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Consumer attitudes toward and intentions to accept mobile advertising

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ABSTRACT

The objective of this study was to examine the drivers of consumers' attitudes towards mobile advertisement. It also sought the relationship between consumers' attitudes towards mobile advertisement and their willingness to accept mobile advertising. Confirmatory factor analysis was used to assess the measurement model while structural equation was conducted to assess the goodness-fit of the overall model. The findings indicate that entertainment, credibility and personalization had positive effects on consumers' attitudes toward mobile advertising. Furthermore, the results show that, consumers' attitude determines their willingness to accept mobile advertising.

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1. Introduction

Innovation comes along with its own marketing opportunities and challenges. One of the emerging innovations is the use of the mobile phone and its associated media which support one-one, many-one and many-many mass communication (Hoffman & Novak, 1996). Thus technology associated with communication continues to evolve and provides marketers with opportunities to uncover (Hoffman & Novak, 1996). Most popularly among them is the Short Message Service (SMS) or text messaging which according to researchers has attracted millions of users worldwide (Mobile Data Association 2004; Yuan & Tsao, 2003). According to the researchers, text messaging remained top on the list as a function of the mobile phone in Europe. In the United Kingdom, for instance, 2.13 billion person-toperson text messages were sent in September 2004 (Scharl et al., 2005). This has accounted for a second look into the SMS-mobile communication and the opportunities that come with it (Sultan, 2005). However, mobile advertising can be disturbing and irritating to mobile phone users and this can affect their attitude towards mobile advertising (Yonus et al., 2003). Chowdhury et al. (2006) noted that consumers' attitude towards mobile advertising is influenced by factors such as content of the mobile

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advertising, time of transmission, personalization and consumer control, permission, and privacy. Barwise et al. (2002) noted that some of the challenges for mobile advertisers is to create and deliver mobile advertising that could be entertaining, eye catching, relevant to the needs and preferences of the target consumer. The attitudes of consumers toward mobile advertising affect their willingness to accept it or otherwise (Chowdhury et al., 2006). However, there is still dearth of empirical studies on consumers' attitude toward mobile advertising and their willingness to accept it (Merisavo et al., 2007; Amberg et al., 2004). Most of the studies have focused on drivers of consumers' attitude towards mobile advertising instead (Yonus et al., 2003; Saadeghvaziri & Hosseini, 2011; El-Garhi, 2014). Therefore, this current study tries to ascertain the factors affecting consumers' attitude towards mobile advertising and their willingness to accept mobile advertising. The rest of the paper is divided into four parts. Part one provides literature review while part two focuses on the methodology employed. Part three presents the findings whilst conclusions and recommendations are made in the last part.

2. Attitude towards advertisement

Analyzing consumers attitude towards advertising in general, the review seeks to investigate how advertisement can affect the attitudes of consumers and induce repurchase. According to Zanot (1984), after the 1970s, consumer's general attitudes towards adverts started becoming negative, with many critiquing the adverts and the media with which they were presented. Thus as consumers were exposed to new forms of technology and the introduction of a two-tier form of communication, the response of adverts had to go through critiques. But research conducted by the Gallup organization, (1959) suggests differently, postulating that consumer attitudes towards advertising in general is positive.

Lutz (1985) defines attitude toward advertising as "a learned predisposition to respond in a consistently favorable or unfavorable manner to advertising in general". Further, Mehta (2000) posited that, how a consumer predisposes an advert, will affect their reaction towards the advert. Thus from his studies (Mehta, 1998), found that consumers who had a favorable attitude towards advertisement, were mostly influenced by the adverts they see and affected their attitude of repurchase. Schlosser et al. (1999) also postulated that consumer's attitudes are affected by the relation they have developed with an advertisement. Also James and Kover (1992) found that attitude toward advertising directly affects the degree of involvement in specific advertisements. Therefore how involved a consumer is to a specific advert, affects the attention and level of attention devoted to certain advertising messages (Greenwald & Leavitt, 1984).

Also a study conducted by Mehta (1995) suggests how the consumer's attitudes toward advertising in general affect the success of the advertising. The study revealed that the respondents, who qualified for the study, showed that with a favorable attitude towards advertising. They also showed a high tendency to recall advertisements and be influenced to repurchase. It was found that the extent to which an individual likes to look at advertising influences how much attention they pay to advertising. Again, Mehta (1995) and James and Kover (1992) suggested that attitude toward advertising is dependent on the, media through which the message is being sent. Thus a consumer may like print, others my prefer television adverts and others through interactive platforms such as mobile or the internet. Further Taezoon et al. (2008) posited that even when the same advertisement is presented to the same audience, its effect may vary depending on the chosen channel. According to Mehta (2000), the control of looking at print advertisements lies with the consumer since while reading a magazine it is easy to regulate the time one devotes to advertisements. However, as James and Kover (1992) state the situation is different when it comes to television advertising or other interactive platforms.

3. Factors influencing consumers' attitude towards mobile advertising

3.1 Entertainment

Ducoffe (1996) defined entertainment as the ability to provide for an expectant audience or an individual an aesthetic enjoyment or motional pleasure that can provide a certain level of satisfaction to the individual or group. A study by Grant and O'Donohoe (2007) show that the dominant factor that influences the use of mobile phones is entertainment. Wilska (2003) suggested that because of the nature of communication using the mobile phone devices like texting, the mobile has suddenly become a way of having fun by commonly texting. According to Haghirian and Madlberger (2005), the fun part of entertainment, makes it attractive to marketers who take such an opportunity to appeal to consumers and immediately capture their attention. Haghirian and Dickinger (2004) postulated that delivering games and other forms of entertainment through mobile devices is a way of engaging and attracting customers. Sending entertaining messages and adverts through the mobile platforms has been perceived to have a positive effect on customers (Bauer et al., 2005). Supporting this assertion Tsang et al. (2004) from their empirical studies show that entertainment is a significant factor in consumers' attitudes toward mobile advertising. Therefore, this study proposes that entertainment influences consumers' attitudes toward mobile advertising.

3.2 Credibility

The credibility of an advert has been defined by McKenzie and Lutz (1989) as the customer's perception of an advert being true and the information provided being one that can be trusted. The credibility of an advertising message is influenced by various factors and according to Goldsmith et al. (2000), the company and "messengers" credibility is a key factor. Daugherty et al. (2007) posited that customers view an advertisement as being credible if it is fair and factual. Dahlén and Nordfält (2004) found a positive correlation between credibility and advertisement efficacy. From studies conducted by Haghirian and Madlberger (2004), Tsang et al. (2004) and Waldt et al. (2009), customers' perception of the credibility of a mobile advert influences the attitude towards the mobile advertising. Consequently, Al Khasawneh and Shuhaiber (2013) hypothesized that credibility of mobile advertisement has a positive effect on consumers' attitude towards mobile advertising. Supporting this view, Chowdhury et al. (2010) found that credibility has a direct positive and significant influence on consumer attitude towards mobile advertisement. It can therefore be concluded that credibility affect consumers' attitudes toward mobile advertising.

3.3 Irritation

The tactics advertisers employ to engage consumers' attention can sometimes irritate consumers and this affect their attitudes towards the advertisement (Saadeghvaziri & Hosseini, 2011). This is especially so when no permission is sought, the message is received frequently or when consumers perceive the advertisement to be manipulative (Ducoffe, 1996; Tsang, 2004). Tsang (2004) reported a negative relationship between irritation and consumer attitudes toward mobile advertising. Similarly, Zabadi et al. (2012) found a negative correlation between consumers' perceptions of the irritation and their attitude towards mobile advertisements. Again, El-Garhi (2014) reported a similar finding. However, this is likely to change when mobile advertising is permission based and consumers can control it (Maneesoonthorn & Fortin, 2006). It can therefore be concluded that there is a relationship between irritation and consumer attitude towards mobile advertising.

3.4 Personalization

Personalization in general has been defined as understanding the different kinds of individual preferences, needs and lifestyle of consumers and providing a product or service that satisfies that single need (Riecken, 2000). When a message is personalized it means customizing the message to suit an individual's preferences (Bauer et al., 2005). How a consumer feels a particular message is directed

towards him/her, affects the response given. Personalized services create strong customer relationships, thus encouraging transactions while preventing users from switching to different services (Riecken, 2000). Sending advertising through mobile devices provides platforms which enable consumers to be reached directly. The mobile platforms, have become a focal point in the deliverance of one-one messages which are interactive. Thus the mobile provides a platform for customizing or personalizing information, because the mobile usually carry the user assigned identity making it easier to know the user without necessarily contacting the user (Lee & Benbasat, 2003). Similar to traditional media, a customized mobile advertising campaign relies upon databases with enough active and potential clients to reach the target group profitably (Balasubramanian et al., 2002). Thus mobile advertisers can customize the mobile messages based on the consumers profile, local time, location, and preferences (Balasubramanian et al., 2002).

According to Saadeghvaziri and Seyedjavadain (2011), sending personalized text messages and information through the mobile platforms are more relevant to consumers than non-personalized messages because of the ability to provide consumers with exact information and serve their personalized needs. Personalization of advertising message is a prime pre-requisite for consumers to be willing to accepts and receive such information since they feel a part of the message (Xu, 2006). Siau and Shen (2003) postulated information delivered to consumers must show certain features of being timely, relevant and useful to the consumers. If thoroughly personalized, mobile adverts can be used as important media through which consumers can better relate to the advertisement without the feel of bothersome (Barnes & Scornavacca, 2004). Such customization helps to reduce the likelihood of a negative reaction (Bauer et al., 2005). Also Scharl et al. (2005) described the positive relationship existing between mobile adverts and personalization. On the bases of this, this current study proposes that, personalization affect consumers' attitudes toward mobile advertising.

4. Consumers Intention to receive Mobile Advertisement

Understanding consumer's perception for the use mobile advertising and devices in general, is as essential as advertising to them. Consumers' intention to use mobile devices and services has gone a long way to affect the rate of usage of such tools (Nysveen et al., 2005). According to David et al. (1989), the perceived usefulness by consumers can affect the purchase intention of a product or service. Thus the usefulness of a service may increase consumer's intention to use the service, attributing it to the performance of the service. Also Venkatesh (2000) posited that the user friendliness of a service on the mobile device may increase consumer intentions to use such services. In effect, the researcher found out that, when a consumer finds relevant adverts on their mobile devices, their intentions to either purchase or recommend the advertising is high. A study by Nysveen et al. (2005) showed that the intention to use self-service technologies or interactive technologies is a function of attitudinal influence. Bauer et al. (2005) found entertainment value and information value as key factors affecting consumers' willingness to accept mobile advertising. Similarly, Thorbjornsen (2005) noted that perceived enjoyment, perceived usefulness, and perceived expressiveness are critical to consumers' intentions to accept mobile advertisement. Contrary to the notion that trust and control are key determinants of consumers' attitude towards and acceptance of mobile advertising, Merisavo et al. (2007) found that these issues are not pre-requisite for consumers to accept mobile advertising. Meanwhile all the factors identified above are key antecedents to consumers' attitude towards mobile advertising (see for example Lee & Benbasat, 2003; Haghirian & Dickinger, 2004) and therefore can be concluded that there is a relationship between consumers' attitude towards mobile advertising and their willingness to accept mobile advertising. On the basis of the literature review, we proposed an initial model as depicted in Fig. 2 (See appendix).

4.1 Sample and Data Collection

The respondents were randomly selected. A total of 476 usable responses (274 male and 202 female) were used in the final analysis. The questionnaires were administered to the respondents by the researchers. The demographic data of the participants have been presented in Fig. 1. The data provided include age, gender, educational level and working experience. Most (65.1%) of the respondents were within the ages of 18-27 years. Similarly, 61.3% of the respondents were degree holders and majority (57.6%) of them were males. Again, 58.4% had 1-3 years of working experience.

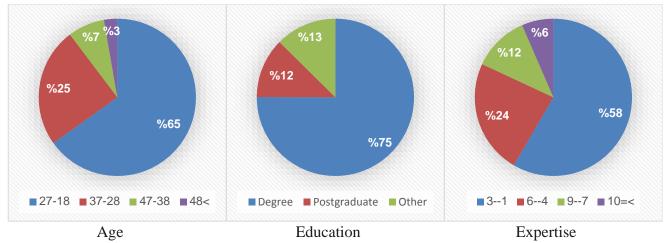


Fig. 1. Personal characteristics of the participants

4.2 Measures

This study adapted all the measures from existing literature. All the items measuring the constructs have been provided in Table 1. The means and standard deviations of the items have also been provided in this same table. The items were measured using a five-point Likert scale; 1=strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

Table 2 Reliability, Validity, Mean, Standard Deviation

| Constructs/Items | Loadings |
|--|----------|
| Entertainment (Source: Tsang et al., 2004), CR = 0.90; AVE = 0.7 | |
| I feel that receiving mobile advertisements is enjoyable (mean= 2.882), (SD= 1.276) | 0.85 |
| I feel that receiving mobile advertisements is entertaining (mean=2.903), (SD=1.177) | 0.85 |
| I feel that receiving mobile advertisements is pleasant (mean=2.855), (SD=1.145) | 0.80 |
| I enjoy receiving mobile advertising (mean=2.903), (SD=1.286) | 0.83 |
| Credibility (Source: Chowdhury et al., 2010), CR =0.82; AVE = 0.53 | |
| I feel that mobile advertisements has no risk (mean=2.828), (SD= 1.193) | 0.71 |
| I trust mobile advertisements (mean=2.733), (SD= 1.085) | 0.73 |
| I use mobile advertising as a reference for purchasing (mean= 2.943), (SD= 1.203) | 0.68 |
| I belief that mobile advertising is credible (mean= 2.903), (SD= 1.110) | 0.62 |
| Irritation (Source: Xu , 2007), $CR = 0.83$; $AVE = 0.6$ | 0.65 |
| I feel that mobile advertising is irritating (mean=2.798), (SD= 1.260) | 0.75 |
| Contents in mobile advertising are often annoying (mean= 2.798), (SD= 1.260) | 0.81 |
| Mobile advertisements disturb my use of the mobile devices (mean=2.828), (SD=1.124) | 0.71 |
| Mobile advertising disturbs me (mean=2.861), (SD= 1.234) | |
| Personalization (Source: Gao and Zang ,2014), CR =0.84; AVE = 0.6 | |
| I feel that the mobile advertisements I receive are relevant to my job and activities (mean=2.723), (SD=1.224) | 0.68 |
| I feel that the mobile advertising displays personalized message (message about the | 0.80 |
| I feel that the mobile advertisements I receive are relevant to my needs (mean= 2.805), (SD= 1.110) | 0.83 |
| Overall the mobile advertising I receive are customised to my needs (mean= 2.607), (SD= 1.226) | 0.75 |
| Consumers' Attitudes toward Mobile Advertising (Source: Taylor and Todd ,1995), CR =0.84; AVE = 0.6 | |
| I read any mobile advertising I receive on my phone (mean=2.987), (SD= 1.271) | 0.66 |
| Mobile advertisements can provide pleasant experience for me (mean=2.985), (SD= 1.141) | 0.80 |
| I have a positive attitude towards mobile advertising (mean=2.962), (SD=1.151) | 0.79 |
| Overall, I like mobile advertising (mean= 2.924), (SD= 1.227) | 0.72 |
| Intention to Accept (Source:Bauer et al.,2005) $\alpha =$; CR =0.84; AVE = 0.6 | |
| I am willing to receive mobile advertisements recently (mean=2.943), (SD=1.148) | 0.70 |
| I may receive mobile advertisements recently (mean= 3.143), (SD= 1.090) | 0.74 |
| I expect to receive mobile advertisements recently (mean=3.109), (SD=1.107) | 0.81 |
| I intend to accept mobile advertising as much as possible (mean=3.040), (SD=1.270) | 0.74 |

4.3 Measurement model

Assessing the reliability and validity of the measures, Confirmatory factor analysis of the items was performed in Lisrel 8.5. The chi-square value was 306.46 with 160 degree of freedom and it is significant at the .0001 level: its *p*-value is P = 0.00. Based on these results, other goodness fit statistics were used. They include Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Non-Normed Fit Index (NNFI), Comparative Fit Index (CFI) and Goodness of Fit Index (GFI) (Bagozzi & Yi, 2012; Schreiber et al., 2006). All the indices met the desirable threshold indicating that the model fit was satisfactory. The RMSEA fit statistic is 0.044 while SRMR is 0.057. Similarly, CFI is 0.97 and the NNFI statistic obtained a value of 0.96. Again, as shown in table 2, the composite reliability (CR) and Average Variance Extracted (AVE) values for all the constructs were satisfactory indicating that convergent validity has been achieved (see Bagozzi & Yi, 2012). Additionally, all the AVE values are higher than the squared correlations among variables (see Table 2). Furthermore, all the factor loadings are high (See Table 1) and there are no cross loadings. This indicates that discriminant validity has been achieved (Fornell & Lacker, 1981; Bagozzi & Yi, 2012).

Table 3Squared correlations and AVE

| Constructs | ENT | CRD | IRR | PZ | ATT | IA |
|--|------|------|------|------|------|-----|
| Entertainment (ENT) | 0.7 | | | | | |
| Credibility (CRD) | 0.45 | 0.53 | | | | |
| Irritation(IRR) | 0.31 | 0.16 | 0.6 | | | |
| Personalization (PZ) | 0.51 | 0.52 | 0.49 | 0.6 | | |
| Consumers' Attitudes toward Mobile Advertising (ATT) | 0.44 | 0.47 | 0.13 | 0.41 | 0.6 | |
| Intention to Accept (IA) | 0.41 | 0.48 | 0.43 | 0.37 | 0.52 | 0.6 |

Diagonal values are the AVE values

4.4 Structural model analysis

Since the model measurement was satisfactory, we proceeded to examine the structural model. The Structural equation model was used to assess the factors determining consumers' attitudes toward mobile advertising and the relationship between consumers' attitudes and willingness to accept mobile advertising. The R² was 0.60 denoting that the model explains 60 % of the variance in consumers' willingness to accept mobile advertising. Further analysis show that the coefficient value for entertainment is 0.20 that of Credibility is 0.40. Similarly, irritation had a coefficient value of -0.10 and personalization had a coefficient value of 0.31. Additionally, consumers' attitude toward mobile advertising is 0.66. The contribution of all the constructs is significant (p=000, P< 0.001). The results have been presented in Fig. 3 (see Appendix).

5. Discussions and Recommendations

The objective of the study was to examine the factors affecting consumer's attitude towards mobile advertising and their willingness to receive mobile advertising. The findings show that the entertainment value of advertisement, credibility, irritation and personalization of the advertisement affect consumers' attitudes toward mobile advertising significantly. Apart from irritation that had a negative relationship with consumers' attitudes toward mobile advertising, the rest of the variables had a positive relationship. The negative relationship between irritation and consumers' attitude might be due to interruptions with consumers' usage of mobile devices or personal activities (Saadeghvaziri & Hosseini, 2011). Mobile advertisements are sometimes received at a time that the recipient is busy with other personal activities. In this case mobile advertisements disturb the recipient. Maneesoonthorn and Fortin (2006) therefore argued for permission based on mobile advertising; thus where permission is sought from the recipient before the message is sent. Haghirian and Dickinger (2004) on the other hand believe that, the time and frequency at which the message is sent must be taken into consideration to ensure the efficacy of the advertisement and reduce the annoying nature of mobile advertisement.

Probably mobile advertising messages should be sent at a time where the recipient is less busy and at most two messages per week. On the other hand the positive relationship between entertainment value and attitudes toward mobile advertising might result from the enjoyment that mobile advertising brings to the recipient (Bauer et al., 2005). Some mobile advertisement is pleasant and entertaining and for such advertisements the recipient is always willing to receive (Haghirian & Madlberger, 2005).

Again, contrary to Merisavo et al. (2007) this study found a positive relationship between credibility and consumers' attitudes towards mobile advertisements. The reason might be that the consumers' trust mobile advertisements or mobile advertisements are not risky (Waldt, et al. ,2009) and are therefore willing to buy products advertised on mobile advertising (Tsang, 2004) . Additionally, personalization of mobile advertisement had a positive impact on consumers' attitudes toward mobile advertising. It might be that the advertisement has messages relevant to the recipient's job or provided relevant information about a product or service that the recipient is interested in (Lee & Benbasat, 2003).

As it has been established in some previous studies (Nysveen et al., 2005), this study also found a relationship between consumers attitudes towards mobile advertising and their willingness to accept advertising messages on the mobile devices; however, it requires a positive attitude from consumers (Merisavo et al., 2007). The consumer must have favorable attitudes toward mobile advertising.

The implication of the findings are that firms and mobile advertisers must profile and constantly update the customers records in order to deliver personalized messages and reduce the irritating nature of mobile advertising. Again, mobile advertisements should have humor in the contents but they should not take a center stage of the advertisement otherwise it will reduce the effectiveness of the advertisement. In addition, mobile advertisements must be accurate and credible in content.

This study is not without limitations. The first limitation is that the data was collected from one country (Ghana), therefore generalization of the findings worldwide might be problematic. Future studies may consider consumers from different countries with different rate of mobile phone penetration. Again, this study relied on cross- sectional data; however, consumers' behavior is not static. Future studies should therefore consider using a longitudinal survey design.

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Appendix

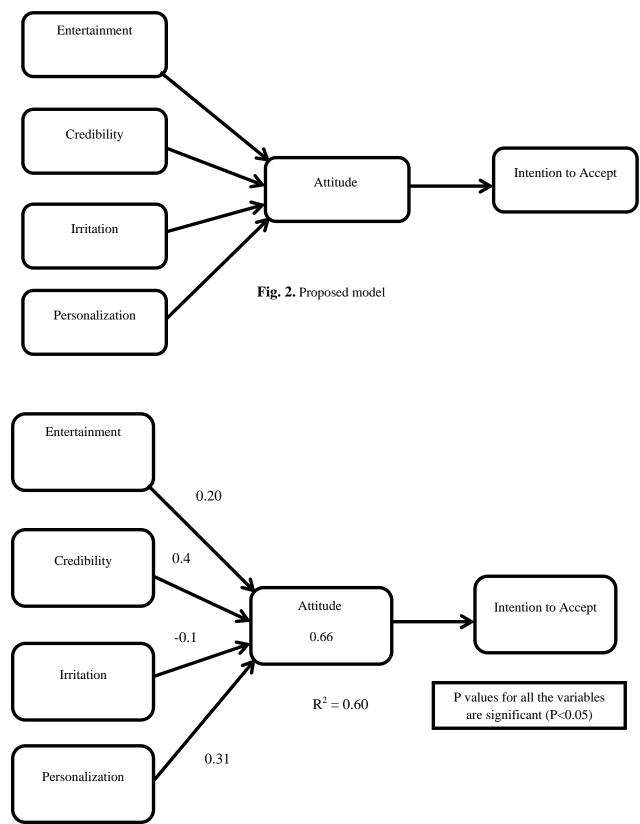


Fig. 3. Structural Path