

## EFFECTIVE MOBILE ADVERTISING ON MOBILE DEVICES

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### Abstract

*Mobile advertising is one of the most effective forms of digital advertising to spread awareness or to stimulate purchases of a product or service as the average time an individual spends on mobile devices is growing daily. The growth of mobile advertising has evolved rapidly and it has a greater reach and penetration compared to other media. However, some of the mobile advertisers fail to reach a larger audience. Therefore, it is very important to identify the gains and benefits of mobile advertising to advertisers and mobile users. Studies have proven that organizations monetize mobile devices to increase revenues and return on investments. The market for mobile advertising is exploding as technology advances. In fact, mobile advertising is no longer about using classic mobile phone or feature phone for calling, texting or sending advertisements. Thus, what is the future of a hand-held world? Now, the future of mobile advertising has shifted towards apps using smartphones and become ubiquitous. As such, this paper aims to review the tremendous evolution, benefits and formats of mobile advertising.*

**Keywords:** *Evolution Mobile Advertising, Benefits Mobile Advertising, Formats Mobile Advertising*

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### Introduction

Advertising is a marketing communication technique that is used by marketers or advertisers to deliver their messages to customers (Moriarty et al., 2014). As time passes, the technology of mobile devices continues to evolve. Mobile devices have deeply permeated into human life and become an indispensable device in daily life (Chen et al., 2014). According to Malaysian Communications and Multimedia Commission (MCMC) (2015), smart phone is the most commonly used connected device in Malaysia, and 1 in 2 Malaysians are using smart phone.

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According to the MCMC (2015), approximately 63.3% of Malaysians are accessing the Internet through their mobile phone. This statistic indicates that users are using their mobile phone to stay connected with their community, family and friends. In 2008, the percentage of users who accessed the Internet through their mobile phone was 11.5%, and this increased to 63.3% in 2014. This implied that users are fully embracing the concept of getting connected everywhere at any time and their mobile phones are switched on all the time. Therefore, this creates a better opportunity for industries with the easiest-to-access content such as Internet banking, e-commerce, e-government and hand phone-optimised websites. In order to utilize consumer's hand phone behaviour for profitability, mobile advertising may become the media channel of choice for advertising (Malaysian-Communications-and-Multimedia-Commission, 2009).

Mobile advertising is a new form of advertising (Drossos et al., 2013). According to The Buzz City Report (2015), a total of 87 billion advertisement banners were served across the entire network in the second quarter of 2015. In addition, advertising through mobile apps is gaining popularity among companies in recent years due to the ability to grow their client base, foster brand awareness, build goodwill with existing or potential clients, and monetize the mobile channel (Krum, 2010). Taken together, this signifies that the changing habits of mobile phone users in Malaysia have encouraged the local companies to advertise their business through mobile devices. Therefore, it is important to identify the gains and benefits of mobile advertising to advertisers and mobile users. The next sections will discuss the evolution, benefits and formats of mobile advertising.

### **Mobile Advertising Evolution**

The rapid growth of development in mobile advertising has opened a new area for research (Tsang et al., 2004). This section provides an overview of how advertising has evolved and how its focus has changed over the years. In our daily lives, most of us are unable to ignore the existence of advertising. Advertising is an essential part of any media as it provides income to the media and information to the audiences (Baran, 2013). Advertisement can serve as a notice about a product (e.g. goods, services, ideas) that is designed to get the attention of a target audience.

Traditionally, advertisements were posted in newspapers and magazines, and on radio, television (TV) and billboards (Baran, 2013). Public might perceive advertising as something that only expressed through print and broadcast medium like assorted printed materials (e.g. flyers, brochure) or through TV commercial programs. In fact, it aims to stimulate direct purchase towards the services or products (Moriarty et al., 2014). The main purpose of advertising is to use any communication technique to reach consumers in order to generate various impacts that advertisers or marketers intended (Moriarty et al., 2014). Once consumers are exposed to the message, they will act or think as the advertisers' wish (Baran, 2013). Generally, most consumers are likely to use advertising to gather information before making any buying decisions (Baran, 2013).

The first generation of advertising media was comprised of magazine, newspaper, and billboard followed by TV and radio as second generation (Park et al., 2008). Historically, print advertising (e.g. newspaper, magazines, brochures, poster) served as the pioneer that

embraced traditional advertising (Moriarty et al., 2014). Magazines and newspaper adopted advertising messages displayed in text, picture or graphic in static medium and were bought by amount of space (Baran, 2013; Chen & Hsieh, 2012). TV and radio belong to broadcast media that transmit sounds and images electronically to consumers dynamically and advertising was purchased in blocs of time (e.g. seconds and minutes) (Baran, 2013; Chen & Hsieh, 2012). However, a major problem that lies with traditional advertising media is the inability to deliver personalized advertisements to different target segments (Chen & Hsieh, 2012).

The emergence of technology had made tremendous changes in advertising (Moriarty et al., 2014). Over the years, the emergence of technology had led to new types of advertising media being introduced (e.g. internet and mobile network) (Park et al., 2008). Online advertising over the internet has made delivery of advertisements at the right time and right place easier (Chen & Hsieh, 2012; Park et al., 2008). Digital media broadcasting, Web advertisement, interactive TV and mobile advertisement are the current trend of emerging advertising media (Park et al., 2008).

With the advance of information and communication technologies, advertisers have another option for advertising which is mobile advertising. In brief, advertisement delivery through mobile device (e.g. hand phone, iPad) is categorized as mobile advertising (Yang, 2007). Mobile advertising has emerged as a powerful platform due to its unique mobile attribute (Chen & Hsieh, 2012). For instance, this kind of new media advertising consists of several features such as interactive, individual, and ubiquitous which makes the advertisement more vivid and it personalizes the advertisement delivery to specific target audiences (Hashim & Zolkepli, 2014).

Despite overselling how the interactive characteristic of new media advertising is much better than traditional advertising, there has been disagreement on whether new media interactive advertising will dominate, surpass, or even replace traditional advertising. The finding of previous study done by Bezjian-Avery et al. (1998) reported that interactive advertisement might disrupt the consumers cognitive processes. Based on the experiments conducted between interactive medium and non-interactive medium, the report highlighted that in terms of time spent viewing advertisement in interactive way, consumers rarely allocate the time to view advertisements and do not demonstrate increased likelihood to purchase the products when compared to traditional viewing advertisement (Bezjian-Avery et al., 1998). Therefore, interactive advertisement might not be so persuasive in certain conditions (Bezjian-Avery et al., 1998). However, study done by Gao et al. (2010) has shown that interactivity is considered a prominent feature that can help advertisement to be presented in more effective way which can be widely applied in the mobile advertisement.

In the past, advertising messages were largely non-personal which means the advertising is not personalized to a specific consumer (Moriarty et al., 2014). Unlike the new media advertising, the traditional forms of advertising tend to have presented the advertisement in passive way (Chen & Hsieh, 2012). Ayyad (2011) claimed that the main drawback of traditional advertising includes inflexibility for the users to access the traditional media (e.g. newspaper, TV, radio) and its rigid and limited time schedule (cited in Hashim and Zolkepli (2014).

The advertising evolution had shown major differences in how advertising can be presented and delivered to the target audience. The way advertisements are delivered to the audience can be divided into pull and push based approach (Hsiao & Chang, 2014). Push based advertisements are sent to consumers without explicit request (Limpf & Voorveld, 2015). The control of receiving or rejecting the message is controlled by the marketer, hence consumers might feel restricted in this process (Limpf & Voorveld, 2015). Unlike push based advertisement, pull strategy offers consumers freedom to subscribe to the message based on their willingness (Limpf & Voorveld, 2015). Pull approach is initiated by the consumer through requesting the service, thereby giving consent to the marketers. Even if the advertisement is relevant to them, users may not wish to receive a bombardment of repetitive advertisements at the wrong time or wrong context, hence there should be an option for mobile users to block or reject the message when they do not have the intention to view it (Zhang et al., 2010).

Newspaper and magazine adopt pull strategy while TV and radio adopt push strategy (Chen & Hsieh, 2012; Park et al., 2008). It has been argued that pull strategies are more likely to be favoured by consumers because the audience is free to decide whether to accept or reject the particular advertising message. However, most successful marketing programs often blend push and pull strategies (Keller, 2008). Although push approach seems to restrict consumers from having more control over the flow of advertising, it still has potential to trigger impulse buying (Unni & Harmon, 2007). At present, no empirical study has argued that mobile advertising should be completely categorized under either pull or push approach. Hence, it can be either pull (e.g. mobile banner) or push (e.g. MMS/SMS) based on its type of presentation. In brief, there should not be any selection bias as to which strategy should be used because both pull and push have their own strengths and drawbacks.

Finally, compared with traditional advertising media, the new emerging advertising media works more efficiently in delivering message to consumer due to its catering characteristics such as ease of targeting, personalized contents and interactive way of targeting consumers (Park et al., 2008). This is in line with mobile advertising features as it is able to send targeted and personalized advertisements to consumers despite location and time horizon differences (Shang & Zhe, 2014). In short, the advancement of technologies might lead mobile advertising to present possibilities that are beyond our expectations, hence it should be further discussed in more detail in order to keep pace with smart mobile technology (Le & Nguyen, 2014).

### **Benefits of Mobile Advertising towards Marketers and Mobile Users**

A mobile phone is a very personal device that allows an individual to be accessed anytime and anywhere (Tsang et al., 2004). Mobile users seldom leave their home without their mobile device and tend to check it whenever and wherever they go (Le & Nguyen, 2014). There are different perspectives on how consumers and marketers deal with mobile device. Consumers perceive that having a mobile device will enhance their private and social status by expressing themselves while marketers perceive it as a marketing opportunity to trigger consumers to engage in a desire to purchase goods and services (Ajax & Irfan, 2012).

In addition, the widespread use of mobile devices and the low cost in setting an advertisement on mobile devices have motivated companies to invest in mobile advertising (Kolsaker & Drakatos, 2009). Advertising through mobile phones has offered numerous benefits to companies, such as delivering a personalized message to consumer-based preferences and interest (Chen et al., 2014) as well as increasing brand awareness among consumers and building a brand image (Krum, 2010). Moreover, 71.4% of users are constantly checking their mobile phone even if there is no notification (Malaysian-Communications-and-Multimedia-Commission, 2015). In other words, this behaviour demonstrates that mobile phone users have a strong attachment to their mobile phones. Accordingly, this will be a good indication for advertisers to leverage the positive use of mobile phones and to further contribute to companies.

Wide-spread adoption of mobile devices have provided marketing opportunities to an expanded set of possibilities to serve consumers despite location and geographic difference (Ajax & Irfan, 2012). At present, many leading companies have adopted mobile advertising and included it in their marketing budgets (e.g. McDonalds, Microsoft, Disney, Coca-Cola, Sony Pictures, Procter & Gamble) (Ünal et al., 2011). In brief, in order to fully utilize and take advantage of mobile advertising, there is a need for consumers and marketers understand its benefits such as interactivity, costing and personalization.

#### *Interactivity*

Mobile device is a good platform for marketers to deliver interactive and persuasive messages to consumers (Atkinson, 2013). Smart mobile advertising media is an "interactive communication system that helps to pre-identify consumer preferences and then delivers customized advertising messages or services to each user" (Kim & Lee, 2015, p. 80). Interactivity is defined as "different forms of interaction between individuals and groups either directly or mediated through digital platforms of media" (Ström et al., 2014, p. 1003). User control, two way communication and time are the three main components of interactivity (Choi et al., 2008; Gao et al., 2010). Interactivity characteristic permits the consumer to have the ability to control the flow of information (Bezjian-Avery et al., 1998). Mobile advertising provides a two-way communication platform (Drossos et al., 2013) that allows marketers and consumers to engage in a direct dialogue by replying to the message content immediately (Hashim & Zolkepli, 2014). The ubiquity characteristic provided by mobile devices allows consumers to assess the advertising message freely without time and space limitation (Parreño et al., 2013). In brief, the characteristic of interactivity advertisement provides an opportunity to marketers to target their consumer easily (He et al., 2013).

#### *Costing*

Mobile advertising is often associated with mobile commerce (Yang, 2007). It is believed that the mobile advertising platform can provide a more user friendly environment in conducting mobile commerce (Mahatanankoon et al., 2005). Marketers tend to use mobile advertising in business for characteristics like low cost and high penetration rate towards the targeted consumers (Kolsaker & Drakatos, 2009; Ünal et al., 2011). According to Öztaş (2015), there are some fundamental advantages that differentiate mobile advertising from

traditional means such as cost effectiveness, enable instant response from consumer, rate of return is more than 10% and mobile advertisements remain stored in the memory of the device and can always be pulled out and reviewed by the consumer. Cost is one of the significant factors that turn marketers to prefer to use mobile devices to send advertisements (e.g. discount coupon, free samples offered for those registered in their E- database) to their consumers instead of using traditional methods (Funk, 2004). Mobile channels can help marketers to realize market segmentation, provide relevant and personalized advertisement to the existing and potential consumers (He et al., 2013). Sending incentive based advertisements can trigger purchase acceleration and product trial because people are interested in monetary benefit especially in price discount (Haq, 2012).

### *Personalization*

Mobile devices (e.g. smart phones, tablets) have become a necessary gadget that is indispensable in our daily life (Hew et al., 2015). Hence, marketers take this opportunity to perform one to one marketing which makes the consumers more willing to accept and adopt the mobile advertisements that have been specially tailored to them (Parreño et al., 2013). Personalization is the main feature of mobile advertising (Shang & Zhe, 2014), and it enables marketers to deliver personalized mobile advertisements that catch the interest of consumers at the right moment. In general, consumers tend to show their likelihood to receive the personalized advertisement because it caters to the wants and needs which are more relevant to them (Chen & Hsieh, 2012). Most consumers would prefer and expect that relevant advertising messages should contain timeliness and geographic proximity while it is being sent to them (Banerjee & Dholakia, 2012). Previous research has proven that personalization improves advertising effectiveness (Keyzer et al., 2015). Personalized messages are usually more memorable, likeable and effective in inducing customer response in action (Ji-Hong, 2014). According to Haq (2012), a good personalized mobile advertisement must cater to time, location, consumer preferences, consumer control, permission and privacy in order to strengthen the positive attitude from consumers. For instance, if users are able to receive the mobile advertisement through mobile context-aware ability (e.g. real time location specific offer), it can help them to reduce the unnecessary search costs while increasing the shopping efficiency experience (Ajax & Irfan, 2012). Consequently, next paragraphs highlight the different formats of mobile advertising such as SMS and MMS, mobile application and mobile advergame, as well as QR Code and NFC.

### **Format of Mobile Advertising**

The meaning of the term "Mobile Advertising" has become more diverse due to advancement of technology. Mobile advertising uses mobile as the platform for advertising such as smartphone (e.g. iPhone, Android phones), tablet (e.g. iPad, Samsung Galaxy Pad). Specifically, mobile device can be defined as "limited to portable, handheld devices that have wireless capability (3G, Wi-Fi, LTE, WiMAX)" (Weller & Calcott, 2012, p. 2). Mobile advertising can be presented through a variety of formats such as Short Message Service (SMS) (Chang & Huo, 2011), Multimedia Messaging Service (MMS) (Wong et al., 2015), mobile application (Hew et al., 2015), mobile advergame (Celtek, 2010), Quick Response (QR) Codes (Oumtrakul et al., 2011) and Near Field Communications (NFC) (Ström et al., 2014). Advertising effectiveness has a strong relationship with the medium or

platform in terms of how a particular advertisement reaches the audience (Dimitris & Giaglis, 2006). There are many forms of mobile advertising, however the popularity of these forms will change over time. The next section will attempt to assess and give a brief review on how different types of advertising are applied in the marketing world.

### *SMS and MMS*

Short message service, known as SMS, was first developed and used in commercial world in 1992 (Varnali, 2014). The instant message system can send up to maximum 160 characters (Okazaki & Taylor, 2008). SMS is the most frequently used medium in mobile advertising due to its high speed of delivery, great reach and high response rates (Drossos et al., 2013). However, the length limitation prohibits SMS advertisement from effectively communicating all the needed information to the consumers (Drossos et al., 2013).

Unlike SMS, Multimedia Messaging Service (MMS) is a messaging services that include "multimedia objects, images, audio, video, or rich text, in addition to text messages" (Okazaki & Taylor, 2008, p. 5). Text, photo, audio and video messages can be combined and sent to consumers simultaneously (Wong et al., 2015). However, although text based services are dominating present and current trend mobile advertising, advertisers are still trying to find other alternatives for the replacement (Yang, 2007). Limiting mobile advertising to text based advertisement might prohibit the use of mobile advertisement in an effective way (Öztaş, 2015). Marketers would rather continuously search for other means to fully exploit the mobile medium in more advanced way.

### *Mobile Application and Mobile Advergame*

According to Martin (2014, p. 26), a mobile app is "typically downloaded to a smart phone from an app store to enable the phone user to more easily accomplish a task that can range from checking the weather to comparing products and services". In general, mobile application is defined as a mobile app that provides users with entertainment (e.g. games), performs daily task (e.g. alarms), mobile commerce (e.g. Amazon), and ultimately helps the users to handle their daily routine in a more convenient way (Hew et al., 2015). There are many free apps available in the apps store, but usually consumers are reluctant to pay a single cent for the apps, and most of the time they would be reluctant to download the apps if required to pay (Helander, 2010). In tourism marketing, mobile application can offer valuable information through location based services (Coelho & Dias, 2011). Many free mobile apps (e.g. Four Square) provide location based services that alert consumers when they enter a certain geographical area (Banerjee & Dholakia, 2012).

Mobile Advergame uses interactive gaming technology to build brand loyalty and it usually provides free entertainment to consumers (Celtek, 2010). Each time they click to play the advergame, it can invisibly raise brand awareness to consumers. Advergame is intended to incorporate branding through the message that will be associated with something unique and fun (Celtek, 2010). Entertainment factor is important in mobile advertising (Hashim & Zolkepli, 2014) because the mobile users perhaps want to experience a sense of pleasure and feel enjoyment when playing mobile advergame. When the advergame is infused with the fun factor, it will easily attract the young consumers.

### *QR Code and NFC*

QR code known as "Quick Response" was invented by Japan Denso Corporation in 1994 to track parts in car manufacturing (Atkinson, 2013; Oumtrakul et al., 2011). This new form of mobile advertising relies on a pull based approach for consumers to access information (Atkinson, 2013). QR code is categorized as two-dimensional (2D) barcode, and it can be accessed without internet connection (Oumtrakul et al., 2011). It looks like a "small white square with black geometric shapes" (Mohamed, 2013, p. 149). Mobile users use the smartphone integrated camera to scan the QR code, and it will automatically open the hyperlink to view the message (Wilken & Sinclair, 2009). QR code is frequently published in all of the printed materials (e.g. posters, magazine, newspaper) (Oumtrakul et al., 2011), and is even printed on the packaging of the products to allow consumers to access it easily when they are ready to purchase or are seeking more product relevant information (Atkinson, 2013). Unlike single barcode, 2D barcode can store much information such as Uniform Resource Locator (URL) and assorted information (Oumtrakul et al., 2011). Consequently, the mechanism of QR code is essential to provide user's convenience to retrieve points of interest and events; however only smartphones-equipped with this technology can perform the function (Coelho & Dias, 2011).

Near Field Communications (NFC) is a new, short range wireless connectivity technology that leads "touching paradigm" (Coskun et al., 2012, p. 2260) and requires two NFC compatible devices (e.g. NFC tag, NFC reader, NFC Smart phone) for information exchange and interaction to transfer data in a more convenient way without physical connection (Morosan & DeFranco, 2016; Pal et al., 2015). NFC was adopted by various banks in mobile commerce in contactless payment (Wilken & Sinclair, 2009). NFC mobile payment can turn their mobile device into an e-wallet, and it had changed the traditional way of making payment by either using cash or credit card (Tan et al., 2011). The emergence of NFC mobile payment only requires consumers to simply touch or wave their digital device in front of the NFC reader (Xu & Liang, 2012). In early 2009, Maxis (one of largest mobile service providers in Malaysia) had cooperated with Maybank to offer Maybankard VISA payWave Mobile (commercially known as Maxis Fast Tap) (Berhad, 2009; The-Sun-Daily, 2009). This Fast Tap service allows the mobile users to use their Nokia 6212 mobile device as a contactless card with existing payment services such as Visa Pay Wave, Touch' N go and more transit transaction (Berhad, 2009; The-Sun-Daily, 2009). NFC mobile payment also enables consumers to enjoy speedy transactions in a user friendly way as well as in a totally new shopping experience. However there is still a lack of awareness of this innovative technology by the public (Pal et al., 2015).

### **Conclusion**

This review paper discusses the evolution, benefits and formats of mobile advertising. In the evolution part, it gives an overview of how traditional advertising media is differ from the current advertising media. It is noted that interactivity is the main characteristic leading the new mobile advertising trend. Hence, the future evolution of mobile advertising is expected to be speedier, more user friendly and allow more interactivity to take place. Moreover, interactivity, low cost and personalization characteristics makes mobile advertising more favourable than other media. For marketers, the appearance of mobile advertising enables



them to easily send their personalization advertisement despite the geographical and time limitation to consumers. Interactive advertisement allows consumers to have a 2-way communication with the marketers, as they can send their request to receive a personalized advertisement that is up to them to control. In addition, today mobile advertising is not merely the text messages sent to consumers. Since the emergence of a variety of mobile advertising business formats, marketers should understand the difference in terms of content and delivery patterns brought by format of mobile advertising (e.g. from the early stage using SMS and the present shift to using QR code and NFC), which will help them identify and choose a most suitable platform to deliver mobile advertisement to targeted consumers (Kim & Lee, 2015). This review paper is believed that it can help the advertisers, marketers, mobile advertising networks, and website and mobile application developers in Malaysia to deliver and design the contents, such as mobile advertising strategies and better advertising design which can reach to more mobile users. Lastly, future reviews are encouraged to discuss the challenges of mobile advertising and the adoption formats of mobile advertising since the mobile advertising device usage in Malaysia will continue to grow in future.

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