# Capitalizing MIM as a Platform for Mobile Business among Undergraduates

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#### Abstract

Mobile Instant Messaging (MIM) or Instant Messaging (IM) via various web-based applications like WeChat, Viber, WhatsApp (WA) and Snapchat have gained much attention. It allows mobile phone users to access instant messaging services right from their smartphones. Majority of researches have focussed on MIM in relations to its use in social interaction and as an educational tool. Some valuable insights cited show that the social media in education can be a tool for blended learning. However, studies on MIM's appeal when used in conjunction with mobile business are still lacking. Various general publications indicate the advantages of mobile business, ranging from the start-up cost, flexibility, mobility up to inventory. The purpose of this study is to explore the realm of MIM usage as a platform for mobile business among undergraduates in Malaysia. Firstly, the main focus is to investigate the uses of MIM for mobile business and secondly, to identify the perceived advantages of MIM as a platform for mobile business. An online questionnaire was designed and randomly distributed to undergraduates who have engaged in mobile business. The questionnaire consists of 3 sections and 15 items. Data were quantitatively analysed using SPSS version 21. Percentages, means, and standard deviations, were used for the analysis. The results show that MIM is frequently used to advertise and sell products most needed by undergraduates. Among the perceived advantages of MIM as platform for mobile business is its cost effectiveness. In addition, undergraduates can easily and conveniently start-up mobile business and generate income simply via a mobile device and a mobile number as it is indeed preferable for reaching general audience.

Keywords: mobile business, instant messaging, perceived advantages, undergraduates

# 1. Introduction

Today's undergraduates, born mobile and raised to experience instant information and utility at their fingertips, have gone through changes in different facets of their lives. They live in a world of technological-gadgets proliferation that is by far different from that of their previous generations. (Soroa-Koury and Yang, 2010; Van der Waldt et al., 2009; Zhang and Mao, 2008). For instance, the smartphone applications such as Mobile Instant Messaging (MIM) on diverse mobile platforms (e.g., iOS, Android, Symbian, and Windows) have become the gateway for entertainment, commerce, and work and tremendously change people's living habits and operation mode (Wu and Lu, 2013). MIM, being widely adopted by young people due to its user-friendly features and convenience for customers is regarded as a powerful device in daily life (Zhaohua et al., 2010). Among the MIM applications, WA, Telegram, Viber and Line allow mobile users to send and receive messages, pictures, videos, and audios to individuals or group of friends at no cost (Karimiyazdi & Mokhber, 2015). Such cost factor can surely attract young adults to involve enthusiastically in online activities. A review of literature has shown that MIM has many advantages over the traditional and even the communication tools such as social networking sites and Short Message Service (SMS) (Soroa-Koury and Yang, 2010; Van der Waldt et al., 2009; Zhang and Mao, 2008). The advantages of MIM, together with the convenience of mobile data plan, have resulted in MIM being forecasted to continuously grow and lead significant decreases in SMS traffic.

Business people around the world are also finding ways to benefit from this application. The fact that customers are being connected all the time and anywhere is a great opportunity to advertise, build, and develop customer relationships, and receive direct response from them (Dusto, 2014; Chan-Olmsted et al., 2013). The study conducted by Church and Oliveira (2013) who interviewed active MIM users revealed two of the six intents people use MIM are for business related communication and receiving advertisements. Most of these active MIM users are young adults whom researchers anticipate, are inclusive of undergraduates. As also mentioned by Hwang (2012), that the innovative technology via smartphone applications may help the business to expand their products all over the world. It can be seen that social networking has made it easy at just ones' fingertips to

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promote while taking and receiving orders from customers around the world. The study conducted by Ibrahim J, et al., (2014) found the benefits of WA and Facebook have highlighted positive reactions towards these applications especially in social application to businesses. In the coming years, many predict that messaging applications will become the primary way customers communicate with brands. It is said that brands will move away from communicating through social networks and switch to direct communications via messaging services such as WA, Facebook Messenger, Skype, Google Hangouts and Viber (Benady, 2016).

The advancement of the smartphone applications has also provided entrepreneurial opportunities. For example, WA enables young entrepreneurs, the IT-savvy, to enrich sales messages with entertainment features in their marketing campaign (Noble, Haytko & Phillips, 2009). It is found that there is a relatively large number of undergraduates who became mobile entrepreneurs during college and used various social media and mobile applications for their marketing strategies (Businessinsider.my, 2016; Usahawan.com, 2016; Steimle, 2016).

#### 2. Literature Review

Among all mobile instant messengers (MIM) available, WA in particular is used by 39 percent of global mobile internet population where Malaysia comes in at number 2 with 75 percent of the amount of worldwide usage. In the first quarter of 2014, the growth of WA usage among the Millennial is 30 percent worldwide (Statista, 2014). In a more recent estimation, it is reported that 77% of internet users in Malaysia are using instant messaging applications on a daily basis (Swathi, 2015). Such increase in the WA adoption has affected communication patterns across the globe, information sharing and news consumptions to name a few. As for the Millennial generation today which comprises of undergraduatess, it is reported that they have actively adopted WA as a convenient communication tool (A. Ahad & S Lim, 2014). Yeboah, J. et al (2014) in their study also found that WA application is the most preferred mode of day-to-day communications than mobile voice calls particularly among students.

Research on the adaptation of WA as a mobile learning tool is plenty (Bouhnik D, Deshen. M & Church. K, 2014; Yeboah, J. et al, 2014; Ngaleka, A & Uys. W, 2013; Rambe, P & Chipunza C, 2013; M. Mohamad, F. Maringe, J. Woollard, 2012). However, studies on WA's penetration by the young adults particularly the undergraduates in online marketing or mobile business are still lacking. Researchers believe that if MIM applications like WA are widely used and well accepted in mobile learning, these applications can also be utilized for other reasons – which include mobile shopping and selling. As revealed by Ibrahim, J. et al (2014) in their study that the smartphone applications give positive impact to the online business success. For instance, Instagram, an interactive and innovative photo-sharing application allows companies and vendors to share product information, photos or pictures thus speeding up communication with potential customers (Ting et.al, 2015). The combination of visual graphics and text retains more impact and is far more engaging than text alone. In a recent study by Benady (2016), messaging is seen as the next big opportunity to business because it allows a direct and more personalised relationship with customers rather than people broadcasting on social networks, thus enabling conversation and creating a compelling consumer experience.

In relation to factors contributing to undergraduates' involvement in mobile business, Basu (2013) revealed that undergraduates start businesses in order to pay for their tertiary study as annual college fees are daunting. Salamon & Wahab (2010) found that high involvement in multi-level marketing among undergraduates was due to a lack of fund to support their college expenses. These undergraduates have turned themselves to become online/mobile seller as an alternative for them to earn extra income in the efforts to pay their way through college. Their efforts become possible with the availability of diverse applications in smart phones thus they present opportunities to offer different mobile business strategies ever before (Olmstead, 2014; Yingjiao & Ann Paulins, 2006).

# 2.1 Uses of MIM as a platform for mobile business

MIM applications open the door for undergraduates as mobile marketers to be creative in their mobile business. In conducting mobile business, marketers need to weigh on types of products advertised (Drossos & Fouskas, 2010; Ma, Suntornpithug & Karaatli, 2009), type of message service sent to users (Koo, Knight, Yang, & Xiang, 2012) and some design attributes of mobile advertising (Chen & Hsieh, 2012). Thus the uses of WA for mobile business can be capitalized on these aspects to reach the audience, capture their undivided attention and prompt their quick responses. According to the current Smart Insights report by Chaffey, D. (2016), 89 percent of customers' mobile time are spent on applications. Given such a high statistic, approaches for selling, advertising and post-sales/after-sales service on mobile business should be conducted creatively.

In college environment, products or services offered should be the ones needed by the undergraduates themselves. In an article by Khalil (2014) on the business ideas that Malaysian undergraduates could offer were prepaid phone card/prepaid online top ups, food & beverage (ready-to-eat/room-to-room delivery), photocopying service, proof reading, T-shirt printing, laptop repairs/service and laundry service. A recent report by ProfitableVenture.com (2016) also highlighted sales of call cards and data bundles for different network service providers, jewellery and fashion accessories, gourmet business, and home tutor services to name a few. Undergraduates also like to shop online for apparel products (Yingjiao Xu & V. Ann Paulins, (2005). While Anderson (2011) found that one of the ten things undergraduates waste money on is food. This thus shows that undergraduates can actually tap an opportunity to offer food service delivery via mobile to their friends.

In terms of mobile advertising, marketers should need to send unique, personalized and customized advertisements and engage their customers in discussions and transactions (Salo, 2009). A study by Parreño et al (2013) also showed a similar result that mobile marketers can influence their customers' attitudes towards their products offerings through message personalization, content relevance and enriching the sales messages with entertainment features. While the study by Saadeghvaziri (2011) indicated that customers hold positive attitudes toward mobile advertisings and perceive them informative.

Mobile marketers may lose the chance to make their customers loyal users if the products/services do not meet the customers' requirements, hence dissatisfaction may occur. Fazlzadeh, A., Bagherzadeh, F. & Mohamadi, P. (2011) found that after-sales service quality impacted the overall offering in which customer's satisfaction could affect behavioural intentions and the quality of the relationship with customers. By using appropriate mobile marketing tools such as following up with the customers just after the purchase to get their immediate feedback may lead to more satisfactory post-purchase experiences for customers.

#### 2.2 Perceived advantages of MIM as a platform for mobile business

There are various studies conducted that indicate MIM applications thus far offers many advantages. For education purposes, ample research found that most institutions of higher learning are willing to use both text and instant messaging to further enhance learning process (Jeong 2007; Kennedy et al. 2008). A study by Church & Oliviera (2013) in comparing MIM behaviour with traditional SMS found that WA offers benefits such as cost, sense of community and immediacy. Amry, A.B. (2014), in her research shows strong and positive impact of WA on the achievement and attitudes of female students towards educational technology based mobile devices. Most of the existing MIM applications allow group chat, which provides a more efficient way for undergraduates to market specific products/services or exchange information without delay and at no cost (Church & Oliviera, 2013). Having the group-chat feature aids mobile marketers to create different segments (groups) within the applications. Thus it is an easier and faster method to advertise and sell the products/services which are more personal with unique messages and tailored to specific groups. Collier (2015) stated that "WA offers marketers a unique opportunity to tap into a highly engaged audience and build a list of customers who want to hear about your businesses". This is supported by Torok (2015) that "Messages sent via messaging applications are opened and read within a few minutes, so the message delivering is much more effective."

Looking at the research on MIM from the perspective of mobile learning, it can be said that MIM has advantages on the way learning process is conducted. Perhaps MIM can also benefit marketers in managing their businesses. However, the uses of MIM as a primary platform for their mobile business and the perceived advantages gained are yet to be conclusive. Thus there is a need to further investigate the pivotal roles of MIM in mobile business among undergraduates. It is hoped that the findings of the study will help to understand further the uses and potential benefits (if any) of MIM among undergraduates in conducting mobile business. If benefits are revealed, then MIM is indeed one of the alternatives for the undergraduates to engage in online business. Otherwise, some other mobile messengers need to be tested for its benefits and as alternative marketing strategy for mobile business. Thus, the purpose of this study is to understand the different kinds of uses of MIM and its perceived advantages as a platform for mobile business among young adults in particular undergraduates in Malaysian higher learning institutions.

### 3. Research Objectives

The primary objective is to explore the realm of MIM usage as a platform for mobile business among undergraduates. The specific objectives are:

- 1. To understand the different kinds of uses of MIM as a platform for mobile business among undergraduates
- 2. To identify undergraduates' perceived advantages of MIM as a platform for mobile business

#### 4. Methodology

#### 4.1 Sampling procedure

This study used mixed methods where both primary and secondary data were gathered. Primary data was collected using a convenience sampling approach via an online questionnaire and verbal interview. The online questionnaire was sent to undergraduates who had been instructed to complete it if they were active in mobile business. The link of the questionnaire was sent via messaging applications either WA or Telegram. Researchers conducted interview in an open environment.

#### 4.2 Data collection procedure

The questionnaire consists of 3 sections and 15 items with mixed closed ended, open ended and Likert scale questions. Section 1 captures the demographic information (6 items), Section 2 is on undergraduates' involvement in mobile business (7 items) and Section 3 relates to undergraduates' perceived advantages using MIM as a platform for mobile business (2 items). For the interview participants were asked to respond based on the questions stated in the survey. At the beginning of the research all participants had given their consent and agreed that they were not forced to participate in this study.

A sample of 60 respondents completed the survey but 5 responses were discarded due to incompletion. Thus a net sample of 55 usable questionnaires remained. Data analysis was conducted using SPSS version 21. Percentage analysis and cross tabulations analysis were used to answer the research questions. The results are presented in the form of tables and charts.

## 4.3 Research questions

The study attempts to answer the following questions:

Research question 1: What are the uses of MIM in terms of mobile business?

Research question 2: What are their perceived advantages of MIM as a platform for mobile business?

#### 5. Finding, Analysis and Discussion

## 5.1 The respondents' profiles

Out of 55 completed questionnaires, the respondents were mostly females with 78.2 percent compared to males with only 21.8 percent and they aged between 19-25 years old. Those involve in mobile business are above 20 years old with a total percentage of 94 percent. Out of this total, 20-year-old undergraduates present 30.3 percent. This scenario shows that respondents get involved in mobile business as they begin their undergraduate study. Majority of them pursued their study in business administration with 51.7 percent were in their second year. Table 1 shows the demographic characteristics of the respondents.

Table 1: Demographic Characteristics

Demographic Characteristics		Percentage (%)
Gender	Male	21.8
	Female	78.2
Age	19 years old	7.3
	20 years old	32.7
	21 years old	25.5
	22 years old	20.0
	More than 22 years old	14.5
Involvement in traditional Business	Yes	60.0
	No	40.0

About 60 percent of the respondents were involved in face-to-face business transactions at the beginning of their business venture before switching to mobile business. The rest 40 percent utilized the MIM applications in commencing their business. The result suggests that some grab an opportunity to capitalize the current technology on starting-up the business while others on the sustainability of their existing business (Steimle, 2016).

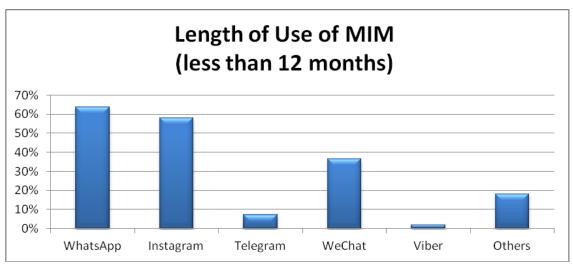


Chart 1: Length of Use of Mobile Instant Messaging

In the context of how long the undergraduates use MIM for mobile business, 64 percent had used it in less than 12 months. Most of the respondents in general had been using MIM for less than one year, however there are respondents who had been using it for more than 2 years. This result indicates that respondents' involvement in mobile businesses could possibly begin at the age of 19. In general, most of them start their mobile businesses after socializing with their batch mates. In the interview conducted, five respondents revealed that they began using MIM after they got to know their batch mates first. Later they created group chats of select friends and share information with them. Hence, this group-chat feature aids them to create different segments (groups) within the application, and indeed an easier and faster method to advertise and sell the products/services (Collier, 2015).

## 5.2 Products/Services Offering via Mobile Business

The result shows undergraduates offer basic daily needs often requested by their college mates. Among these products or services, clothing scored the highest with 69.1 percent; food and beverage and cosmetics/beauty products counted for 27.3 percent each; while prepaid phone cards is 23.6 percent. The rest of the products and services offered via mobile business include electrical goods, books, telephones/accessories as well as health products. This result concurs with Yingjiao Xu & V. Ann Paulins (2015) that undergraduates shopped online for their clothing needs. The business ideas that undergraduates can take up as suggested by Khalil (2014) are also reflected in the result. The prepaid phone cards/prepaid online top ups as well as food and beverage are among the products sought after by undergraduates via mobile business.

With regard to which MIM applications that respondents use as their mobile business platform (respondents are allowed to choose more than one messaging applications), 93 percent chose WA, followed by 82 percent chose Instagram, and WeChat, 47 percent. While Telegram and Viber were only 13 percent and 4 percent respectively. The result of WA being the main choice is consistent with the data presented by GlobalWebIndex (2014) which states that Malaysia is the third largest country in the world using this application. Instagram users in Malaysia reached 5.52 million in January 2015. Dazeinfo (2015) also reported that Malaysians are the most active users of instant messaging in the Asian-Pacific region.

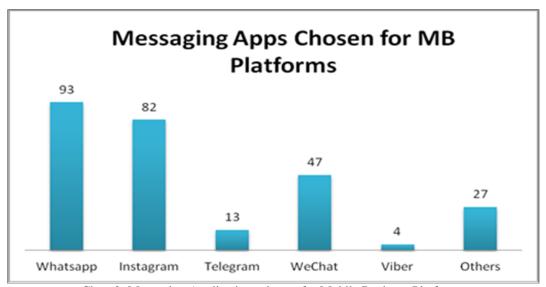


Chart 2: Messaging Applications chosen for Mobile Business Platforms

Respondents were asked to rate the usage frequency of the chosen messaging applications. Chart 3 shows that the respondents frequently use WA (63 percent), followed by Instagram and WeChat with 55 percent and 42 percent, respectively. Most of the undergraduates will generally select and alternate the messaging applications that are preferred by their customers. This is due to specific features of messaging applications which are attractive and easier to use (Collier, 2015 & Torok, 2015).

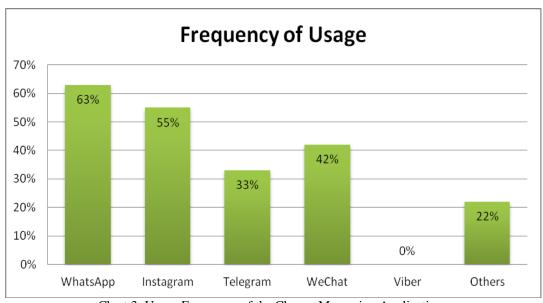


Chart 3: Usage Frequency of the Chosen Messaging Applications

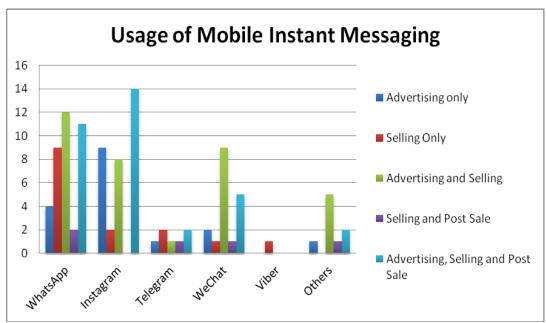


Chart 4: Main Usage of Mobile Instant Messaging

The above chart shows that, WhatsApp and WeChat are used mostly for advertising and selling the product; however, Instagram is used widely for advertising, selling and post-sale. In terms of getting feedback and testimonials from customers, Instagram is found to be most convenient and user friendly. It is also found that clothing is the main product that is used for advertising and selling via Messaging Applications. WA is preferable to be capitalized for advertising and selling since more personal products/services with unique messages can be sold and tailored to specific groups. The group-chat feature makes it easier and faster for the messages to be read within a few minutes (Torok, 2015).

# 5.4 Perceived advantages of MIM for Mobile Business Platform

In addition to the uses of messaging applications, its perceived advantages for mobile business were also examined (Chart 5). It is found that respondents use messaging applications for the purpose of generating income and commencing a mobile business. This corresponds to the information stated in Businessinsider.my (2016) which highlights today's Malaysian young entrepreneurs started venturing into mobile business during their tertiary study.

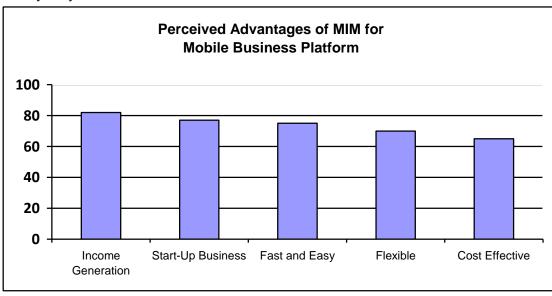


Chart 5: Perceived Advantages Using Messaging Applications for Mobile Business Platform

#### 6. Recommendation for Future Research

It is recommended that future research may investigate the followings:

- 1. Effectiveness of messaging applications for mobile business

  The effectiveness of messaging applications for mobile business can be investigated further as it can be helpful for mobile marketers to choose and capitalize which of the application is suitable for their products/services.
- 2. Undergraduates' attitudes towards the use of messaging applications in business contexts
  In general, undergraduates have accepted the use of messaging applications as an educational tool. Their acceptance has a positive impact both in teaching and learning. Yet in the context of mobile business, the young people's attitudes and willingness to capitalize messaging applications in purchasing and selling is much to be studied.
- 3. Relationships between male and female undergraduates' attitudes towards the use of messaging applications. The research can help to gauge the differences of young male and female customers on how well they accept messaging applications in the context of mobile business. The differences in their attitudes help mobile marketers to focus on catering to their specific needs via selecting suitable messaging applications.

#### 7. Conclusion & Limitation

This paper aims to investigate the uses of MIM for mobile business among undergraduates and to identify perceived advantages of MIM as a platform for mobile business. The results obtained show that mobile business among undergraduates is growing with the use for MIM for selling, advertising and post sales. However, undergraduates will utilize and alternate the messaging applications which features are convenient for their customers to know further about the products/services.

Among the perceived advantages of MIM for mobile business are for the undergraduates to make extra income in their efforts to pay their way through college. In addition, some undergraduates capitalize MIM as a stepping stone for them to venture into mobile business. MIM features such as ease of use, document sharing and group chat offer easier and faster methods to advertise and sell products and services.

Several limitations are encountered in this study. Respondents are less likely to have internet access and to respond to online questionnaires. Even though this method is fast and convenient, some still prefer to answer printed questionnaires instead. In addition, most respondents are involved in apparel business, thus the result may be different if the respondents' businesses are of different kinds. The study focuses on MIM alone and uses non-probability sampling, thus the results presented should not be generalized to other context or population. Future research can cross-validate across different samples and/or virtual community settings.

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