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Preliminary Communication

# Use of WhatsApp Application on Fruit Marketing Communication: A Traders' Experience

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#### **Abstract**

WhatsApp is mobile messaging application which is widely used in communication. However, its use in marketing communication is relatively new. This study investigates WhatsApp user profile, factors that influence the use of WhatsApp and relationship between the factors with WhatsApp usage level in fruit marketing communication. Respondents were selected using census method by taking all fruit wholesalers in Giwangan Fruit Central Market, the largest fruit market in Yogyakarta, Indonesia. Data were analyzed using descriptive methods and Spearman Rank correlation. The results showed that majority of WhatsApp users among traders are male in millennial age, with high school education. Furthermore, the convenience in use and economical reason were the most influential factors in the use of WhatsApp on marketing communication. Moreover, this study found that there was a strong and positive correlation between benefits factors and the use of WhatsApp on fruit marketing communication.

**Keywords:** WhatsApp adoption, digital marketing communication, fruit trading

#### 1. Introduction

Social media has become a popular and effective platform of communication in the digital world [1]. One of the most popular social media platform is WhatsApp. Recently, WhatsApp as a social media applications shows an increasing trend of being

used as a new communication platform [2] and the most widely used social media for sending messages with a total of 1.6 billion global users in 2019 [3].

The popularity of WhatsApp as a social media base messaging application is may drived by the increasing use of the internet in various aspects of life [4]. The International Telecommunication Union (ITU), an UN agency which is responsible for issues that concern on the development of information and communication technology, in its recent report states that global internet users in 2019 are estimated to reach 53.6 percent of the global population, or 4.1 billion people as the Internet users [5]. In Indonesia alone, according to a national survey on Penetration and Behavior Profile of Indonesian Internet User, it was stated that out of a total of 264.16 million Indonesians population, there were around 64.8% or 171.17 million people who used the internet in their daily lives in 2018. This data showed a growth of around 10% from 2017 in the amount of 143.26 million people or 54.86% of the population [6].

Mobile messenger and social media applications are the most widely used internet-based applications with a total number of users reaching 89.35% in Indonesia [7]. Mobile messenger and social media services are growing rapidly since they provide convenience and lower costs [8] compared to previous messaging platforms such as short message services (SMS) [9]. Online messaging applications such as WhatsApp, LINE, Facebook Messenger, Blackberry Messenger (BBM) and WeChat are among the most widely used applications. Furthermore, WhatsApp is the most popular message sending application in Indonesia where 83% of internet users use the WhatsApp platform as their message sending application, far surpassing LINE or FB Messenger which is only used by 59% and 43% of users [10].

Ultimate features in sending messages, such as the ease of sending pictures and videos makes WhatsApp offer many advantages compared to the previous message service application [11] [12]. Moreover,WhatsApp also provides calling service both voice call and video call for "free", this indeed making WhatsApp more popular [13]. All these advantages are certainly very supportive for trading activities, especially in marketing communication between sellers and buyers [14]. The use of the WhatsApp application could make it easier for merchants to communicate with consumers in providing goods and services using mobile technology or communication devices such as smartphones, tablets, computers or laptops.

Moreover, in case of trading of perishable products such as fresh fruit, the presense of internet-based communication application such as WhatsApp could be an effective communication tool to deliver messages to consumers or other stakeholders [15]. Fruit trade, for instance, is one sector that has an important role in Indonesian economy. Data shows that in 2015 Indonesia exported 354,508.9 tons of fruit valued at USD \$ 368.68 million. This number increased compared to the previous year which only reached 299,104.3 tons or valued at USD \$ 302.2 million [16]. Not only the number of exports of fruit products has increased, the number of Indonesian fruit production has also increased. Indonesia's total fruit production in 2017 was 19.64 million tons, an increase of 7.1% from 2016 which was only 18.34 million tons [17].

The increase in fruit production is in line with the increase in Indonesian people's per capita fruit consumption. The level of fruit consumption per person per year has

increased in 2015 from 0.349 kg per capita per week to 0.405 kg in 2016 and most recently in 2018 to 0.480 kg per capita [18]. According to Indonesian Food Security Monitoring data, there are three provinces that have reached the level of consumption recommended by the government of 400 grams per capita per day, namely Yogyakarta, Bali and Sulawesi. While other provinces have not reached the level of consumption recommended by the government [19].

Horticultural commodities, especially fruits have an important role in the Indonesian economy. Data shows that in 2015 Indonesia exported 354,508.9 tons of fruit valued at USD \$ 368.68 million. This number increased compared to the previous year which only reached 299,104.3 tons or valued at USD \$ 302.2 million [16]. Not only did the number of exports of fruit products increase, the amount of Indonesian fruit production also increased. Indonesia's total fruit production in 2017 was 19.64 million tons, an increase of 7.1% from 2016 which was only 18.34 million tons [17].

The increase in fruit production is in line with the increase in Indonesian people's per capita fruit consumption. The level of fruit consumption per person per year has increased in 2015 from 0.349 kg per capita per week to 0.405 kg in 2016 and the last year in 2018 to 0.480 kg per capita. The increase was found in oranges, apples, salak, bananas, papayas and watermelons [18], [19]. According to Indonesian Food Security Monitoring data, there are three provinces that have reached the level of consumption recommended by the government of 400 grams per capita per day, namely Yogyakarta, Bali and Sulawesi. While other provinces have not reached the level of consumption recommended by the government [19].

Increasing trend of fruit production and consumption in Indonesia opens up opportunities for fruit trading activities to expand its marketing activities. Especially with the development of information and communication technology which is a strategic tool to improve the efficiency and effectiveness of marketing communication activities [20]. ICT base social media such as WhatsApp could provide benefits for marketing communication activities such as promoting products, marketing products, communicating with consumers, communicating with suppliers, providing services needed by consumers to improve collaboration, new products or services and allowing for opening market opportunities [21].

WhatsApp is widely known as one of the most popular internet-based messaging platforms. Previous research related to the use of WhatsApp has been done a lot, however, research on its use in marketing communications, especially marketing of fresh fruit has not been found. Several previous studies regarding the use of WhatsApp for instance explore the role of WhatsApp in interactions between consumers and companies [22], WhatsApp as a communication medium [4] and learning exchange [23] as well as study on the ability of WhatsApp application to disseminate information to become "viral" [24] and making it as a marketing tool [14]. WhatsApp as social media could also be used as a gathering place (group) and can be used to spread information [25] with one click to many people (broadcast message) so that it becomes an effective advertising medium [26] and coordinating information trade [27]. However, although a lot of research has been done on WhatsApp, research on using WhatsApp as a marketing communication medium has not yet been found.

The variety of functions and features possessed by WhatsApp application and the growing dominance of this application as a medium for sending messengers and social media is interesting to investigate its use in marketing communications, especially fresh fruit marketing. Therefore this study aims to examine whatsapp application usage profile, the level of use of WhatsApp application and the factors that influence the use of this application by fruit marketing communication traders. This study provides insight into the baviour of trader on using WhatsApp as marketing communication tools in fresh fruit trading.

#### 2. Literature Review

## 2.1. Marketing Communication

Many researchers have defined marketing communication with various definitions. In order to understand the concept of marketing communication, it is necessary to figure out the meaning of communication itself. A communication is an activity of exchanging ideas [28] where there is meaning or value conveyed by individuals to other individuals or groups [29]. While marketing communication or in other term called integrated marketing communication is an effort of traders to persuade, inform regarding the brand [30] and provide information related to products directly through traditional media such as radio and television or using new media such as Youtube, Facebook, Instagram, WhatsApp, Line and other social media application. Trough online communication, trader and producter could build relationships with consumers effectively [31] and consumers can understand about the product being sold, who makes the product, the purpose of the product is made so that consumers can buy as needed.

The main purpose of marketing communication is to provide information from merchants to consumers about product or service information, introduce products and establish relationships with consumers or providers of goods and services using various media available such as Instagram, WhatsApp and Facebook [32]. There are several forms of marketing communication:

#### a. Sales promotion

Promotion is part of integrated marketing communication with the objectives to boost sales so that consumers can see and buy products directly sold by merchants so that traders can increase sales. Through promotion, consumers can get to know the products or services offered, sell, have the opportunity to buy more often and more [33].

# b. Personal Sales

Personal selling involves two parties between the trader and the buyer which is carried out either face to face, telephone, video call and website. Applications that are used vary depending on the needs desired by the trader, personal selling also functions as a way to find consumer demand for the products offered by the merchant [34].

### c. Public relations

Public relations serves to build and maintain a mutually beneficial relationship between traders and consumers to get the desired results. The main objective of public relations is to introduce and maintain perception and image of products sold by traders and the traders organization/company [35].

# 2.2. WhatsApp Adoption

Use of information technology such as WhatsApp, and other social media is relatively new. As a new technology, before it was used massively as it is today, it underwent the adoption process. Adoption of technology is a common process in using new technologies such as information and communication technology. One well-known theory of technology adoption model is the Technology Acceptance Model (TAM), which was first developed by Davis 1985 [36]. This technology adoption model is a model to find out the influential factors in the technology adoption process such as ease of use, benefits, anxiety, business owner's innovation power, consumer demands and competitor pressure.

There are several factors according to Theory of Technology Acceptance Model that are considered by researchers as supporting factors of technology adoption including variable of usefulness and ease of use [37]. On the contrary, factors that hinder the adoption process including security and privacy issue, cost of technology and incompatibility of the technology with business processes so that the technology does not provide benefits [38]. In addition, another factor is that not all businesspeople such as traders understand on using information technology (3). Many do not trust information technology because they believe that there is a lack of security in interacting with consumers using information technology or social media, (4). Costs incurred in maintaining electronic systems and facilities that do not yet support the utilization of the technology, (5) and there is no definite law in the use of technology for business [39].

Adoption of social media innovation is one of the important things since it could expand and improve business competitiveness and can improve the ability to communicate with others and establish relationships with customers [40]. With rapid change requires traders inevitably have to use technology in order to compete. In adopting information technology, there are benefits to its use such as social media technology that includes younger traders in communicating with consumers and suppliers, building relationships with new people so that expanding friendships and marketing, making it easier to share ideas or information with others and information technology as well make me more creative in increasing sales [41].

Adoption of technology is the final result obtained from the process of utilizing information and communication technology by traders and the ease of using the technology so as to produce behavior and attention to existing technology for use in daily activities [42]. There are several models for technology adoption [43]:

# a. Technology Acceptance Model (TAM)

TAM is a theory developed by Fred Davis in 1985 [36] that explains the acceptance of technology that someone will use. In this case there are several variables that influence the use of the system carried out by previous studies mention there are

two determinants that have an important role, namely the perceived usefulness (Perceived usefulness) is defined by the extent to which someone uses information technology at work and has benefits in its use and perceived ease (Perceived ease of use) is defined by the extent to which a person believes using information technology makes it free from difficulties or major obstacles [37].

#### b. Theory of Planned Behavior (TPB)

This theory is a theory of attitude models that predict a person's interest or intention to take action by being influenced by three main factors namely attitude toward behavior (attitude toward behavior) is defined as a person's negative and positive feelings towards the achievement of a behavior. Subjective norms (subjective norms) are defined as a person's perception by seeing for most someone who is considered important, he must or not in carrying out an action or behavior and control the behavior. The last factor is behavior control or behavior control to guard behavior against things that are not in accordance with the norm [44].

# c. Theory of Reasoned Action (TRA)

The theory that was successfully developed by Fishbein and Ajzen in 1979 [45] states that a person's perception and reaction to a thing determines the person's attitude or behavior. This theory chooses behavioral goals as a function and indicates that behavior can be predicted from the intensity of behavior (behavior intention) is a combination of attitude factors (attitude) and subjective norms (subjective norm) in shaping a person's behavior. So that a person's attitude or behavior about information technology will have an effect on his attitude in the acceptance of the use of information and communication technology because someone will use something if there are benefits and ease of use. (Permana, Astuti, & Suydi, 2012).

# 3. Methodology

This study is a survey research using descriptive analytical method. The survey research was conducted by conducting a structured interview with respondents chosen using questionnaires to obtain the facts, opinions and behavior of respondents [47]. The descriptive method is a method for examining the status of a group, object, condition or event in the present with the aim of obtaining a systematic and accurate description and description of the facts and phenomena studied [48].

Yogyakarta city was chosen as a research location with consideration that in addition to being a large city (the provincial capital), the city of Yogyakarta was one of the cities that showed growth in per capita fruit consumption above the national average [19]. Giwangan Fruit and Vegetable Market was chosen with consideration because it is the largest fruit market in Yogyakarta. The respondents in the study were selected using census method from all wholesalers in Giwangan Market. Based on field visits and research criteria there are 45 wholesalers who are willing and meet the research criteria, so the total number of respondents is 45 traders.

The Whatsapp user profile including variable of gender, age, education and trading experience was analized using descriptive statistice, while the level of use of the WhatsApp application in marketing communication is measured using three indicators, namely: sales promotion, personal sales and public relations [49], [50].

Furthermore, the indicators were analyzed by descriptive method using the help of tables and average scores. The category intervals in this study are as follows:

Interval Score = 
$$\frac{maximum\ score - minimum\ score}{number\ of\ category}$$
Interval = 
$$\frac{(5-1)}{5} = 0.8$$

Based on the formula, the resulting score interval is presented on Table 1:

Score	Response
1,00 - 1,80	Strongly Disagree
1,81 - 2,60	Disagree
2,61 – 3,40	Doubtful
3,41 – 4,20	Agree
4,21 – 5,00	Strongly Disagree

Table 1. Score Interval and Response

After the measurement is done by calculating the average score of each indicator, then classified according to the achievement of scores to determine the level of use of the WhatsApp application and determine how much the factors influence the use of WhatsApp applications in fruit marketing communication. The formula for calculating each variable score is as follows:

Achievement Score = 
$$\frac{\text{Total score} - \text{Minimum score}}{\text{Maximum score} - \text{Minimum score}} X 100\%$$
Moreover, the WhatsApp app usage level categories based on achievement scores

per variable are as follows:

<b>Achievement Score</b>	Usage Perception
0% - 19,99%	Very Low
20% - 39,99%	Low
40% - 59,99%	Medium
60% - 79,99%	High
80% - 100%	Very High

Table 2. Achievement Score and Usage Perception

Furthermore, to determine the relationship between the level of use of the WhatsApp Application with the factors that influence the use of the WhatsApp Application, the Spearman Rank correlation test is used. This study proposed four factors including education, convenience, benefit, reference group, and economic factors that influence the use of the WhatsApp Application [51] [52].

The Spearman rank correlation test is used to look for relationships or test the significance of associative hypotheses if each of the linked variables in the form of an ordinal and the source of data between the variables is not the same [53], [54]. This analysis performed by statistical calculation using the following formula [55]:

$$rs = 1 - \frac{6\Sigma d^2i}{n(n^2 - 1)}$$

Note:

rs = Rank Spearman corelation coeficient

d = ranking difference between variables

n = number of samples or data

After determining the correlation coefficient value from the above formula, the result value can be set into the value interval to determine the relationship that will be generated. The relationship between the factors that influence WhatsApp usage with the level of use of the WhatsApp can can be seen in Table 3 [56].

Interval Score (+/-)	Relationship Strength
0,0	None
0,1	Negligible
0,2	Weak
0,3	Moderate
0,4 - 0,6	Strong
0,7-0,9	Very Strong
1,0	Perfect

Table 3. Interval Score and Usage Perception

#### 4. Result and Discussion

#### 4.1. Respondents Profile

The respondents of this study were all fruit wholesalers in Giwangan Fruit and Vegetable Market in Yogyakarta City. There are 73 traders registered at the Giwangan Market Management Office, however only 45 people are eligible and are willing to become respondents. Several traders have more than one shop with different names, and others no longer trade even though they are still registered in the Giwangan Market Office. Based on the data, the profile of fruit wholesaler is then arranged. There are several indicators to describe the profile of traders, namely: gender, age, level of education and trading experience, as presented in Table 4.

No Variable	Dange	Respondent		
110	variable	Range	Number	%
1	Gender	Male	38	84.4
		Female	7	15.6
2	Age (Year)	≤ 18	0	0,0
		19 – 35	29	64,4
		36 – 55	14	31,1

		> 54	2	4,4
3	Education	Elementary	6	13.3
		Junior High School	6	13.3
		Senior High School	27	60.0
		Graduate	6	13.3
4	Trading Experience	≤ 5	15	33,3
	(Year)	6 - 10	4	8,9
		11 - 20	21	46,7
		> 20	5	11,1

Table 4. Socio-demographic Characteristics of Traders

Table 4 shows that the majority of fruit traders in Yogyakarta's Giwangan Fruit and Vegetable Centr Market are male with a percentage of 84.4%. Men dominate the merchant population for the reason that most of the work done has started early in the morning so that men are more free to work with these situations and conditions than women. However, in the context of using WhatsApp, gender has no significant effect [57].

Furthermore regarding the age of traders, the majority of traders aged between 19-38 years or covering 64.4% of the total trader population. Age between 19-38 years in 2019 is the age range of millennial generation. Some studies mention that millennial generation is the generation born between 1980-2000 [58], [59]. Among the characteristics of millennial generation is their closeness to digital technology and the internet [60]. This is certainly an important finding that the majority of fruit traders are already familiar with digital technology to support their work.

Finally in the trader's profile is the factor of experience or length of trading. The data shows that 46.7% of traders have experience of 10 to 20 years, and there are even 11.1% who have traded for more than 20 years. Nevertheless there are still a third or 33.3% of traders who only have experience of between 0 and 5 years. This is likely for young traders, especially the previous data states that the majority of traders (64%) are between 19-38 years. Experience in business is expected to support the adoption of new technologies [61].

# 4.2. The Level of Use of WhatsApp Application

The usage level of WhatsApp in marketing communications of fruit wholesalers was analyzed from several marketing communication indicators which include the use in sales promotion, personal sales and public relations [62]. Each indicator was analyzed its average score and then classified according to the category of achievement score, which starts from the category of very low to very high. This research shows that the overall level of use of the WhatsApp application in marketing communication by wholesalers was relatively high as presented in Table 5.

Indicator	Average	Score	
	Score	(%)	Category
Sales Promotion	4.24	80.93	Very High
Personal Sales	4.19	79.81	High
Public Relation	3.41	60.28	High
Total	3.95	73.67	High

Table 5. Usage Level of WhatsApp Application

Table 5 indicates that three indicators of the level of use of WhatsApp application are at the very high and high score category level. The sales promotion indicator shows a very high category with an achievement score of 80.93% and an average value of 4.24. The promotion indicator shows a very high category in the use of the WhatsApp application by traders perhaps because promotion is the main activities in marketing of fruit, and WhatsApp provides facilities to spread information [63] in order to support sales promotions [64] easily and inexpensively.

Moreover, the level of use WhatsApp in personal sales indicators shows high category with an achievement score of 79.81% with an average score of 4.19. This is in line with previous research which states that some features and services in the WhatsApp application can support sales activities [65]. Another reason is may because the use of WhatsApp provide interactivity between sellers and buyers, allows connecting with other marketing channels, and personalize the customers [66].

The last variable is public relations which shows a high category with a score of 60.28% and average score of 3.41. Public relations has an important meaning in marketing communication since it could build a good image to consumers and other trading stakeholders. WhatsApp offers several features that support public relations activities such as being able to share photos, videos and also create groups [67]. Communication and image building could be carried out through the WhatsApp group.

### 4.3. Factors that Influence the Use of WhatsApp Application

WhatsApp as a technology that has not been so long known, launched in 2009, has been widely used by people and not just utilized as a sender of messages, but also a tools of networking [68]. Its use in marketing communication is also the development of use as a message sender application.

There are several factors that are likely to influence the use of the WhatsApp application by traders in fruit marketing communication. Based on previous studies [69], [70], this study proposes educational factors, convenience factors, benefit factors, reference group factors and saving factors as factors that influence the use of WhatsApp on marketing communication by fruit traders. Furthermore, these factors were analyzed its scores and categories of influence as presented in Table 6.

Variable	Average	Score		
Variable	Score	(%)	Category	
Education	3.73	68.33	High	
Convenience	4.56	88.89	Very High	
Benefit	4.01	75.14	High	
Reference group	3.57	64.26	High	
Economic	4.32	83.06	Very High	
Total	4.04	75.94	High	

Table 6. The Level of Use of WhatsApp Application

Table 6 shows that factors that influence the use of the WhatsApp application have several indicators with different categories, from high to very high. The difference in the level of use of WhatsApp is influenced by the level of merchant approval in the selection of existing variables. There are 2 variables that show a very high category, namely convenience variable and economic variable. Convenience variable has a very high category with the score obtained by 88.89% and the average score of 4.56. This shows that WhatsApp as an application does not provide difficulties for traders in using it. Another thing that might be the reason is because most traders (64.5%) are millennials generation whith aged between 19 to 38 years old who are very familiar with new technology such as WhatsApp [71], [72].

The next variable that shows a very high category is the economic variable with an achievement score of 83.06% and an average score of 4.32. Reasons for economical view in using WhatsApp can be understood since in business the cost factor is very important [73]. Traders feel that using WhatsApp can save costs because they do not need to pay more for mobile service in order to contact suppliers or consumers. Another reason is that it can save time in buying fruit to suppliers since they do not have to go to see and buy the fruit but just to share the pictures using WhatsApp.

Moreover the other variables, namely education variable, benefit variable and reference group variable, show high category. Educational variables get a high category with a score of 68.33% with an average score of 3.37. It shows that the education factor has a significant role in the merchant's decision to use WhatsApp in marketing communication. Educational factors have an influence in facing difficulties in using new technologies and applications such as WhatsApp [74].

While the benefit variable gets a high category with a score of 75.14% and an average score of 4.01. Traders feel the benefits after using WhatsApp such as promoting fruit, knowing information about the price of fruit in the market so that traders can make decisions faster in order to increase sales. The last variable is reference group shows a high category with a score of 64.26% and an average score of 3.57. This indicates that reference groups such as family, other traders and consumers have an influence on the use of the WhatsApp to communicate. This can be understood since in Indonesia WhatsApp is the most popular mobile messaging application which was used by the majority of the population, with penetration of 83% of the population in 2018 [75].

# 4.4. Relationship Between the Level of Use of WhatsApp Application with Factors That Influence the Use of WhatsApp Application

The next analysis is about the relationship between the level of use of WhatsApp application with the factors that influence the use of WhatsApp application on fruit marketing communication. This relationship can be positive or negative. The positive sign indicates that the stronger the relationship of the factors that influence the use of the WhatsApp application with the factors that influence the use of the WhatsApp application, the higher the level of use of the WhatsApp application by traders. While the negative sign illustrates the weaker relationship of factors affecting WhatsApp usage. The detail of the results can be seen in Table 7.

Variable	The Level of the Use of WhatsApp on Marketing Communication Activity					
variable	Sales	Categ	Personal	Categor	Public	Catego
	Promotion	ory	Sales	y	Relation	ry
Education	0,180	Week	-0,045	Week	-0,074	Week
Easy to	0,268	Week	0,429	Strong	0,555	Strong
use						
Benefit	0,541	Strong	0,520	Strong	0,623	Strong
Reference	0,247	Week	0,281	Week	0,360	Modera
group						te
Economic	0,059	Week	0,176	Week	0,265	Week
al view						

Table 7. Coefficient of Correlation of Factors that Influence the Use of WhatsApp Application

Table 5 shows that there are several number of variables that have been shown to have a strong positive relationship. The easy to use variable is proven to have a positive and strong relationship with public relations and quite strong relationship with personal sales with a correlation coefficient of 0.555 and 0.429 respectively. This shows that the easier it is to use WhatsApp, the more it is used in public relations and personal sales activities in fruit marketing communication. The ease of use of mobile technology applications such as WhatsApp has indeed become an important factor in its use [73].

Furthermore, the benefit variable has a strong and positive relationship with all indicators of marketing communication icluding sales promotion, personal sales and public relations with correlation coefficients of 0.541, 0.520 and 0.623, respectively. This results indicate that the higher the benefits of using WhatsApp, the higher its use in marketing communication activities including sales promotion activities, individual sales and public relations. The benefit of using WhatsApp is one of the reasons for its popularity [76]. In the context of usage for public relations which is also has strong relationship, it may because WhatsApp could bring an intimate relationship compare to another social media such as Facebook [77].

#### 4.5. Conclusion

Based on the results and discussion, it can be concluded that the majority of whatsapp users among traders are male from millennial generation with high school education. Furthermore the level of use of Whatsapp application in marketing communications by fruit wholesalers at a high level. This is indicated by Whatsapp usage level variables such as sales promotions which is shows in a very high category, and variable of personal sales and public relations at high categories. The high level of use of the WhatsApp application among traders is supported by the profile of the majority of them with a young age and a good level of education.

Furthermore, regarding the factors that influence the use of the WhatsApp application, this study concludes that convenience and economic reasons are the most influential factors in the use of the WhatsApp application by traders, compare to other factors such as education, benefits and reference groups with lower influence. Finally the relationship between the level of use of WhatsApp and the factors that influence the use of WhatsApp on fruit marketing communication by traders, this study found that there is a significant strong relationship between the benefits factor and the use of WhatsApp in marketing marketing communication activities that include sales promotion activities, personal selling and public relations. The easy to use factor is proven to have a moderate relationship but only on personal selling activities and public relations.

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