings of a study done by Pedersen (2003) whom found that mobile advertisements are usable to its receivers. Since the marketing environment today is jumbled with marketing communications due to numerous market segmentations, the positive usage traits of mobile advertisements are considered vital.

<table>
<thead>
<tr>
<th>Use</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is easy to set bookmarks on movie mobile advertisements in my smartphone.</td>
<td>5.00</td>
<td>0.00</td>
</tr>
<tr>
<td>It is easy to surf on movie mobile advertisements in my smartphone.</td>
<td>5.00</td>
<td>0.00</td>
</tr>
<tr>
<td>It is convenient to read information on latest movie via smartphone.</td>
<td>4.52</td>
<td>0.50</td>
</tr>
<tr>
<td>Overall</td>
<td>4.52</td>
<td>0.5</td>
</tr>
</tbody>
</table>

As for the attitude towards technology usefulness, respondents agreed that such advertisements improve social interaction among moviegoers ($x=4.47$, $sd=0.5$) and the past browsing record on advertisements promoting movies can be easily accessed ($x=4.7$, $sd=0.5$). Respondents also agreed that movie mobile advertisements are new value added for moviegoers ($x=4.7$, $sd=0.5$). In overall, respondents agreed on the usefulness of mobile advertisements promoting movies in acquiring and retaining information about latest movies in the market ($x=4.3$, $sd=0.5$). These findings are consistent with the findings of a study done by Serenko & Bontis (2004). This is a prove that customers are becoming a better decision maker as little by little customers decided to filter advertisements before making their purchase. This is especially when it comes to mobile advertising as it is a very new occurrence.
Table 2: Malaysian Youth Twitter Users Technology Acceptance (Usefulness) On Mobile Advertising Promoting Movies (n = 400)

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movie mobile advertisements improves social interaction among moviegoers.</td>
<td>4.47</td>
<td>0.500</td>
</tr>
<tr>
<td>Past browsing record on movies can be easily accessed.</td>
<td>4.47</td>
<td>0.500</td>
</tr>
<tr>
<td>Movie mobile advertisements are new value added for moviegoers.</td>
<td>4.47</td>
<td>0.500</td>
</tr>
<tr>
<td>Overall</td>
<td>4.30</td>
<td>0.5</td>
</tr>
</tbody>
</table>

6.3 Purchase intentions after receiving mobile advertisements promoting movies

The second objective of this study is to investigate the respondents’ purchasing intentions after receiving movie mobile advertisements. The respondents almost agree that they have positive intention towards purchasing after receiving movie mobile advertising (x=3.9, sd=0.500). They had given positive remarks to continuously read all the movie mobile advertisement messages they receive in the future (x=4.5, sd=0.500); would probably purchase the product or service mentioned in the text message or take part in the event (x = 4.0 sd=0.000); and interested in getting more information on the product, service, or event in question (x=4.0 sd=0.000). Therefore content providers and advertisers should revise their marketing mix and add the use of mobile advertising with social media marketing and location-based services.

Table 3: Malaysian Youth Twitter Users Purchase Intention After Receiving Mobile Advertising Promoting Movies (n = 400)

<table>
<thead>
<tr>
<th>Purchase Intention</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will read all the movie mobile advertisement messages I receive in the future.</td>
<td>4.50</td>
<td>0.500</td>
</tr>
<tr>
<td>I will probably purchase the product or service mentioned in the text message or take part in the event.</td>
<td>4.00</td>
<td>0.000</td>
</tr>
<tr>
<td>Overall</td>
<td>3.90</td>
<td>0.5</td>
</tr>
</tbody>
</table>

6.4 The relationships between Twitter users technology acceptance on purchase intentions

The third objective of this study is to determine the relationships between technology acceptance (use and usefulness) on purchase intentions. It is found that technology acceptance records positive perfect relationships on purchase intention (r=1.0 for both use and usefulness) as results showed that these elements recorded a very strong correlation with purchase intention. This means that youth in this study perfectly accepted movie mobile advertising through Twitter and has influenced them greatly in their purchase intention to go and watch the movies advertised. Studies with positive perfect correlation are common, for instance Rao (2011) found positive perfect relationships between variables in his study. With all these data being gathered, it is proven that mobile connectivity is continuing to grow as a means for audiences to keep track with latest films releases. These multiple mediums enable deeper one-to-one relationships between filmmakers, content providers with moviegoers.
### Table 4: The relationships between technology acceptances on purchase intentions (n = 400)

<table>
<thead>
<tr>
<th>IV Technology acceptance</th>
<th>Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
</tr>
<tr>
<td>Technology acceptance</td>
<td>1.000</td>
</tr>
<tr>
<td>Use</td>
<td>1.000</td>
</tr>
<tr>
<td>Usefulness</td>
<td>1.000</td>
</tr>
</tbody>
</table>

P<0.01/p>0.05

#### 7. Conclusion and Implications

Such results proved that marketers, advertisers and content providers should emphasize on upgrading ‘use’ and ‘usefulness’ features in their ads. This is because youths in this study agreed on the usability of movie mobile advertisements allowing them to use it for bookmark features, better fluidity on web surfing and better readability as opposed to reading using a laptop or desktop. Respondents also agreed on the usefulness of movie mobile advertisements as they regarded it as a very useful tool as it has links to specific groups in social network and a fast retrieval of past browsing/purchase history.

Youths in this study positively agreed that use and usefulness of movie mobile advertisements received influenced them greatly in their purchase intention to go and watch the movies advertised. With all these data being gathered, it is proven that mobile connectivity is continuing to grow as a means for audiences to keep track with latest films releases. These multiple mediums will enable deeper one-to-one relationships between filmmakers, content providers with moviegoers. This will be able to inspire film organizations to comply with mobile-enabled technology, setup mobile sites, build mobile apps and full extend their ads using these mobile platforms.

These finding should be able to inspire film organizations to comply with mobile-enabled technology, setup mobile sites, build mobile apps and full extend their ads using these mobile platforms. Advertisers and content providers also should create ads geared towards a collective approach. Besides enabling various businesses to obtain the whereabouts information of its customers, mobile technology also enable organizations to extend their reach and objectives to various levels of consumers. Future studies should consider using other statistics and other theories such as Extended Technology Acceptance Model (ETAM).

#### Acknowledgements

When you enter a cow’s barn, moos, and when you enter a goat’s shed, bleat.

(A Malay proverb, translated).

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