# Improving Viral Marketing Campaign via Mobile Instant Messaging (MIM) Applications

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**Abstract** – *The emergence of new media provides new opportunities for marketing. Mobile instant messaging (MIM) applications such as WhatsApp and Viber are growing in both number of users and popularity. These applications can be used for viral marketing campaigns. The success of these campaigns depends on recipients' willingness to forward the advertisement message to others. Hence, it is important to recognize and analyze the factors that influence individuals' intention to forward a viral message. The purpose of this paper is to better understand the factors that motivate individuals to participate in viral marketing campaign via MIM applications. The paper argues that the predictors (entertainment and purposive value of message, market mavenism, social identity, and MIM applications) influence individuals' intention to forward a viral message and it is anticipated that all the contributing factors have a positive effect on it. A paper survey will be given to 400 students of University Technology Malaysia (UTM). The data will be subjected to statistical analyses with SPSS. The study will provide guidelines to the improvement of viral marketing campaign through MIM applications.* **Copyright © 2015 Penerbit Akademia Baru - All rights reserved.**

**Keywords:** Viral Marketing, MIM Application, Entertainment and Purposive Value of Message, Market Mavenism, Social Identity

## 1.0 INTRODUCTION

Companies need effective advertising to remain competitive. Traditional advertising medium such as newspaper, billboard, magazine, and radio are not as effective as the past because consumers are spending their time online [1]. International Telecommunication Union (ITU) [2] anticipated there will be about 3.2 billion internet users by the end of 2015 and mobile broadband penetration will achieve 47%, a value that grew 12 times since 2007. It proves that information and communication technologies are key drivers of the information society. Technology and the Internet have revolutionized all aspects of the advertising industry. With the emerging technologies such as mobile internet, the number of TV viewers is declining considerably [3], traditional radio audiences decreased and people prefer surfing internet instead. Modern customers have less attention to traditional advertising and consequently many companies minimized spending on traditional advertising [4]. Ninety two percent of consumers valued friends and family recommendation over all forms of advertising and sixty four percent of marketing executives believed that word of mouth is the most effective form of marketing [5]. Ninety percent of customers do not buy products and services that involved in the negative

word of mouth communication [6].With the emergence and growth of the Internet, more and more people went online and shared their experience and product information. Peer-to-peer referrals have increased dramatically, and marketers have tried to use their potential through viral marketing campaigns [7,8]. Viral marketing is electronic version of traditional word-of-mouth advertising [9]. In a viral marketing campaign, an organization intends to encourage customers to forward the marketing message to their contacts [10]. Those customers who are attracted in viral marketing campaign likely to be more loyal than those attracted through regular marketing activities [11].

The viral marketing campaign can be done via different transmission channel such as email, SMS, Social networking sites (SNS) and recently MIM applications. The emergence of new media provides new opportunities for marketing. In the era of high speed data network such as 4G, people use mobile instant messaging to communicate with others in every-day life [12]. Cell phone ownership increased dramatically and result in a new area for WOM communication which called mobile viral marketing [13]. Mobile devices provide higher flexibility in space and time which enable consumers to be online more continually [14]. The emergence of MIM applications, exposed traditional SMS in danger of losing its market as the dominant mobile messaging service. MIM applications such as WhatsApp, Viber, Line, etc which install and run on personal digital assistant such as tablets and smartphones, have become very popular worldwide and have generated significant demands [15] and enable consumers to send and receive text, photo, and video message, at very low or no cost [16,17]. MIM is more user friendly and has more features in comparison with traditional short message services (SMS). In addition, MIM offers variety of instant communication options, and users can easily switch between MIMs [18]. Deloitte [19] predicted MIM will carry more than twice the volume (50 billion versus 21 billion per day) of messages sent via a short messaging service (SMS). MIM apps even threaten powerful social networking sites. The number of teenagers who were active on Facebook had fallen to 56% in the third quarter of 2013, from 76% in the first. They switch to use mobile chat service like WeChat, and photo-sharing apps like Instagram [20].

By considering the increasing popularity and usage of MIM applications, many studies have been done on viral marketing through different medium such as email, blog, social networking website, and SMS. However, none to our knowledge has been studied on viral marketing via MIM application. Pescher, Reichhart [11] conducted a research about mobile viral marketing via SMS. They suggested studies on multimedia messages because they offer more entertaining content [11]. Woerdl, Papagiannidis [21] discussed email, YouTube, and forums as the channels for spreading the viral messages. They suggested studies on viral marketing through new communication transmission channels which use new technologies as well as what communication channels are used frequently or infrequently [21]. Ho and Dempsey [22] did not consider the difference between different transmission channels in their research about viral marketing and stated this as their study's limitation for future researches. The result of viral marketing via one transmission channel cannot be generalized to viral marketing through other transmission channels. For example, in viral marketing through SMS, cost is an inhibitor to forward a text message [13] but this obstacle does not exist in viral marketing via MIM apps [17]. Therefore, previous literature lacks a thorough understanding of the factors that affect viral marketing via MIM applications and cannot provide a model that illustrate factors which influence consumers' intention to forward a viral message via MIM apps. To fill the gap, this paper draw on the literature about viral marketing and MIM application to examines the effect of message content, user characteristics, and different transmission channel on consumers 'intention to forward a viral message.

## 2.0 BACKGROUND OF RESEARCH

### 2.1 Viral Marketing

Jurvetson and Draper [23] used the term "viral marketing" to describe the free email service that Hotmail was offering. They defined the term as "network-enhanced word-of-mouth" [24]. Viral marketing is a "digitalized sneeze" which is the release of "millions of tiny particles that can infect others who come into contact with them" [25]. Viral marketing is similar to an alive biological virus which duplicates itself with each interaction [26]. Viral marketing refers to "any strategy that encourages individuals to pass on a marketing message to others, creating the potential for exponential growth in the message's exposure and influence" [27]. Viral marketing is a form of word of mouth that encourages customers to pass along company-developed products and services or audio, video, or written information to others online [28].

In a viral marketing campaign, a company make an online marketing message and motivates individuals to forward the message to members of their social network fried list. These members are subsequently stimulated to forward the message to their friends, and so on [28]. These type of messages from friends may have more effect than advertising and as the messages quickly spread over the Internet, viral marketing became a powerful marketing communication tool that can achieve many people in a brief period of time [7].

Viral marketing has many advantages over the traditional marketing. One of the major benefit of viral marketing is about the cost. Viral marketing is extremely inexpensive in comparison with other types of advertising [26,29,30]. Viral marketing is very influential because it use peer to peer (P2P) transmission [30]. In viral marketing the advertising message spread very quickly [26,31] and in a short period of time [21]. Marketers can reach substantial and various audiences via social contacts by applying viral marketing [31]. Moreover, the rapid diffusion of the viral advertising message significantly increase the speed of the adaptation of the advertised service or product [30]. Viral marketing is becoming an increasingly important element for many companies' marketing communication.

By considering the benefit of the viral marketing, it is important to discover and analyze the factors that influence viral marketing and improve them and enjoy the maximum benefit of viral marketing. Many factors affect the success of viral marketing. Several researchers concerned the measurement and evaluation of viral marketing. Lance and Guy J [32] stated that viral marketing measurements should be based on attitudinal criteria including cognitive and behavioral changes. Helm [31] stated the target of viral marketers is vital in achieving competitive advantage through a viral message. The success of a viral marketing campaign depends on the willingness of people to talk to other people [33]. In the following sections, the influential factors of viral marketing that motivate consumers to forward a viral message will be explained.

### 2.2 Value of Message Contents

The value of the message content is about the quality of the message content [34]. Quality of an argument is a crucial point in determining the persuasive influence of a message. People have a more positive attitude towards a product when the quality of the product's information is high [35].

The value of the message content has two dimension including entertainment value and purposive value [14,34,36-38]. Ajzen [39] defines the message content as subject matter that communicate to the audience. In previous studies, value of message is an important motive for

individuals to engage in electronic word of mouth (e-WOM). In the two next subsection, the both dimension of the value of the message contents will be explained.

### 2.2.1 Entertainment Value of Message

Entertainment value is about the relaxation and fun through playing or interacting with others [36]. Entertainment leads individuals to create, consume, and contribute to online brand-related content [40]. Advertisements that seems fun, cool, exciting, and flashy have a positive influence on attitude toward the ad [37]. Hedonic value satisfy users' needs for aesthetic enjoyment, diversion, and emotional release. Message content that evoke individuals' emotions, such as fear, humor, sadness or inspiration, is likely to be forwarded [41,42].

The aim of viral marketing is to make a splash in the marketplace to showcase a brand and its special characteristics. Some researchers believe these effects are mostly driven by the rules of entertainment than the rules of selling [33]. Hedonic benefits are extremely important and can be related to entertainment value. Consumers join willingly and derive value from the fun of communicating with others by forwarding a message such as an advertisement that might be interesting for recipients [43]. In a research that conducted by Okazaki [44] showed the entertainment value directly affects the recipient's perspective toward the viral marketing campaign and it is a predictor of recipient's intention to participate in the campaign. Entertainment value rises individuals' forwarding behavior in viral marketing campaigns executed via e-mail [45].

A text message that addresses those who strongly consider entertainment value makes the recipient to think about forwarding the message and motivates them to send the mobile ad to others [11]. Young adults move away from face-to-face communication to text-based interaction, especially to instant messaging to entertain themselves. Recreational purposes is the main reason to use instant messaging tools [38,46,47]. On the basis of these studies, entertainment value plays a very important role to encourage individuals to pass a long a viral message.

Hypothesis 1. Entertainment value of message positively influence on intention to forward a viral message.

### 2.2.2 Purposive Value of Message

Purposive value is about utilitarian benefit that include functional and instrumental benefits [48,49]. Purposive value is about the value derived from fulfilling some pre-determined instrumental and informational purpose that include transformation of information through virtual community participation [36]. If people find the information of message useful and relevant, they judge that helpful and trustworthy [41]. On the basis of Chiu, Pant [42], those people who read a viral marketing message that has higher degree of purposive value are more willing to forward the message than those who read the information with a lower purposive value.

Dholakia, Bagozzi [43] analyzed the effect of purposive value in network-based virtual communities. They found purposive value as a predictor of social identity and an important driver for a person to engage in virtual communities. Okazaki [44] analyzed the effect of purposive value in mobile based word of the mouth referral campaign and found purposive value in the mobile based viral marketing significantly affect a person's attitude toward the campaign which consequently influence on intention to join in mobile based viral marketing campaign.

People may have a social and a personal intent to forward a (mobile) ad in a viral marketing campaign. They may think the ad is useful for their friends. Therefore, those who believe on purposive value of a message are more likely to enter reading and interest stage and then forward the message [11]. Therefore, it is expected that purposive value also greatly influence the intention of individuals to forward a viral message.

Hypothesis 2. Purposive value of message positively influence on intention to forward a viral message. Although the value of the message content is very important but it is not enough to guarantee the success of a viral marketing campaign. Entertainment value and purposive value explained the characteristic of message. In two next sections we consider the characteristics of user which includes market mavenism and social identity.

## 2.3 Market Mavenism

Feick and Price [50] defines the market maven as "individuals who knows many thing about many kinds of products, locations to shop, and other aspect of markets, and share their information and experience with other consumers and answer their questions." Market mavens are similar to opinion leaders who are knowledgeable about products and whose advice is taken seriously by others [6]. Opinion leaders give informal information or advice about a particular product or product category, for example which of several brands is best or how a specific product may be used. They are often highly confident, socially active, and frequent users of the category [33]. However, market mavens are not exactly the same as opinion leaders [50]. Clark, Goldsmith [51] identified market mavens as individuals who are confident about their ability to obtain market information; decide between different brands, products, and shopping locations; be involved in marketplace behaviors and gain desirable social outcomes; know how to persuade others effectively; and insist on their opinions in a discussion.

Walsh, Gwinner [52] surveyed 326 consumers and found market mavens were motivated to engage in word of mouth behavior. They found market mavens are motivated by a desire to help others, a sense of obligation to share information, and pleasurable feelings as result of informing others about the products. Goldsmith, Clark [53] believed the psychology of market mavenism are important than it's demographic because managers know little of why mavens are the way they are. Hence, they conducted a research about the psychological profile of market mavenism and found innovativeness, status consumption, and consumer need for uniqueness explained more of variance in market mavenism than did demographics.

Market mavens are tend to be heavy users of media and they are more interested to be early adopters of new communications technologies. In addition, it is found that market mavens frequently use traditional print and electronic media to increase their knowledge [50,54]. Belch, Krentler [55] stated that market mavens have more knowledge about the virtual marketplace. They surf internet a lot and enjoy to use the Internet for different purposes, and obtain more detail about goods/services by searching in Internet.

Market mavens and opinion leaders are influential in the marketplace due to their effect on other individuals' consumption decisions. Thus they are important consumer groups for both other consumers and companies [56]. Market mavens are very likely to spread information about a variety of products through word of mouth communications. People can be qualified as market mavens after acquiring many general knowledge about products and the marketplace [54]. Market mavens have more tendency to pass along an e-mail message to their contacts if they think the recipients may like it. Moreover, they feel a sense of responsibility and social obligation to forward e-mails [45]. Therefore, as long as a person has more market mavenism tendency, he/she is more likely to participate in viral marketing and forward a viral

advertisement message. Market mavenism considered the characteristic of the person who are supposed to forward a viral message.

Hypothesis 3. Market mavenism positively influence on intention to forward a viral message.

The other important factor that play important to motivate a person to forward a viral message is about his/her relationship with a group of people who are supposed to receive the viral message which will explain in the next section.

## 2.4 Social Identity

MIM applications enable users to make group chat which let them exchange information with many people at once [57]. People like to share information with those group of people who have similar lifestyle with them and are a valuable member for them. Therefore, the group influence the person to share the information with them. Social identity represents the core aspects of the individual's identification with the group. Social identity refers to "the portion of an individual's self-concept derived from perceived membership in a relevant social group" [58].

Dholakia, Bagozzi [43] developed a social influence model to analyze consumer involvement in network- and small-group-based virtual communities. The model has three phases namely value perception, social influence variables, decision making and participation. In the value perception phase, individuals tend to look for media in a goal-directed fashion, to fulfil a core set of motivations. Next phase is about individual's identification with the group. In this phase an individual view himself/herself as a member of the group which belongs to it. This phase involves three elements including cognitive self-awareness of membership in the group; affective commitment to the group; and evaluative significance of membership in the group. Previous research shows the construct and nomological validity of these elements [43,59,60].

On the basis of Dholakia, Bagozzi [43] model, Okazaki [14] tried to illustrate consumers involvement in e-WOM at both an individual level (desire) and a group level (social intention). He considered social identity as an independent variable in his model. The cognitive, affective, and evaluative elements are components of a second-order social identity construct. Cognitive social identity considers how much a person's self-image and lifestyle overlap with the group. Affective social identity refers to how strong a person feels he belong to the group and in evaluative social identity an individual considers whether he/she is a valuable and indispensable member of the group. Okazaki [14] proved that stronger social identity will result in higher levels of desire and social intention to participate in e-WOM.

Hypothesis 4. Social identity positively influence on intention to forward a viral message.

## 2.5 Message Transmission Channel

Viral messages transmitted via personal communication channels such as email, SMS, SNS, and MIM applications and the speed of information to spread highly depends on the message transmission channel [33]. Chiu, Pant [42] conducted a research about viral marketing through blog as the transmission channel. They found those individuals who use blogs are more likely to share the information with others than email users [42]. Selecting an efficient means to carry the message is very important. In the next section the different aspect of MIM apps will be discussed in comparison with other transmission channels.

## 2.5.1 Mobile Instant Messaging (MIM) Application

MIM provides great convenience for users and is highly adopted by youth. There are some differences between SMS and MIM. Initially, SMS only provide simple text message but MIM offers more friendly features such as stickers and pictures expressing emotions. In addition, MIM can handle a conversations between two or more parties while SMS is limited to two parties and it has a slight lag time [61]. MIM offers "presence awareness" features which shows someone's availability and the user understand whether it is a good time to chat with another user/s. MIM services are typically available for free or only a small fee. For example Apple's iMessage service is included on every iPhone and there is no charge for using it. Other MIM services such as WhatsApp charge a nominal amount for a subscription. WhatsApp's subscribers use the application free for the first year and after that they are only charged a dollar per year for subsequent years. Even this little amount is waived for some users. Many users installed few MIM applications on their smartphones, thus they can switch MIM if they don't want being charged even $1 per year to use a service [19]. MIM applications are something more than a messenger. For example, in China, people use WeChat to make payment, book plane tickets, and play games. In South Africa, WeChat's Microjobbing service, M4JAM (which connects companies and job seekers) conducted many campaigns for more than 40 local companies since its launch six months ago [62].

Deng, Lu [63] conducted a research to measure the customers' satisfaction and loyalty of different MIM service provider in China. They determine four value for MIM applications including functional value, emotional value, social value, and monetary value. Functional value is about the technical and utilitarian benefit of the MIM apps that a user can enjoy when use the app. For example, when a user can have video chat, make free phone calls, send text messages, share pictures and post status updates. Emotional value refers to mental or psychological needs. For example users can have fun by sending jokes and interesting photo. Social value refers to a sense of belonging to a certain group and connecting with others. Monetary value refers to the cost, time or effort spent in using the MIM. Economic aspect are usually considered as an important factor for people to use information systems. They found that functional value and emotional value have considerable influence on customer satisfaction, while social value and monetary value are have direct but no significant effects [63].

Zhou and Lu [64] found that enjoyment is critical objective for users to use MIM continuously. Moreover, they found perceived complementarity significantly influence users satisfaction and perceived usefulness which these two factor affect customers loyalty to a MIM application. Perceived complementarity also strongly influence users perceived enjoyment. Perceived complementarity refers to complementary functions which bring additional values to users. It is about the ancillary functions of MIM, such as games, skins and file transference. It means the fine performance of MIM application facilitate the communication process and in result enhance the functional perception towards the app [64]. Huang and Li [12] found the relative advantage of MIM affects the users' satisfaction of MIM. Relative advantage defines as the extent to which the new technology has more advantages than the previous technology. The MIM service offers vivid communication experience to users. Peng, Zhao [18] stated functional deprivation, emotional deprivation, and monetary deprivation will cause customer dissatisfaction and they will switch to new MIM application.

Church and de Oliveira [65] interviewed active WhatsApp users. They found eight factors that affect the users to use WhatsApp including: cost, social influence, nature/intent , community and sense of connection, immediacy, privacy concerns and expectations, reliability and guarantee, choice of technology, and coping mechanisms. In addition, they found people use

WhatsApp for six intents namely: chatting, sharing personal news, business related communication, coordination and planning for social activities, communicating with group of people, receiving ads. On the basis of Church and de Oliveira [65] findings, the interviewees answered WhatsApp messages are free and not limited in terms of characters. It is quicker and more immediate in comparison with SMS. WhatsApp used to interact within closer social circles and are mostly used for group-based interaction. Hence, there is higher frequencies of group communications, chatting, planning and coordination in comparison with SMS. Furthermore, WhatsApp popularity has grown because users incurred almost no cost and younger adults use it longer than older adults. There are also some problem with WhatsApp including privacy, delivery and expectations.

Böhmer, Hecht [66] conducted a research to measure the usage of different mobile applications. They found news apps and games are the most popular in the morning and at night respectively. But communication apps dominate through most of the day [66]. The number of teenagers who were active on Facebook as the biggest social networking sites had fallen to 56% in the third quarter of 2013, from 76% in the first. They switch to use mobile chat service like WeChat, and photo-sharing apps like Instagram [20,67]. The rapid growing popularity of MIM apps caused the most popular social networking website (Facebook) spend $ 19 billion (13 times Facebook's 2013 net income) to acquire WhatsApp [68]. The number of WhatsApp users increased about 15 percent only within three months and reach 800 million users in April [69]. MIM applications grew by 103 percent worldwide during 2014 [62]. Currently apps such as WhatsApp, Line, Viber, WeChat has 800, 560, 516, 468 million users respectively [70]. By considering the provided information about MIM applications, it is expected that recipients who use MIM applications have higher intention to forward a viral message.

Therefore, Hypothesis 5. The intention to forward viral messages is higher for those who use MIM application.

## 3.0 CONCEPTUAL FRAMEWORK
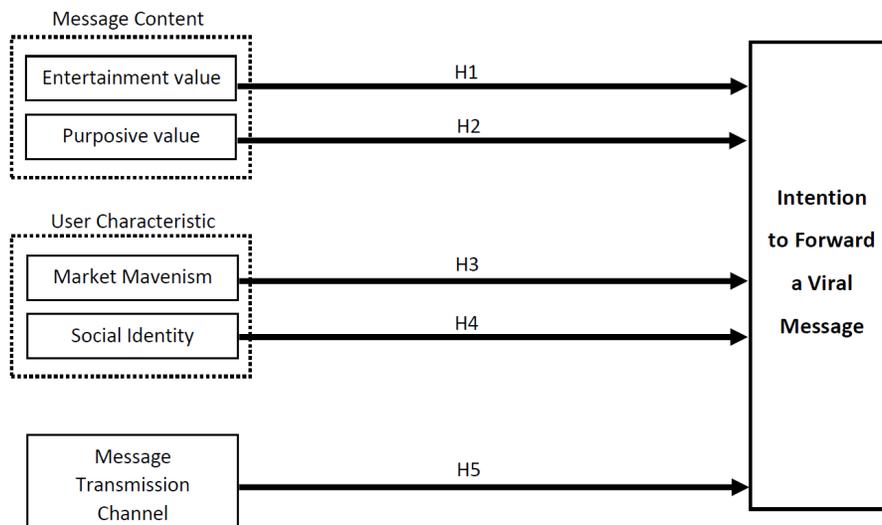
## 4.0 METHODOLOGY

This research emphasizes on the relationship between viral messaging influential factors that affect intention to forward a viral message by MIM applications. This study is quantitative in nature in which a survey will be conducted to assess the relationship between independent and dependent variables. The population of this research can be all the smartphone users but it is impossible to test every individual in the market. The majority of smartphone users are people between 17 and 36 years old [71-73].Thus, university students can be a good sample as the majority of them are in this age range. Based on the convenience sampling method the students of University Technology Malaysia (UTM) will be selected as the sample. UTM has 25,172 students [74] and based on Krejcie and Morgan [75] table 379 students is the proper sample size for this research. Therefore, 400 questionnaires which consist of 27 items, will be distributed in UTM.

The questions that are going to use to measure the variables will adopted from broad range of relevant previous researches including, entertainment and purposive value of message [11,14,42,44,76]; market mavenism [54,76]; social identity [14,43]; intention to forward a viral message [76,77]. Five point Likert scale ranging from "1" strongly disagree to "5" strongly agree will be used to measure all the variables. Thereafter, multiple regression analysis in SPSS will be used to explore the relationship between the dependent variable and a number of independent variables or predictors in order to analyze data generated to achieve the findings and conclusion of the study.

## 5.0 CONCLUSION

In order to implement a successful viral marketing, it is essential to explore and improve the determinants of viral marketing. Viral marketing is extremely inexpensive and influential. New technologies provide new communication channels which consequently provide new opportunity for viral marketing. MIM applications are the newest transmission channels after email, SMS, and SNS. This study investigates the factors that affect the viral marketing through MIM apps. It is expected that all the predictors positively influence on intention to forward a viral message. The result of this study can be a helpful guideline for marketers and practitioners to improve viral marketing through this media.

## ACKNOWLEDGEMENTS

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