



INTENTION TOWARDS MOBILE MULTIMEDIA MESSAGE (MMS) ADVERTISEMENTS

Ms. T. S Jayasooriya
Assistant Lecturer
Department of Marketing
University of Jaffna,
Sri Lanka

Dr. Mrs.S.Shivany
Senior Lecturer
Department of Marketing
University of Jaffna,
Sri Lanka

Mrs.S.Vaikunthavasan
Senior Lecturer
Department of Marketing
University of Jaffna,
Sri Lanka

Abstract— Advanced technology plays a significant role in analysis of consumers' psychology and their changed behavior towards purchasing any particular product. There are currently many different ways of marketing communications, by which marketers can reach their target audience. At present, the consumers are living in such an environment where they can get the information about a product or service from the various available media vehicles. Presence of numerous media vehicles in the advertising world has created an advertising clutter, reducing the effectiveness of advertising. That is why marketers are looking for innovative Medias and methods for advertising, which has yet not been saturated, and mobile multimedia message advertising is one of them. Mobile advertisements allow the marketers to approach the customers' indistinctive way, but, there arises a question that how does a consumer observe this innovative way of advertising. The present study attempts to examine consumer attitude towards mobile advertising intention and the various factors that influence their intention. This study mainly relies on primary data collected through validated questionnaire. The study will be beneficial for the marketers to gain an insight of consumer attitude and their intention for mobile advertising and to define the appropriate strategies targeting them accordingly. Empirical study was conducted to collect the primary data using a questionnaire as a tool in order to test the hypotheses. The questionnaire was distributed to 200 respondents who were randomly selected from the population. The findings proved that there is a relationship between independent variables (i.e., entertainment, informative, irritation, credibility and personality) and the dependent variable (consumer intention toward mobile multimedia message advertising) based on several reasons discussed thoroughly in this research.

Keywords—*Advertisements, attitude, customer intention Mobile Multimedia Message advertising*

I. INTRODUCTION

Advertising plays a major role in business functions. There is a trend towards using more personalized one-to-one relationship marketing. Over the past years, the development of mobile communication has presented advertisers with a radically new form of advertising channel. Mobile marketing consists of ads appearing on an individual's mobile device, often in the form of a text message. Given the fact most users would be reluctant to give out their cell phone number to companies if it meant dealing with pop-up ads, a surprising number of consumers share their number due to the ability to opt out of mobile campaigns. In order to send a message, consumers must first opt into receiving messages. Ryan Goodrich (2013).

SMS (Short Messaging Service) has grown to be the single most frequently used mobile data service. This service is also referred to as "text messaging" or "texting". SMS is a messaging infrastructure that allows a mobile user to send and receive a text message of up to 160 characters and across virtually any operator network. All mobile phones shipped over the past few years support SMS. As a result, the large installed base of SMS phones creates a large addressable market for SMS-based mobile marketing campaigns. MMS uptake is growing as multimedia-capable mobile phones spread in the market. MMS allows mobile users to exchange multimedia messages - typically picture, audio and/or video in combination with text. SMS and MMS services are together referred to as "Mobile Messaging". "The key differences between the two are that SMS is text only, while MMS offers rich media content. SMS communication is supported between different networks and between different countries, while MMS still faces obstacles in many places when it comes to sending messages between networks and countries. However, the stickiness of Mobile Messaging, the enormous reach of SMS and the rich media capabilities of MMS make this channel a highly rewarding advertising opportunity. In recent years, a more robust service called MMS-Multimedia Messaging Service has been introduced. Just as convenient and immediate as text messaging. MMS marketing offers several dramatic advantages. Instead of just plain text, a



message can now include audio, video, color and animation. This opens up completely new words of possibilities-particularly marketing applications. Just to give an idea of the difference, regular text messages allow for characters or about 140 bytes of information, whereas multimedia messages allow for almost unlimited text characters and a much greater allowance when it comes to size. Another mobile feature of multimedia message that the land in the mobile inbox and can therefore be forwarded to the recipient's contacts, making it possible for messages to go viral. This creates the potential for existing marketing possibilities.

Most of companies use SMS and MMS as their marketing communication tool. It sees the letter as an opportunity for multimedia ads, including video. Consumers are more apt to open text message than e-mail and more likely to redeem offers as well. Messages that use rich media are opened more often still because, "a picture is worth a thousand words" Todd waresserman (2013). MMS become a need of company as a communication or a promotional tool. Many factors have contributed to MMS growth to date, such as the introduction of more technologically advanced handsets, improved interoperability, the popularity of social networking sites, application-to-person messaging, and unlimited messaging and bundled service plans that include on MMS. However, mobile marketing may have the largest impact on MMS growth in the coming years because MMS is an integral, effectiveness tool for delivering compiling advertisements to customers. Corporate marketers and advertising agencies understand the value of messages that include a combination of text, images, audio and video, Jimbowyer (2011). Here's there is couple of reason to start integrating MMS marketing and advertising campaign with business, but before starting the MMS as new plat form in a new context it is must to identify what factors influencing on the decision on the intention towards this new advertisement vehicles.

Research objectives

1. Identify the factors related to MMS advertisement from the literature.
2. To identify the factors affecting the intention towards MMS advertising

II. LITERATURE REVIEW

Information systems researchers have made significant efforts in building theories to examine and predict the determinants of information technology acceptance (Agarwal et al (1998, 1999). Existing models of IT acceptance have their foundations in several diverse theories, most noticeably innovation diffusion theory, where individuals' perceptions about using an innovation are considered to affect their adoption behaviour Agarwal et al (1997, 1998) Moore et al (1991,1995). Other theoretical models that attempt to explain the relationship between user beliefs, attitudes, intentions, and actual system use include the theory of reasoned action Ajzen et al (1980), the theory of planned behaviour Ajzen et al

(1991), and the technology acceptance model Davis et al (1989), Davis et al (1989). Researchers have conducted several studies to examine the relationship between perceived ease of use, perceived usefulness, and the use of other information technologies Adams et al (1992,1989), Davis (1989), Hendrickson et al (1996), Mathieson (1991), Szajna (1996). Their research has supported the technology acceptance model proposed by Davis (1989), which posits that perceived ease of use and perceived usefulness can predict the usage of technology.

The theory of reasoned action Ajzen et al (1980) provides sample empirical support that users' positive attitude toward a technology will increase their intention to use or reuse the technology. Recent research has further affirmed that these findings are also applicable to mobile technologies and services by Perderson (2003). Therefore, consumers' attitude toward location-aware advertising is likely to be positively related to intention to reuse the service. The concepts of attitude, intention and behaviour constitute three keystones of the Theory of Reasoned action developed by Fishbein (1975), in their study; argue that attitude affects behaviour through intention. Tsang, Ho et al (2004), by using this theory, claimed that there was a positive relationship between attitude and intention for consumers to accept mobile ads.

The Theory of Psychological Reactance argues that people react negatively when they perceive their freedom to choose is threatened. Due to relatively low cost of advertising via short messaging service (SMS) and multimedia messaging service (MMS), companies send collective SMS without considering personal information of receivers. Because of this, most people are irritated and disturbed because of these wrong marketing tactics. In other words, irritating, offending, insulting or manipulative advertising techniques cause consumers to perceive advertisements as undesirable and irritating. A number of misleading and diverting information can take place in mobile advertisement messages sent to affect consumers. Consumers who feel they are misled in this respect show negative attitude towards advertisement.

Innovation diffusion theory, where is individuals' perceptions about using an innovation are considered to affect their adoption behaviour Agarwal & prasad (1997, 1998) Moore et al (1991) Rogers (1995). Rogers develop innovation and diffusion theory in 1992. It originated in originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The result of this diffusion is that, people as part of social system, adopted a new ideas, behaviour or product. Adaptation means that a person does something differently than what they had previously. The key to adaptation is that the person must perceive the idea, behaviour or product as new or innovative. It is through this that diffusion is possible.

Location based service are increasingly back on the mobile marketing agenda, as both operators and independent technology companies seek to promote the technology that allows us to track the whereabouts of users' mobile phones.



For marketers, the theory goes; this potentially represents a very powerful opportunity- the means of targeting customers not only with the right message at right time, but now, in the right place. According to the limited capacity information processing theory, that the advertisement format type may affect consumers' usage intention of location base advertising application and product purchase intention through their perceived values and overall attitude toward location base advertising. Information processing theory by Kahneman (1973), Lang (2000) argues that media messages, delivered simultaneously in a number of modalities, are cognitively complex and serve to overload the processing system. This theoretical perspective posits that, if users need to spend attention resources on to text, they will be left with fewer resources for the central task of capacity. Information processing theory suggests that when multimedia elements are added to the text-only advertisement, information processing of such advertisement should decrease as some of the attention resources are spent on processing the extra modalities De Fleur et al (1992) Lang et al (2002).

Mobile Marketing refers to marketing activities that deliver advertisements to mobile devices using a wireless network and mobile advertising solutions to promote the sales of goods and services, or build brand awareness Yunos et al (2002). Furthermore, mobile advertising provides consumers with time- and location-sensitive, personalized information that promotes products, services and ideas, thereby benefiting all stakeholders Scharl et al, (2005). According to Yuan and Cheng (2004), mobile marketing has become increasingly popular because the mobile phone is a personal device used in marketing. When looking at mobile advertising acceptance, a distinction can be made between permission-based mobile advertising and regular mobile advertising. Mir (2011) showed that users of mobile marketing services, after advertisers getting their permission, tend to have a more positive attitude toward the advertisement. In permission based advertising, product and service specific content is communicated only to agreed individuals Tsang et al (2004). Unsolicited messages (spam) irritate mobile users and are considered illegal in some countries Tripathi et al (2008). In permission, marketing consumers give their approval to receive marketing information Godin (1999).

Consumers' acceptance refers to consumers' acceptance of mobile marketing and does not refer to the acceptance of certain products and services provided by enterprises. Consumers' intention to participate in or accept mobile marketing include willing to read business SMS and MMS advertisement, willing to connect to the mobile sites of enterprises to inquire product information, willing to participate in enterprises' interactive marketing activities and willing to receive mobile coupons or even actively exchange them. Interactivity is one of the most stated benefits of mobile advertising. Interactivity is generated through applications on the mobile device, which facilitate two-way communication between the marketer and the potential customer Vatanparast et al (2007). In general consumers have been found to have a negative attitude toward mobile advertising Drossos et al

(2007) as they associate mobile advertising with unsolicited messages and an invasion of privacy Leppaniemi et al (2005). Numerous studies from different perspectives have been carried out to understand the manners of factors affecting consumer attitudes, intentions and behaviours toward SMS advertising. However, there is no studies examined the factors affecting consume intentions toward MMS advertising in Anuradhapura district. Even though the previous studies have been carried out in different regions, there is a semi consensus among researchers about many of the factors affecting the consumer attitudes, intentions and behaviours toward SMS advertising. It is also evident that there is a scarcity of previous studies that concerning intentions to receive MMS advertising and behaviour. After reviewing numerous previous studies and theoretical background, it has become evident, that many researchers have discussed different factors affecting the customer intention towards MMS advertising however, it all falls under one of the main four factors. For instance, (kumar, 2013) and (Ravindra. R, Rajyalakshmi. N, 2011) Studies have both emphasized that privacy, irritation, prior permission, time of sending, local language, operating knowledge and consumer preferences are factors affecting the customer intention towards MMS advertising. Yet, reviewing the theoretical, it is reasonable to say that prior permission, time of sending, local language and privacy can all be fallen under the irritation category.

Studies carried out by (Phau I, Teah M, 2009) Young consumer's motivation for using SMS in Australia is convenience and economic reasons influence SMS usage frequency. Social involvement influences attitudes towards SMS advertising. (Suher HK, Ispir N, 2008) Found in Turkey, Credibility and Permission did not find support in the findings as indicators of attitude toward SMS advertising, but the Life Partner factor did as a new indicator. This is a research, which present new indicator as life partner factor. In Malaysia, perceived usefulness, perceived ease of use, perceived credibility, compatibility, and social factor influence the behavior and intention of consumers in using mobile-coupons. This is the study of (Jayasingh S, Eze U, 2009). The results from the study of (Mirbagheri, 2010) determined 10 vital elements of SMS advertising value model in Iran including entertainment, informativeness, and frequency of exposure, privacy, and irritation.

In Canada, SMS language is not always recommended, while known and credible companies could use an SMS language shortened, original and entertaining, little known ones or ordinary spokespersons should refrain from doing which is result of study by (Nantel J, Sekhavat Y, 2008). (Tripathi SN, Mittal M, 2008) Present the perception of Indian consumers towards mobile marketing can be broadly categorized into the following three factors; lack of contextualization and personalization of mobile ads, disruptive nature of mobile and perceived usefulness of mobile ads.

In Jordan, there are a number of technical elements that might be responsible for the wide use of English or switching between English and Arabic "with Arabic Roman scripts" in



mobile text messaging. This is the result from the study of (Al-Khatib M, Sabbah E, 2008). (Karjaluoto H, Standing C, Becker M, Leppaniemi M, 2008) Express, the Perceived utility, context, credibility and perceived social utility are the main contributors to Finnish consumers' intentions to participate in mobile-marketing initiatives.

Advertising appeal and product involvement have a significant positive influence on the attitude towards the ad, the attitude towards the brand and the consumers' purchase intention for SMS advertising and not for the traditional marketing communications (Roozen I, Genin E., 2008). The study (Barutz, 2008) point out the in Turkey, mobile phone users have positive attitudes towards mobile advertising. Also (Haghirian P, Madlberger M, 2005) Shows from their studies, in Austria, advertising value and advertising message content have the largest impact on attitude toward mobile advertising. (Bamba F, Barnes S, 2006) Shows from their study, in the UK, even if the relevance of the advertisement is high it does not on its own make consumers give permission; it need to be combined with the control over opt-in conditions to assure consumers and gain permission. The opt-in conditions valued the most are: the possibility to withdraw at any time, personal data disclosure only with consent, and mobile operators as a primary advertising filter.

In Bangladesh, if mobile advertisers can present SMS ads pleasingly, with appropriate information, consumers will not be annoyed and there is a fair possibility that they will gradually like the ads. Furthermore, credibility, a construct of the study, has found to be the most significant of the factors affecting respondents' attitude toward mobile ads. This is the conclusion of (Chowdhury HK, Parvin N, Weitenberner C, Becker M, 2006) and (Peng, 2006) Investigates from his study, in China advertising content, credibility, product profiles, personalization, consumer pattern, previous experience, privacy and permission affect consumer opt-in and purchase intention, responses and behaviours. In addition, advertising content credibility was the most important element.

The results of the study of (Tsang MM, Ho S, Liang T, 2004) carry out the survey indicate that (1) consumers generally have negative attitudes toward mobile advertising unless they have specifically consented to it, and (2) there is a direct relationship between user attitudes and consumer behaviour. Thus, it is not a good idea to send SMS advertisements to potential customers without prior permission.

Some variables have positive effect on consumer's attitude towards mobile advertising like; informativeness, entertainment, credibility, perceived usefulness, and personalization, whereas some has negative effect such as irritation. This is the result of investigation of (patat, 2011). Also Khasawneh et al (2013) Investigated the Jordanian consumer's attitude and acceptance of SMS advertising is positively influenced by informativeness, entertainment, credibility, clarity, incentive, personalization, relevancy, and subjective norms; Whereas it is negatively influenced by message irritation, brand familiarity and consumer control.

(Keshtgary M, Khajehpour S, 2011) Investigated in Iran, entertainment is the most significant factor affecting consumer's attitudes toward mobile advertising, while further analysis showed that Iranian consumers in general have no negative attitudes towards advertising as long as there is a prior permission. Moreover, consumer's intentions to receive and read mobile advertisements have been noted to be positively influenced when introducing incentives that offer free minutes.

According to the research findings of (Alhrezat, 2013), in Saudi Arabia, the consumer's attitudes toward acceptance mobile marketing is significantly affected by the following independent variables: customer satisfaction for the content of the advertising message, customer trust for the content of the advertising message, the value and the utility of the offers that are provided by the advertising message and the brand of the products that are offered by the advertising message.

Factors influencing intention towards mobile multimedia message advertisement

Entertainment

People's feeling of enjoyment associated with advertisements play the greatest role in accounting for their overall attitudes toward them Shavitt et al (1998). Therefore, it is necessary that the message is concise and funny, and thus immediately captures the consumers' attention Kalakota et al (2002).

Informativeness

A key role of advertising is to generate awareness of products and to make consumer aware of how competing products are different Soberman (2004). One of the advertising goals is to inform audience about new products or new features of existing products, also make audience aware of changes in products' price Kotler et al (2006).

Irritation

The tactics advertisers use when competing for consumers' attention can be annoying to the audiences. When advertising employs techniques that annoy, off end, or are overly manipulative, consumers are likely to perceive it as unwanted and irritating influence Ducoffe (1996). Mobile advertising can provide an array of information that confuses and distracts the recipient as well as overwhelms the consumer with information Xu (2007). In their major survey of American consumers, Bauer and Greyser (1968) founded the main reasons consumers criticize advertising related to annoyance or irritation it causes.

Credibility

Credibility of advertising is an important predictor of attitude toward the advertising. Advertising credibility is "consumers' perception of the truthfulness and believability of advertising in general" Mackenzie et al (1989). Credibility of an advertisement is influenced by different factors, especially by the company's credibility Goldsmith et al (2000). Corporate credibility is defined as "the extent to which consumers

believe that a firm can design and deliver products and services that satisfy customer needs and wants” and has been found to have direct positive effects on attitude toward the ad, the brand, and purchase intent Choi et al (2002).

Personalization

Consumers would like the content of mobile services to be customized to their interests and relevant for them. Personalization of mobile advertising can enable marketers to reach their potential customers in a very individual way and thus increase the relationship with the Consumers, Robins (2003). Ho et al (2003) state that “with personalization, the amount of messages sent to the customers will be reduced, and the users will no longer receive numerous irrelevant messages”. In addition, Rao and et al (2003) argue that it is urgently necessary for marketing techniques based on knowledge of customer profiles, history, and their needs.

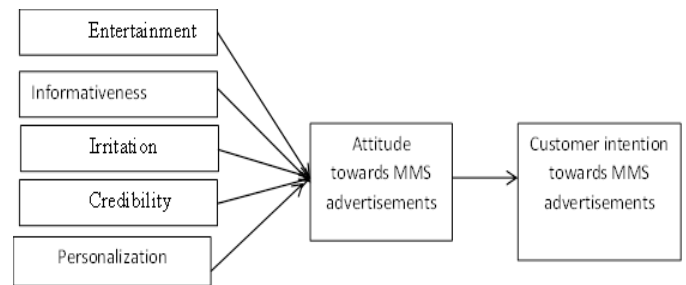
Attitude

Attitudes towards an advertisement are defined as “a learned predisposition to respond in a consistently favourable or unfavourable manner toward advertising in general” Mehta et al (1996). In this case, it is essential to note that attitudes towards advertising via mobile devices refer to consumers’ attitudes towards this mode of advertising in general. It does not refer to consumers’ attitudes towards a particular advertisement. In general, attitudes are mental states used by individual consumers to shape the way they perceive the external environment, and such mentality guides the way they respond to it (Aaker, Kumar, and Day, 1995) (Bauer, , & Greyser, 1968) . Altuna et al (2009) observed that there was a strong correlation between customers’ general attitudes towards mobile advertising and customers’ responses to specific advertisements. For example, some advertisements were annoyed, whereas others were likeable and enjoyable. Thus, our research study has focused on the antecedents of consumer attitudes towards advertising via mobile devices In general. In this study, customer attitudes towards advertising via mobile devices have been measured using various dimensions.

Intention

Intention can be defined as a course of action that one intends to follow, or an aim that guides action or an objective. Accordingly, (Barnes, 2002) has stated that it is essential for marketers to understand the relationship between attitudes, intention to receive SMS ads and their actual usage behaviour. Based on the review of the literature and theoretical underpinnings, it is expected that there is a direct and positive relationship between customer attitude towards MMS advertisements, intention to receive MMS advertising and behavioural response towards MMS advertising.

Conceptual Model



III. METHODOLOGY

A survey was conducted to collect primary data. Questions are prepared as closed ended questions and in the research one of the ordinal measures used, it called Five points Liker’s scale" it is from 1 (Strongly disagree) to 5 (Strongly agree). The questionnaire for the purposes of this study consists of two major parts as Personal details and Research details. Questionnaires were issued to 200 customers who having Smart phone in Anuradhapura area. The language of the Questionnaire is in Sinhala medium (Sinhala version of the questionnaire was tested in order to make sure that the questions were easily understood).

Each completed questionnaire was checked immediately, and was entered for data analysis by using the Statistical Packages for Social Science (SPSS) statistical software. The distribution of demographic data applied the descriptive method of SPSS. In order to test item reliability of each factor, this study applied Reliability Analysis in SPSS. In order to test construct validity of each item, this study used Factor Analysis of SPSS. This study would like to test hypotheses between each factor and customer intentions through Regression Analysis, in order to find significant factor(s) and to contribute to the adapted research model.

IV. ANALYSING AND RESULT

Analysis and Results

Structural equation modelling (SEM)

Structural equation modelling or SEM is a very general, chiefly linear, chiefly cross-sectional statistical modelling technique. Factor analysis, path analysis and regression all represent special cases of SEM. This multivariate statistical analysis technique is used to analyze structural relationships. This technique is the combination of factor analysis and multiple regression analysis, and it is used to analyse the structural relationship between measured variables and latent constructs.

In this study, intention factors of Mobile Multimedia Message Advertising were consider as the independent variables or predictor variables, the customer intention was consider as the dependent variable and Attitude towards Mobile Multimedia



Message Advertisement was consider as the intermediate variable. Based on the Structural Equation model the research is to be explained and the corresponding hypotheses was be accepted or to be rejected.

Data reliability analysis

Reliability refers, obtain an index of the internal consistency of the scale as a whole, and identify problem items that should be extracted from future studies using the scale Byrne (1961).

Table 1: Reliability statistics

Variable	Cronbach's Alpha	N of Items
Entertainment	0.850	4
Informativeness	0.793	5
Irritation	0.654	9
Credibility	0.630	5
Personalization	0.836	5
Attitude	0.658	4
Intention	0.890	6

According to the analysis, the Cronbach a coefficient of all variables were above to 0.6 as shown in Table 1, which means that they are significant and highly reliable coefficients, so value is accepted.

Construct reliability and validity

Prior to developing the structural equation modeling for hypotheses testing, the reliability and validity of the study constructs need to be tested Bagozzi et al (1988). Reliability is a measure of how consistently a scale would give the same responses if data were collected at different points in time Hair & Anderson et al (2010). Cronbach's alpha coefficients were tested for each study construct to examine internal consistency and establish the reliability of the items in the constructs Cooper et al (2013) and Hair et al (2011). CFA results enable researchers to ascertain the construct validity of items. Hair and Anderson et al (2010) define construct validity as “the extent to which a set of measured items actually reflects the theoretical latent construct which those items are designed to measure”. Construct validity is established by assessing the convergent validity and discriminant validity of the items amongst study constructs Tabachnick et al (2012).

Convergent Validity

Hair et al (2006) define convergent validity as the “degree to which the measures of the same construct are correlated”. They suggest the main rule of thumb to infer convergent validity of a dataset is that the standardized factor loading values of items need to be above 0.5 and as per the table; factor-loading values of items were beyond the value 0.5.

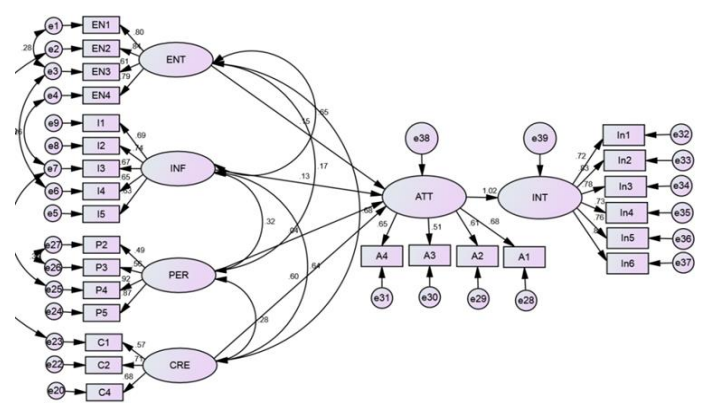


Figure 1: Factor-loading analysis.

- T=Entertainment
- EN1-EN4=Indicators to measure entertainment
- INF=Informativeness
- I1-I5=Indicators-to-measure-informativeness
- IRR=Irritation
- RR1-IRR4=Indicators to measure irritation
- PER=Personalization
- P1-P5=Indicators to measure personalization
- CRE=Credibility
- C1-C4=Indicators-to-measure-credibility
- AAT=Attitude
- A1-A4=Indicators to measure attitude
- INT=Intention
- In1-In6=Indicators to measure intention

Table 2: Factor-loading values of constructs

Measure s of Construc ts	Item loadin g	Measure s of Construc ts	Item loadin g	Measu res of Construc ts	Item loadin g
Entertain ment	0.80	Credibilit y	0.67	Person alizatio n	0.49
EN1	0.84	C1	0.71	P2	0.92
EN2	0.61	C2	0.68	P3	0.87
EN3	0.71	C4		P4	
EN4				P5	
Informati veness	0.69	Attitude	0.65	Intentio n	0.72
I1	0.74	ATT1	0.51	IN1	0.83
I2	0.67	ATT2	0.61	IN2	0.78
I3	0.65	ATT3	0.68	IN3	0.73
I4	0.63	ATT4		IN4	0.76
I5				IN5	0.84
				IN6	



According to the above figure indicators and variables were accepted and which were rejected with the below 0.5 of factor loading value. In here C1 and P2 have the nearest value to accepted level so these indicators can be taken as accepted indicators. Table 3 presents an assessment of the measurement model. Most questions had factor loading scores above 0.63, variances extracted for these constructs were all above 50 percent. Cronbach's alphas were also higher than 0.7 as shown in the table 3 these results of the convergent validity tests provided evidence for convergent validity of the measurement model.

Discriminant validity

Discriminant validity is the extent to which a construct is truly distinct from other constructs Hair et al (2010). The rule is that variables should relate more strongly to their own factor than to another factor. This can be ensured by Average Variance Extracted (AVE) and Squared Multiple Correlations (SMC). In the discriminant validity all SMC values should be less than AVE values.

Table 3: Discriminant validity

Constructs	ENT	INF	CRE	PER	ATT	INT
ENT	0.6					
INF	0.42	0.5				
CRE	0.41	0.03	0.5			
PER	0.03	0.08	0.07	0.5		
ATT	0.03	0.05	0.14	0.08	0.6	
INT	0.24	0.06	0.04	0.11	0.04	0.6

Table 3 reports the results of discriminant validity, which is checked by comparing the diagonal to the non-diagonal elements. In here AVE shows by bold numbers and SMC were less than AVE which is calculated. According to the result all items fulfilled the requirement of discriminant validity.

Model fit indices

Various fit statistics are generally calculated and reported to provide insights about the overall model fit Hu et al (1999). The most widely applied model fit indices and discussion of each of these indices are presented in Table 4

Table 4: Model fit indicators

Fit indices	recommended	Overall structure
Non-significant differences - P-value of Chi-square	(p>0.05)	0.072
Degree of freedom ratio - X²/df	below 5.0	2.166
Comparative fit index - CFI	>0.90	0.926
Goodness of fit index- GFI	>0.90	0.904
Adjusted goodness of fit index - AGFI	>0.80	0.858
Standardized root mean square residual - SRMR	<0.05	0.041
Root mean square error of approximation - RMSEA	<0.08	0.077
Trucker and Lewis index- TLI	>0.90	0.903

For models with good fit, most empirical analyses suggest that the ratio of chi-square normalized to degree of freedom, (x²/df) should not exceed 3.0 Carmines et al (1981). In addition, the obtained goodness-of-fit (GFI) measure was 0.904 and the adjusted goodness-of-fit (AGFI) measure was 0.858, respectively, which are both higher than the suggested values. The other two indices of good fit – the normalized fit index (NFI) and the comparative fit index (CFI) are recommended to exceed 0.90. The results also meet this requirement. Finally, the discrepancies between the proposed model and population covariance matrix, as measured by the root mean square error of approximation (RMSEA), are in line with the suggested cut-off value of 0.08 for good fit Byrne (1998).

CFA result: measurement model

CFA was run for these constructs to evaluate the model fitness and confirm the model for the subsequent analysis as SEM. The CFA of the independent variables had a CMIN/df value below the cutoff point. Hence, model is fitted in line with Chi-Square value to degrees of freedom. Also, fit indices. CFI, GFI and AGFI, were above 0.9, with TLI was close to the value 0.90. Additionally, RMSEA and SRMR values were below the cut-off points. These indices suggest a good model approximation to the sample data. According to the figure: 1 shows the factor loading values and table 4 shows the model fit summary. There are some values with indicators below the 0.5. These measurement indicators had to be removed from this analysis such as all the indicators of irritation and C5, A3, P1, C3.

Table 5: Summary result of model fit measurement model

Fit indices	recommended	Overall structure
Non-significant differences - P-value of Chi-square	(p>0.05)	0.055
Degree of freedom ratio - X²/df	below 5.0	3.755
Comparative fit index – CFI	>0.90	0.742
Goodness of fit index- GFI	>0.90	0.764
Adjusted goodness of fit index - AGFI	>0.80	0.697
Standardized root mean square residual - SRMR	<0.05	0.53
Root mean square error of approximation - RMSEA	<0.08	0.118
Trucker and lewis index- TLI	>0.90	0.698

Fit indices	recommended	Overall structure
Non-significant differences - P-value of Chi-square	(p>0.05)	0.072
Degree of freedom ratio - X²/df	below 5.0	2.166
Comparative fit index – CFI	>0.90	0.926
Goodness of fit index- GFI	>0.90	0.904
Adjusted goodness of fit index - AGFI	>0.80	0.858
Standardized root mean square residual - SRMR	<0.05	0.041
Root mean square error of approximation - RMSEA	<0.08	0.077
Trucker and Lewis index- TLI	>0.90	0.903

After analysing the new model fit without errors, following measurements could be taken with the following measures shows in the table 5

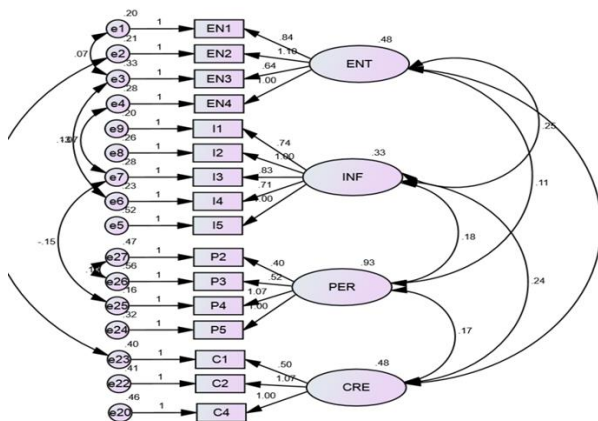


Figure 2: Factor-loading analysis 2

SEM and hypotheses testing

Hypothesis testing is an act in statistics whereby an analyst tests an assumption regarding a population parameter. According to the study, following result can be taken as the

summary of the hypothesis testing. Researchers use SEM to test hypotheses, SEM enables researchers to test relationships amongst multiple constructs simultaneously, Tabachnick et al (2007). Hair et al (2010) define SEM as “the multivariate technique combining aspects of factor analysis and multiple regressions that enable researchers to simultaneously examine a series of interrelated dependent relationships amongst the measured variables and latent constructs as well as between several latent constructs”.

A SEM revealed the following fit indices: CMIN/df value of 3.06. Value of 3.06 is below the cutoff point. Hence, model is fitted in line with Chi-Square value to degrees of freedom. Also, fit indices. CFI, GFI and AGFI, were above 0.9, and with TLI were close to the value 0.90. Additionally, RMSEA and SRMR values were below the cut-off points. These indices suggest a good model approximation to the sample data. This is the right time to check the hypotheses. Because, results of the structural model of the depending variables with covariance relationship among antecedents revealed that, the structural model is fitted and recognized as the valuable model based on advanced statistical technique as CFI, GFI and AGFI in the SEM. In here there are six hypotheses which boiled based on the previous research literature had to check whether is it accepted or rejected.

H1= There is a significant impact between entertainment and Attitude

H2= There is a significant impact between informativeness and Attitude

H3= There is a significant impact between credibility and Attitude

H4= There is a significant impact between personalization and Attitude

H5= There is a significant impact between Attitude and intentions

H6= There is a mediate of credibility on intention through attitude

Table 6: Hypothesis testing

Direct Effects of model	Standardized Regression Weights	UnStandardized Regression Weights	Standard Error	Significant Level
ENT-ATT	0.148	0.101	0.071	0.157
INF-ATT	0.134	0.109	0.078	0.162
PER-ATT	0.044	0.021	0.029	0.466
CRE - ATT	0.604	0.434	0.099	0.001
ATT- INT	0.819	0.707	0.188	0.001
CRE - INT	0.834	0.090	6.894	0.001

As per the table 7 Independent, Variables such as Entertainment, Informativeness, and personalization had not significant direct effect on Depending Variable of Attitude. However, Credibility had a significant impact on Attitude and



Attitude had a significant effect on Intention. The significant levels were also at 0.001. According to these results, first three hypotheses (H1-H3) were rejected and last three hypotheses (H4 – H6) were accepted.

Table 7: Results in hypothesis testing

Mentions Direct Effect	Standardized Regression Weights	UnStandardized Regression Weights	Significant Level	Conclusion
ENT - ATT	0.148	0.101	0.157	H1- Rejected
INF - ATT	0.134	0.109	0.162	H2- Rejected
PER - ATT	0.044	0.021	0.466	H3- Rejected
CRE - ATT	0.604	0.434	0.001	H4- Accepted
ATT - INT	0.819	0.707	0.001	H5- Accepted
CRE - INT	0.834	0.090	0.001	H6- Accepted

Table 8 describes the acceptance and rejections of the steted hypothesis. According to this result, Attitude was a significant predictor for intention to reuse (H5). The path coefficient from attitude to intention to reuse was significantly stronger. Entertainment (H1), Informativeness (H2) and Personalization (H3) were not significant predictors of attitude. (H6c). Table 7., summarizes the results of hypotheses testing. Credibility had a very significant effect on Attitude and directly on intention.

V. FINDINGS

A number of factors like Entertainment, informativeness, irritation, personalization, and credibility drives customer attitude towards intention. With the aid of secondary data, various factors that affect consumer intention were highlighted in the literature review. Based on these factors a questionnaire survey was conducted to collect primary data and determine the effect of these factors on customer intention. Data were collected from a sample of 200 customers using Anuradhapura district. From the gathered data, the majority of the respondents were male and aged 21-30 years old. Most of the respondents' education level is high school while income level is below Rs20000. As well as most of them are working in public sector and married.

The finding from the research that, out of all the test table hypotheses, there are three-rejected hypothesis such as H1, H2, H3 and 3 hypotheses are accepted such as H4, H5, H6. Further, the findings reveal that, Attitude variables have significant impact on customer intention directly as well as credibility directly affect to the customer attitude and intention towards mobile multimedia message advertisements. In order to answer what is the influence of Mobile multimedia message advertisements on customer intention, respondents were asked to give weight to these aspects and then using SEM analysis, and these factors are presented in order of their strength to affect factors of mobile multimedia message advertisements on customer intention.

Results of this study substantially contribute to theoretical and managerial understanding of consumer attitude toward mobile multimedia message ads in a developing district where Anuradhapura is. At the theory level, this study has produced greater understanding of the variables that appear to be most responsible in structuring consumer attitude and intention with regard to mobile ads in Anuradhapura district. In other words, the model as a whole means that when a consumer forms an attitude toward a mobile multimedia ad, s/he may retrieve the constructs directly related to it. It would be interesting to know what factors best contribute to negative intention toward mobile advertising and how attitudes can be changed. From a practical standpoint, results of this study could provide managers with greater insight concerning the potential benefits associated with using perceived quality strategies. This research clarifies the sometimes-confusing roles of entertainment, informativeness, and irritation in case of mobile multimedia message ads. Practitioners may use the findings to design marketing programs with mobile multimedia message ads that create positive intention and avoid negative effects.

VI. CONCLUSION

In general, this study tested the direct influence of entertainment, informativeness, irritation, and credibility on consumer attitude toward and its effect on consumer intention towards mobile multimedia message advertisements. The results of the proposed model where only one variable (credibility) has shown direct positive and significant influence on consumer attitude toward mobile multimedia message advertisements. Researcher hypothesized and validated that the credibility of a mobile multimedia advertising message will have a direct significant impact on consumer attitude toward advertisement. As the empirical data shows, the respondents not held significant impact on attitudes with regard to entertainment, informativeness, irritation and personalization about receiving mobile multimedia message ads. This finding is contradictory compared to the previous research (Bauer et al. 2005). This may have been because the consumers in Anuradhapura found that mobile ads were not very entertaining or informative or they may have not been exposed to many entertaining or informative mobile advertisements, or it may have been because of cultural factors. However, this finding shows that the success of mobile advertising activities strongly depends on message characteristics. Marketers cannot solely rely on the fact that an advertising message sent via a mobile device will be read and remembered automatically. On other hand, they have not considered mobile ads irritating; they are not annoyed from receiving mobile ads. Thus, if the mobile advertisers can present the mobile ads pleasingly with appropriate information, consumers will not become annoyed and there is a fair possibility that they engage in ads. Mobile advertising activities provide many new opportunities and challenges for marketers. They enable the ability to address consumers individually and allow for direct and reciprocal communication with customers. The effects of advertising via mobile devices have not yet been fully investigated in emerging markets



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