Exploring the model for multimedia messaging services for special context

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Exploring the model for multimedia messaging services for special context

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Abstract: This research paper aims to explore a model for multimedia messaging services in contemporary marketing environment. There are many research studied in foreign countries regarding Multimedia Messaging service which is applicable to their cultural environment and context. But in Sri Lanka, there are lack of research studies regarding MMS marketing. This research study aims to fill this research gap and to establish a new model for the special context. Now-a-days marketers have reduced the paper advertisement, television advertisement and have shifted to mobile marketing. Mobile usage is an instant response giver to the marketers by the customers. In this way new methods of MMS are making business activities very much effective trends than past eras used on traditional methods. The main purpose of this research paper from the researchers' point of view is to develop a model to understand the significant role of MMS in contemporary marketing world. This research paper explores a model which gives a new insights of multimedia messaging service connected with marketing aspect to special context through analyzing the past researchers' conceptual models. This research paper is concluded by citing the past researchers' models and suggestions. Finally the researchers have found a new model for a special context

Keywords: Ease of use, Intention, MMS, Special context

Introduction

We are living in a dynamic era which is mostly influenced by the technology based resources. The usage of electronic equipment has been increased in the modern competitive environment. Marketing communication method has been changed due to the TD/ICT development (Dalgic and Leeuv, 1994).

Mobile devices are a part and parcel of humans' lives. Mobile phones are accepted by many consumers as it is useful for personal and buying purposes (Barwise and Strong, 2002). There is an explosion worldwide in the usage of handheld electronic communication devices, such as mobile phones, digital music players, and handheld Internet access devices are becoming more.

The huge number of adopters of these devices and of the related services indicates a growing mass audience for mobile electronic communication and promotion, an emerging mobile lifestyle, a popular channel for delivering mobile electronic services, and a mass market for executing mobile transactions. Marketers are trying to communicate their offerings in or through a new platforms (Zahay et al, 2004)

Communication to this audience can be delivered in the form of text, audio, or video. Consumers cannot only receive information from firms but also initiate interactions, actively sending requests or information to firms. Shankar and Balasubramanian's (2009) definition of mobile marketing as "the two-way or multi-way communication and promotion of an offer between a firm and its customers using a mobile medium, device or technology.".

Mobile marketing has been increased in the recent years in retailing. Due to the time constraint and location constraint the marketers are more concerned on the mobile marketing. The traditional way was, customers

entering into the retailer environment and making the location by themselves. But now this paradigm is upside down. Marketers approach the customers through mobile marketing, because the device is always with the customers and the marketers can enter the customers' environment anywhere at any time.

The mobility and the personal nature of the mobile device differentiate it from other electronic devices such as the television and personal computer and other equipments, with important implications for retailers. Unlike the TV and PC, the mobile device is a constant companion to the consumer. It is regarded as a personal accessory, is generally not shared, and potentially acts as a gateway to a close relationship between the consumer and the retailer. Furthermore, because the device is portable, it is an ideal supplementary channel for virtual e-tailing as well as physical retailing.

Mobile marketing related to evidences with many aspects (mobile communication, MA,SMS,MMS etc) this research has its scope – MMS. Before implementing or introducing a service or product or promotional method, it is important to identify customer need and their expectations (Interactive marketing issue- (Stewart and Pavlar, 2002). Technology based product or promotional method should consider the consumer acceptance towards the new offerings (TAM, Davis, 1986). Despite the marketing potential, academic or applied research in mobile marketing is still in its early stage (Barnes & Seornavacca, 2004). There are many models introduced by many authors (Matti Leppäniemi and Heikki Karjaluoto, 2005). But the each model has considered the specific factors and causes (Matti Leppäniemi and Heikki Karjaluoto, 2005, Venkatesh Shankar, Alladi Venkatesh, Charles Hofacker & Prasad Naik, 2010, Arno Scharl , Astrid Dickinger, Jamie Murphy, 2004)

Companies have adopted to innovative model from traditional model in the new era. Those days companies used manual system in production, marketing, sales etc. But nowadays they are using technology based applications which are very easy and quick to access and enhances the productivity of the organization.

In Northern part of Sri Lanka, people experienced a tremendous war experience for the past three decades and now have slowly moving to a new life where they are experiencing the new technology and products. People are using smart mobile phones where they have many applications for business purposes.

Research Gap

There is a lack of research studies related to MMS marketing in Sri Lanka. The authors in other context have done some research studies in the same filed. Role and mobile marketing communications in media strategy – Jonna Holland, 2010, Impliactions of M-Commerce (Balasubramaniam, and Peterson, 2002, Grong,W, and Liz,G 2008), Mobile message value based studies (Haghirian, P, Madlberger, M & Tanuskova, A 2005), Value and risk model and consumers M/M (Sultan,F, Gao,T, Rohm,A, and Wange 2012), Attitude based studies (Sandra –Luxton ,et al 2009), Mobile Marketing Model building – Matti Leppaniemi & Heikkis karjaluoto, 2007), Culture and Consumer Acceptance (Yoan, 2009, Wahlberg, A 2015, Craig, 2005 Samuel Craig, et al 2014).

There are many studies done based on technology: Technology as a driver of customer satisfaction was studied by Sanjeevan & Shivany (2011), Factors affect for Technology usage on information searching (Karunarathna, Dahanayeke and Tennakoon, 2014), An ICT based Surveillance system for Controlling Dengue Epidemic In Sri Lanka (Rukshan and Miroshan, 2014), Factors influencing mobile advertising acceptance (Shivany, 2010), Use of internet based E-sources among undergraduates (Wijesinghe, U.S. Thathsarani and Senavirathna, 2014), Integrated mobile marketing communication and value technology as a mediator (Fazeela, and Shivani, 2010), Factors influencing consumer's trust on E-Commerce adoption in Sri Lanka (Ilmudeen, 2014).

Research Problem and Research Questions

Sri Lanka has been enjoying its technology transformation from 2009, due to the end of war, companies try new communication platforms for their customer base. Northern Sri Lanka, now enjoying a great outcome from the technology investment by the government and the private organization which pursue the remarkable usefulness to the society. Northern Sri Lanka, and its customers try to enjoying new products, service experience, technology acceptance, now they are very parallel to the international world. Many companies compete their selves to attract the consumers through many differentiators. Technology as a differentiator and a satisfaction course in Northern Sri Lanka (Sanjeevan, and Shivany 2011). Before the introduction of new media or method or offer it is important to study the relatedness to the context.

To fill the gap, this study answers the Research Question :- What MMS delivery model is appropriate to a special context?

Research objectives

1. Build a framework from the literatures on mobile marketing, mobile commerce and integrated mobile marketing communication

2. Provide a comprehensive framework intended to guide research effort focusing on mobile multimedia message services

3. Aid practitioners in their quest to achieve MMS success

4. Provide a broad delineation as to how mobile multimedia message service strategy integrated into the firms' overall marketing communication

Literature Review

Past researchers through their empirical study stated that their findings confirm the positive effects of multimedia on entertainment and informativeness in the context of location-aware advertising. Multimedia appears to have a greater impact on informativeness compared to entertainment. This result reinforces prior studies investigating the effects of multimedia in enhancing information quality and richness. The comparatively weaker effects on entertainment could be due to the fact that the simulated MMS advertising messages in their experiment are still not sufficiently strong enough to induce a higher entertainment perception (Oh, L.B. and Xu, H., 2003). At the same time the study on "Exploring factors influencing mobile users' intention to adopt multimedia messaging service" in 2011, clearly explains that, it is a simple, natural and attractive way for people to communicate via MMS. While providing such rich content with various multimedia formats, MMS needs to attract users with several desirable characteristics including ease of use and relative advantage, such as comfort, time saving, and flexibility (Chang, S.E. and Pan, Y.H.V., 2011).

Another empirical study of understanding user acceptance of multimedia messaging services in 2007, suggested that perceived media richness significantly affects shaping of beliefs (perceived usefulness, perceived ease of use, and perceived enjoyment) regarding MMS usage, practitioners should endeavor to raise users' perceived media richness of MMS (Lee et al, 2007). The middle of transformation that is going to extremely change the business and marketing activities is wireless marketing especially for mobile marketers. Now-a-days the introduction of 3G, 4G net works and other technologies are the growing facilitators in the wireless networks providers for developing services provided on existing network services and allowing new mobile net work services which were not possible ever before (Leppaniemi, M. and Karjaluoto, H., 2005).

Past researchers stated that most of the technology adopters and potential adopters' motivate element is compatibility, it is important to ensure that MMS fits well with the existing values and lifestyles of the adopters. To achieve that, it is important to understand how MMS can be made to be more compatible with the adopters' lifestyles and needs (Hsu, C.L., Lu, H.P. and Hsu, H.H., 2007). Scharl and his team have done a study as "Diffusion and success factors of mobile marketing" in 2005. They have suggested some recommendation through their research study to the future researchers. Future researchers should investigate emerging standards such as MMS and their impact on planning, executing and evaluating mobile marketing campaigns. In 2010, Venkatesh Shankar and his team suggested the mobile marketing, which involves two- or multi-way communication and promotion of an offer between a firm and its customers using a mobile medium, device, or technology, is growing in importance in the retailing environment.

Methodology

In order to obtain the research objectives, the archival method was conducted by the researchers for this study. Archival research is research involving sources held in an archives, a special collections library or other repository. Archival sources can be manuscripts, documents, records (including electronic records), objects, sound and audiovisual materials or other materials (Mare J. Ventresca et al, 2001). Secondary data analysis is analysis of data that was gathered by someone else for another primary purpose. The utilization of this existing data provides a viable option for researchers who may have limited time and resources (Johnston, 2014). And also Andrews and team (2012) stated that in a time where vast amounts of data are being collected and archived by researchers all over the world, the practicality of utilizing existing data for research is becoming more prevalent.

This review process includes (i) find out the literatures from the sources such as journals, articles and other research papers relating to the review topic, (2) analyzing, (3) identifying the gaps in past literature models, (4) proposing a new process model of the review. This review process considers the research works on "Multi Media Messaging Services for Special Context". Therefore finally, this study has used new insights and ideas from experts in mobile marketing (Melissa P. Johnston 2014).

Data Presentation and Analysis

This section explores the model related to MMS delivery to consumers and the critical evaluations on the models.
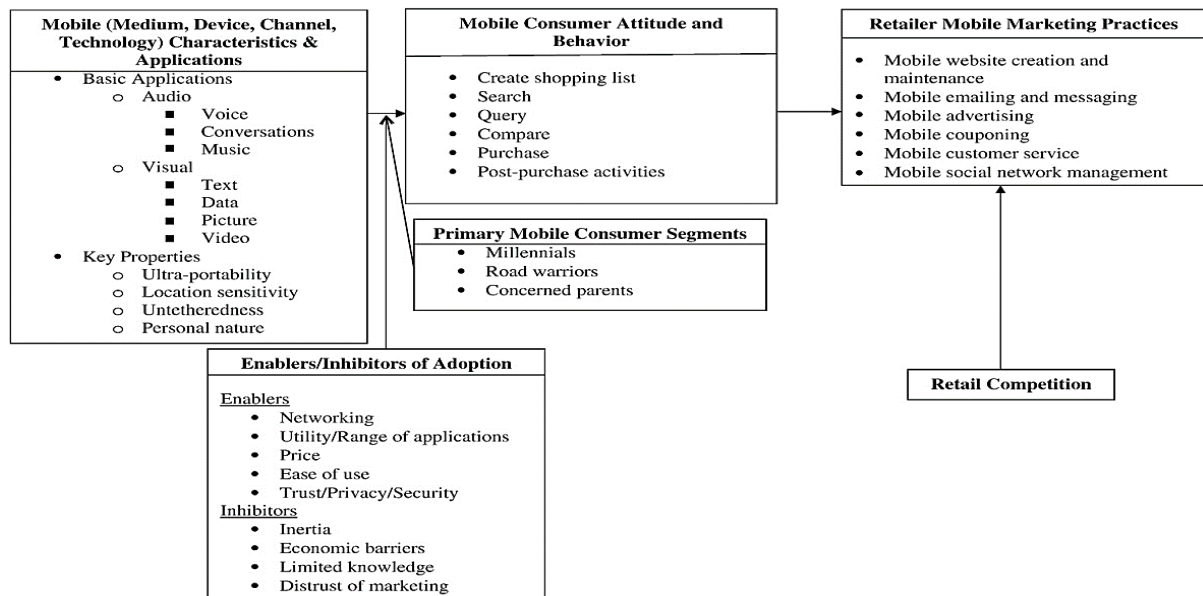
Model 1
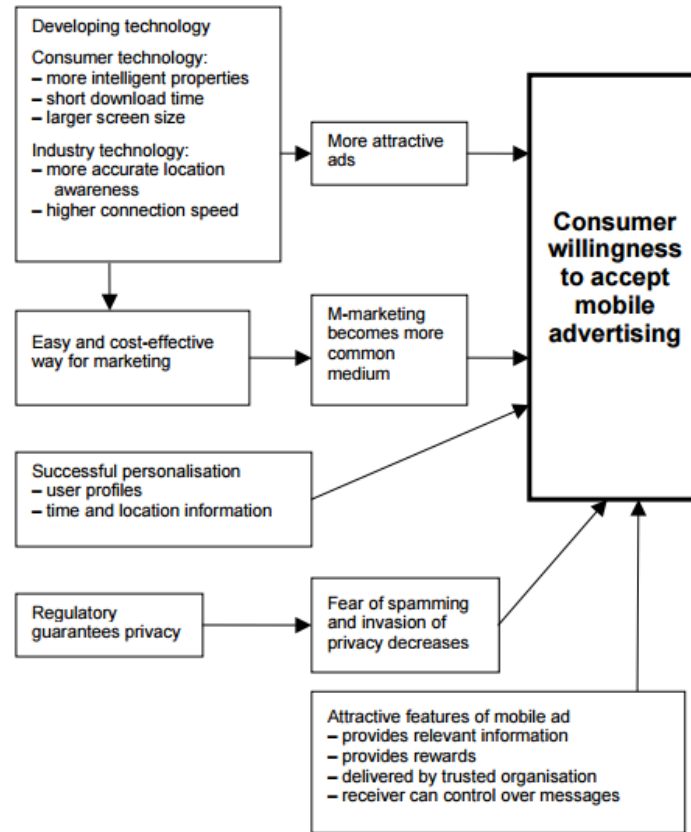
Source: Matti Leppaniemi and Heikki Karjaluoto , 2005

The purpose of this model 1 is to build a conceptual model of consumers' willingness to accept mobile advertising. According to the purpose, this model was proposed based on several industry and consumer specific factors which are influenced on the acceptance of mobile advertising. In the model, it shows the development of mobile technology which includes consumer technology and industry technology. Consumers gain benefits from technological advancements of mobile phones such as the intelligent properties, short downloading time and larger mobile phone's screen size. Then in case of industry technology, organizations gain benefits such as more accurate location awareness and higher connection speed. Thus this technology development not only enables the organizations to create more attractive ads but it is a cause for the emergence of M-Marketing as a common medium because it is an easy and cost effective way for marketing. So the more attractive ads and M-Marketing had been taken to identify the influence on consumers' willingness to accept mobile advertising.

Mobile medium offers new opportunities to personalize messages. User profiles as well as time and location information are stored individually in the databases by the organizations enhances consumers' willingness to accept m-advertising. Regulations that guarantee consumers' privacy which enhance consumers' willingness to accept m-advertising when doing the message delivery by using a trusted source as opposed to an unknown one, consumers' will accept it more. So consequently, fear of spamming and invasion of privacy will be decreased. Attractive features of mobile ad such as provide relevant information & rewards, deliver message by using trusted and well known organization enable receivers to control over messages. It enhances the willingness to accept mobile advertising obviously. Consumer behavior context study had not been studied in this model. This is a gap in this model.
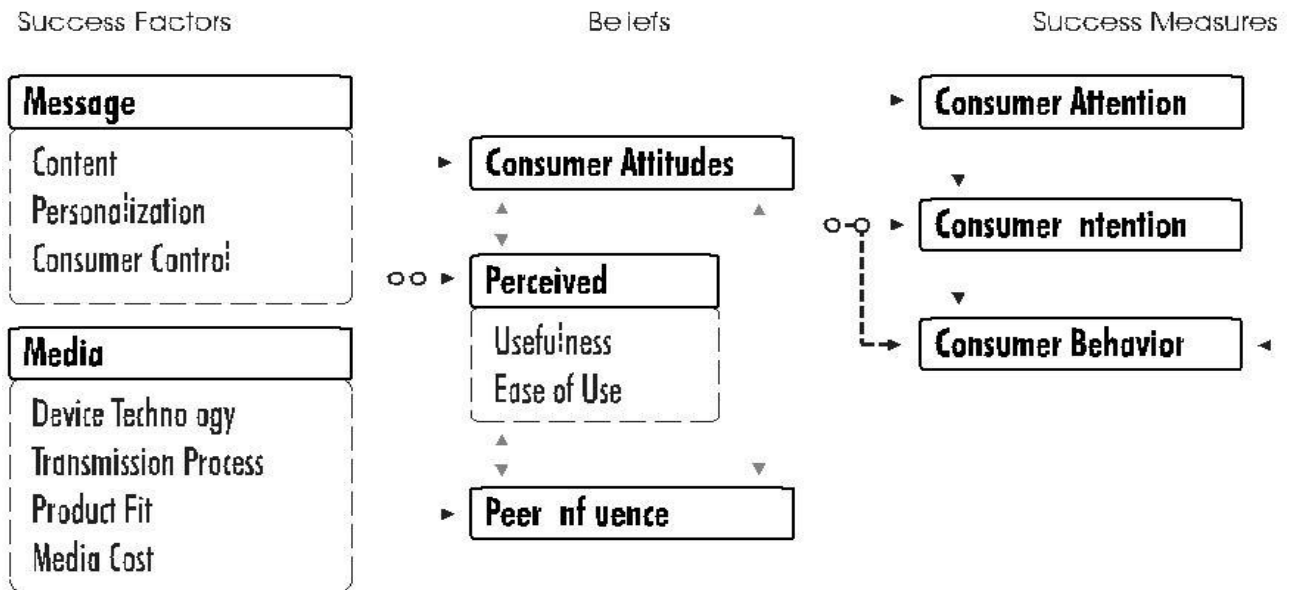
Model 2

| Mobile (Medium, Device, Channel, Technology) Characteristics & Applications |
| Basic Applications |
| o Audio |
| ▪ Voice |
| ▪ Conversations |
| ▪ Music |
| o Visual |
| ▪ Text |
| ▪ Data |
| ▪ Picture |
| ▪ Video |
| Key Properties |
| o Ultra-portability |
| o Location sensitivity |
| o Untetheredness |
| o Personal nature |

Mobile Consumer Attitude and Behavior
- Create shopping list
- Search
- Query
- Compare
- Purchase
- Post-purchase activities

Primary Mobile Consumer Segments
- Millennials
- Road warriors
- Concerned parents

Retailer Mobile Marketing Practices
- Mobile website creation and maintenance
- Mobile emailing and messaging
- Mobile advertising
- Mobile couponing
- Mobile customer service
- Mobile social network management

Retail Competition

Enablers/Inhibitors of Adoption

Enablers
- Networking
- Utility/Range of applications
- Price
- Ease of use
- Trust/Privacy/Security

Inhibitors
- Inertia
- Economic barriers
- Limited knowledge
- Distrust of marketing

Source: Venkatesh Shankar, Alladi Venkatesh,Charles Hofacke&Prasad Naik,2010

According to the model 2, it comprises three key entities which are consumers, the mobile and the retailer. The above model addresses six key related issues. First one is key mobile properties which include audio and visual facilities as basic applications and ultra- portability, location sensitivity, untetheredness and personal nature as key properties. Second one is mobile consumer activities like create shopping list, search required items, put queries, compare with other products, purchasing and post purchase activities. Next key issue is mobile consumer segments. This segmentation is done by segmented the mobile consumers as millennial, road warriors and concerned parents. Then, there are some enablers and inhibitors which determine the adoption of mobile phone usage. Mobile adoption enablers such as networking, range of applications, price, ease of use and trust influence on the adoption of mobile phone usage by consumers. Mobile adoption inhibitors such as inertia, economic barriers, limited knowledge and distrust of marketing are the factors negatively impact on the mobile marketing. It also addresses retailer mobile marketing strategies and identifies the customer related and organizational challenges. Retailers are doing the mobile marketing practices on mobile website creation and maintenance, mobile emailing and messaging, mobile advertising, mobile couponing, mobile customer service and mobile social network management.

Finally the competition from the same product market retailers' influence on the particular retailer's mobile marketing practices. This model failed to point out regular customer service which is a gap in this model. Regular customer service should have impact on retailer mobile marketing practices.
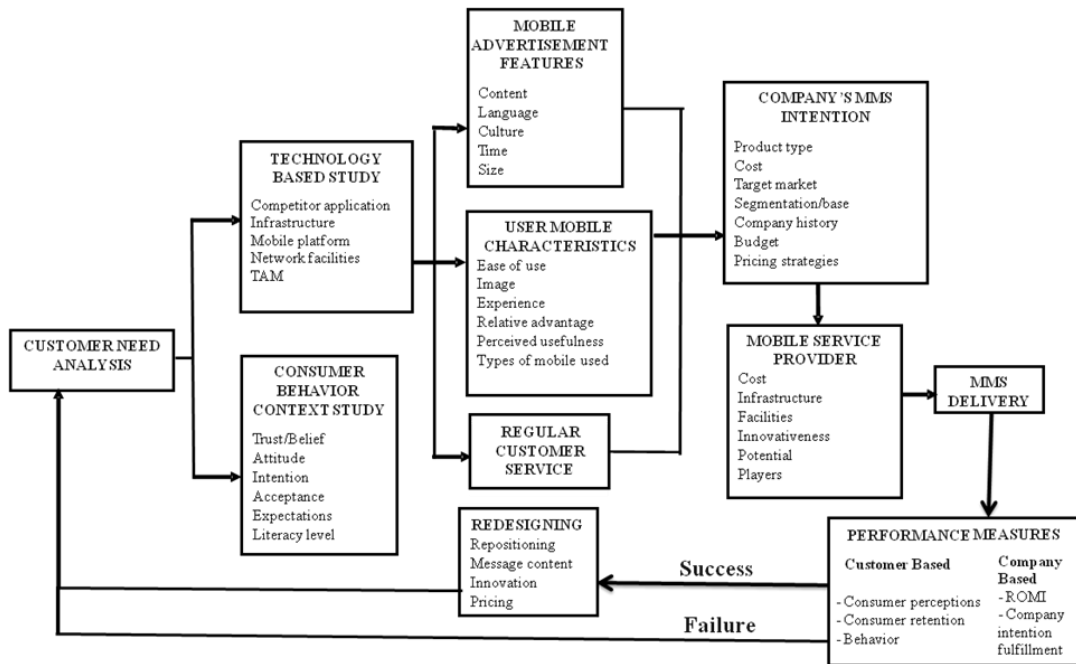
Model 3

Success Factors   Beliefs   Success Measures

Message
- Content
- Personalization
- Consumer Control

Media
- Device Technology
- Transmission Process
- Product Fit
- Media Cost

Consumer Attitudes

Perceived
- Usefulness
- Ease of Use

Peer Influence

Consumer Attention

Consumer Intention

Consumer Behavior

Source: Arno Scharl, Astrid Dickinger, Jamie Maphy,2003

According to the model 3, it distinguishes two categories of success factors, message success factors and media success factors both influence on the factors; consumer attitudes towards mobile services, perceived usefulness & ease of use of these services and peer influence. Message success factors include content, personalization and consumer control. Media success factors include device technology, transmission process, product fit and media cost. Then they have an influence on three dependent success measures: consumer attention and consumer behavior. This model consists of success measures, where they failed to find out the customer based, company based performance measures which indicates the overall success or failure. It is a gap in this model.

Findings

MMS Delivery Model

Data collection and analysis from the theories and literatures, the initial model was developed by the researchers. This model was given to 5 respondents (Academicians and experts in technology) and got the suggestions and opinions from the respondents. And finally the researchers came up with the model which is shown above. The researchers initially wanted to analyze the customer needs and wants. The step is to have a consumer behavior context study and technology based study.

Consumer behavior context study includes the consumers' behavior, attitudes, their intentions, their trust /belief, literacy level, their expectations and acceptance in the society.

Technology based study is all about the telecommunication infrastructure, mobile platform, network facilities, Technology acceptance model and competitor application. Under this study, researchers have identified three major aspects that are mobile advertisement features, user mobile characteristics and regular customer service.

The content of the message, the language, the culture, the time of the ad and the size of the ad will add value to the mobile advertisement features. At the same time, the consumer will look into for the user friendly approach, the image or animation, the experiences, relative advantage, perceived usefulness and type of mobile used under the user mobile characteristics. Companies need to evaluate whether they are providing technology based customer services regularly.

After completing this two major studies, companies need to evaluate the MMS intention according to their product type, cost, target market, segmentation basis, company history, budget and pricing strategies. After deciding the company's MMS intention, the company should search for mobile service provider. The company will consider the providers' cost, infrastructure facilities, innovativeness, future potential, and the key players of the telecommunication industry.

Company will go through all these procedures and put effort to deliver the MMS in a successful manner. After delivering the MMS, company needs to measure the performance of service, whether it is success or not. The performance can be categorized into two basis, customer based measures and company based measures.

Consumer perceptions, consumer retention and their behavior will be measured to assess the performance success in regard to customers. Company based performance is measured by Return on Marketing Investment (ROMI) and company intention fulfillment.

By measuring those performance factors, the company would be able to find out whether it is success or not. If it is success, the company has to redesign it over the time period. They have to reposition the MMS again, redesign the pricing strategies in accordance to the inflation rate, redesigning the content and making new innovative ideas over the time. Even though, the company has to analyze the customer needs and want again. On the other hand, if it goes failure, the company needs to analyze customer need from the beginning.

Conclusion

Mobile marketing, which involves two- or multi-way communication and promotion of an offer between a firm and its customers using a mobile medium, device, or technology. Accordingly we proposed a conceptual framework that comprises mobile technology, customer context and company's MMS intention.

This paper presented a conceptual model for multimedia messaging services marketing for special context based on a qualitative survey among academic experts in the marketing field. The results of this qualitative study give managers an insight to current mobile marketing and mobile advertising through multimedia messaging services. These results also will help to future research area of technology adoption in Multimedia Mobile Marketing. Due to the time constraint, the researchers were not able to collect the data from mobile service providers and business organisations

References

Andrews, L., Higgins, A., Andrews, M.W. and Lalor, J.G., 2012. Classic grounded theory to analyse secondary data: Reality and reflections. *The Grounded Theory Review*, *11*(1), p

Balasubramanian, S., Peterson, R.A. and Jarvenpaa, S.L., 2002. Exploring the implications of m-commerce for markets and marketing. *Journal of the academy of Marketing Science*, *30*(4), p.348

Barnes, S.J. and Scornavacca, E., 2004. Mobile marketing: the role of permission and acceptance. *International Journal of Mobile Communications*, *2*(2), pp.128-139.

Barwise, P. and Strong, C., 2002. Permission-based mobile advertising. *Journal of interactive Marketing*, *16*(1), pp.14-24.

Chang, S.E. and Pan, Y.H.V., 2011. Exploring factors influencing mobile users' intention to adopt multimedia messaging service. *Behaviour & information technology*, *30*(5), pp.659-672.

Dalgic, T. and Leeuw, M., 1994. Niche marketing revisited: concept, applications and some European cases. *European Journal of Marketing*, *28*(4), pp.39-55

Davis Jr, F.D., 1986. *A technology acceptance model for empirically testing new end-user information systems: Theory and results* (Doctoral dissertation, Massachusetts Institute of Technology).

Dickinger, A., Haghirian, P., Murphy, J. and Scharl, A., 2004, January. An investigation and conceptual model of SMS marketing. In *System sciences, 2004. proceedings of the 37th annual hawaii international conference on* (pp. 10-pp). IEEE.

Gao, T., Rohm, A.J., Sultan, F. and Huang, S., 2012. Antecedents of consumer attitudes toward mobile marketing: A comparative study of youth markets in the United States and China. *Thunderbird International Business Review*, *54*(2), pp.211-224.

Haghirian, P., Madlberger, M. and Tanuskova, A., 2005, January. Increasing advertising value of mobile marketing-an empirical study of antecedents. In *System Sciences, 2005. HICSS'05. Proceedings of the 38th Annual Hawaii International Conference On* (pp. 32c-32c). IEEE

Hsu, C.L., Lu, H.P. and Hsu, H.H., 2007. Adoption of the mobile Internet: An empirical study of multimedia message service (MMS). *Omega*, *35*(6), pp.715-726.

Johnston, M.P., 2014. Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries (QQML)*, *3*, pp.619-626

Lee, M.K., Cheung, C.M. and Chen, Z., 2007. Understanding user acceptance of multimedia messaging services: An empirical study. *Journal of the American Society for Information Science and Technology*, *58*(13), pp.2066-2077.

Leppaniemi, M. and Karjaluoto, H., 2005. Factors influencing consumers' willingness to accept mobile advertising: a conceptual model. *International Journal of Mobile Communications*, *3*(3), pp.197-213.

Luxton, S., Mahmood, U. and Ferraro, C., 2009. Mobile phone marketing: challenges and perceived attitudes. In *Australian and New Zealand Marketing Academy "ANZMAC", Conference paper, Monash University Research Publications* (pp. 1-11).

Merisavo, M., Kajalo, S., Karjaluoto, H., Virtanen, V., Salmenkivi, S., Raulas, M. and Leppäniemi, M., 2007. An empirical study of the drivers of consumer acceptance of mobile advertising. *Journal of Interactive Advertising*, *7*(2), pp.41-50.

Oh, L.B. and Xu, H., 2003. Effects of multimedia on mobile consumer behavior: An empirical study of location-aware advertising. *ICIS 2003 Proceedings*, p.56.

Scharl, A., Dickinger, A. and Murphy, J., 2005. Diffusion and success factors of mobile marketing. *Electronic commerce research and applications*, *4*(2), pp.159-173.

Shankar, V., Venkatesh, A., Hofacker, C. and Naik, P., 2010. Mobile marketing in the retailing environment: current insights and future research avenues. *Journal of interactive marketing*, *24*(2), pp.111-120.

Shivany, S. and Sanjeef, A., 2011. Impact of information technology on customer satisfaction: Special application to the post conflict banking environment, International research conference on competency building strategies in business & technology, Sai Ram Institute of business management, published volume (2), pages 173-178

Zahay, D., Griffin, A. and Fredericks, E., 2004. Sources, uses, and forms of data in the new product development process. *Industrial Marketing Management*, *33*(7), pp.657-666.

Annexure