

Conference Paper

E-marketing Skill: An Essential Future Qualification to Compete in the Digital Era (*The Effect of Social Media E-marketing to Consumers' Shopping Behavior*)

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Abstract

As the number of Internet users increases, the trend of online transactions also increases. E-marketing is one of the selling strategies using social media such as Facebook, Instagram, Twitter, WhatsApp, BBM and LinkedIn. The purpose of this study was to analyze the simultaneous and partial effect of e-marketing to the shopping behavior of respondents. Data were obtained from questionnaires given to 100 student respondents of Indonesian vocational education. The analytical method used in this research is the *t*-test and *F*-test using SPSS 17. Based on the results of the study, it is found that three factors affected the shopping behavior of these respondents through their online transactions via social media, namely, accessibility, currency and interactivity. All e-marketing variables influenced the behavior of consumers. However, there are also some e-marketing variables affecting the shopping behavior of the respondents in different factors. From the cultural factor, shopping behavior is influenced by the accessibility and currency variables, while an effected variable linked to personal factors is accessibility alone. For psychological factors, the only effecting variable is interactivity. But overall e-marketing variables affected the shopping behavior of respondents. In conclusion, e-marketing is an essential future qualification needed to be able to compete in the digital era.

Keywords: consumer behavior, e-marketing, online shop, social media, shopping, qualification

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1. Introduction

It is a common knowledge that human desires are endless, not to mention the desires to meet their daily needs. With its nature, humans have never been satisfied and that

is why it is not surprising that human needs are endless. Their needs in question are food, clothing as well as board. Human needs of things and services will be able to give satisfaction to man, both the physical and spiritual satisfaction. Human needs are usually adjusted to the income they received. The higher their income per capita, the higher their needs.

Online facilities have grown so rapidly that simply by clicking in one interface, we can buy all we desire and need through the Internet. The Internet provides all needs ranging from food to additional needs such as electronic goods. Consumers are given the ease in meeting all their needs and desires through the Internet on their communication gadget. Now, almost everyone has a gadget, which has now become a primary requirement for communication. Through this gadget and the Internet service, we can connect to whomever we want, even those in other parts of the world. This service is connected electronically 24 hours a day 7 days a week. The system of online services for commercial purposes is known as the electronic marketing (e-marketing). The web-shopping intentions become higher with the presence of promotional offers (May et al., 2005).

The e-marketing industry is also growing more rapidly. In the future, it will not be impossible that e-marketing industry becomes one of the backbones of the national economy. Nowadays, people in big cities treat e marketing as part of their lifestyle. This is a reason why e marketing in Indonesia will continue to grow. The Internet offers opportunities for everyone to introduce products and market them. We can market a wide variety of things, either product or service with an unlimited area coverage that reaches the entire world.

The growing number of Internet users increases the trend of online shop transaction number every day. Based on the data of Bolton Consulting Group (BCG), in 2013 the middle classes in Indonesia reached a number of 74 million people. It is predicted that by 2020 this figure will rise to 141 million people or about 54% of the total population in Indonesia. The 2015 Performance Report of the Ministry of Communication and Information also reported that active internet users has reached 73 million people with a 150 trillion rupiah value of transaction. This is a fantastic figure considering that only about 7% of Internet users in Indonesia used shopping online. Viewing this data, it is clear and it is certain that the market potential of e-commerce in Indonesia is enormous. With the rising number of middle class level, people will not hesitate to spend their money in purchasing a variety of desired items.

Based on the aforementioned description, it is time for consumers to act smart, thorough, efficient and effective in shopping for desired products. With the increasing

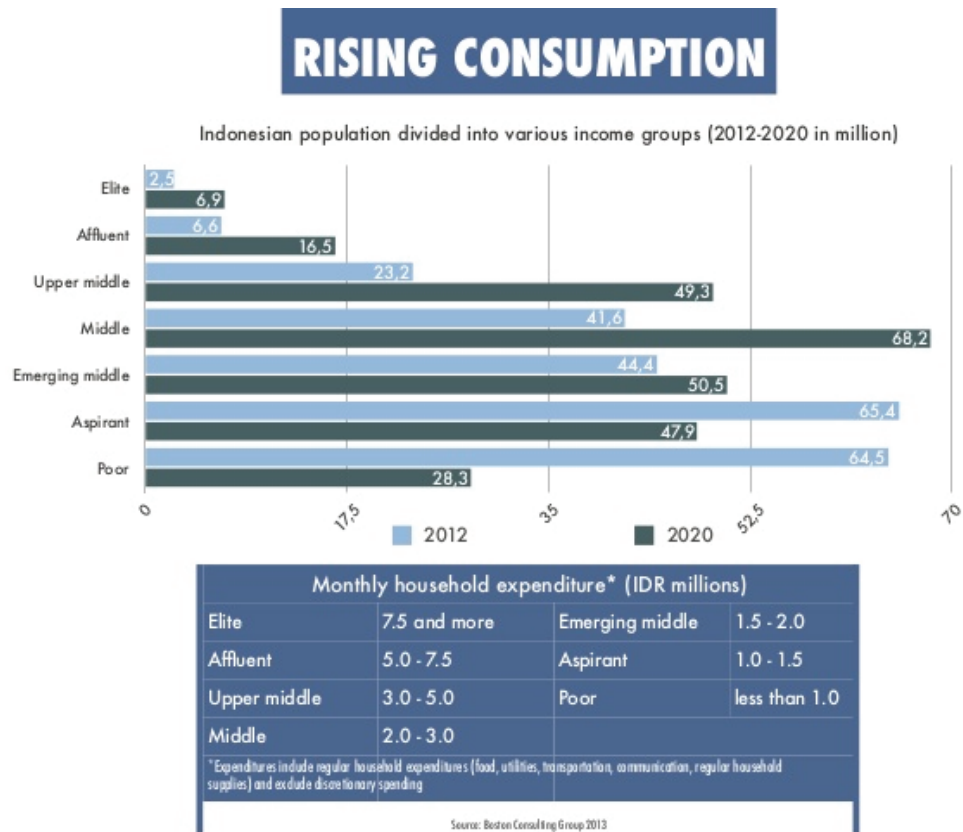


Figure 1

consumer demand for a wide range of products, the producers will strive to meet the needs of their consumers. Added with the easy service given by producers, consumers feel indulged by e-marketing facilities. These technological innovations become dilemmas for consumers, whether they decide to shop on needs and desire or on temptation with online facilities provided. In this study, researchers will analyze the effect of e-marketing strategy on consumer behavior in making the right decision to shop and meet their need and desire of consumers. This research investigates to what extent e-marketing influence the interest of respondents' expenditure and what capacity e-marketing has in the producer's sales strategy. Following the research question the purpose of this study is to know and explain about e-marketing as well as to understand the position of e-marketing in influencing consumer's shopping behavior. The result will justify e-marketing as an essential future skill needed to compete on the digital era.

2. Literature Review

2.1. Online marketing

According to Gupta et al. (2012) the term e-marketing is also known as internet marketing, web marketing, or online marketing. Therefore, online service is an act or effort carried out by the producers to sell their products or services in order to gain consumer interest through Internet-based media.

There are 13 criteria that can be used to evaluate a website [8] namely; accessibility and visibility, accuracy and credibility, authority, coverage, currency, interactivity, metadata, navigability, orientation & objectivity, privacy, searchability, security, and services. In this study, the authors used three criteria deemed appropriate, namely accessibility, currency and interactivity. The use of these three criteria is considered very suitable to study e-marketing because they are not overly complex. They are e-marketing as a media that provides a variety of information about products services and various other promotions without including the applications of e-commerce and online transaction services.

1. Accessibility is the degree of access capabilities consisting of efficient and easy access applications without time limit.
2. Currency refers to the timeliness of information, materials, and services provided. The information provided must be current and beneficial during time of access. Usually the producers or the sellers deliver easy to understand newest information, which is needed by consumers.
3. Interactivity, sellers and buyers are able to interact directly, such as through group and social media sharing.

In the modern world of marketing, there is the term called e-business and e-marketing. E-marketing incorporates the worldwide web in all the activities a business conducts with the aim of attracting new business, retaining current business and developing its brand identity [2]. E-business is the use of an electronic medium in everyday business activities.

E-marketing or electronic-marketing is part of e-business that takes advantage of electronic medium to carry out marketing activities in order to achieve marketing objectives. In this study, the authors analyze social media marketing as marketing activity (e-marketing). The potential for e-marketing is limited in such environment [5].

2.2. Social media

According to Kaplan and Haenlein (2010), social media is a group of Internet-based applications that are constructed based on Web 2.0 ideology and technology. Sales through social media is fairly effective because the message is universal. In other words, not just one or two people receive the message, but a lot of people will be informed of the message own conveys in a short time and on an unlimited time. Social networking or social media that continues to evolve has established ways for businesses to collaborate and communicate effectively with their consumers both inside and outside the company. From a time point of view, word of mouth is more effective in supporting customer service function and in humanizing the company’s brand (Rahmawati, 2013). In this study, the authors used several social media types targeted for promoting or selling products/services such as Facebook, Instagram, Twitter, WhatsApp, BBM and LinkedIn.

2.3. Consumer behavior

According to Schiffman and Kanuk (2004) is behavior shown by consumers in searching purchase, use, evaluation, and replacement of products and services that are able to satisfy their needs. Factors that affect buying interest relate to feelings and emotions. If someone is happy and satisfied in buying goods or services the buying interest will be strong and dissatisfaction will typically be omitted.

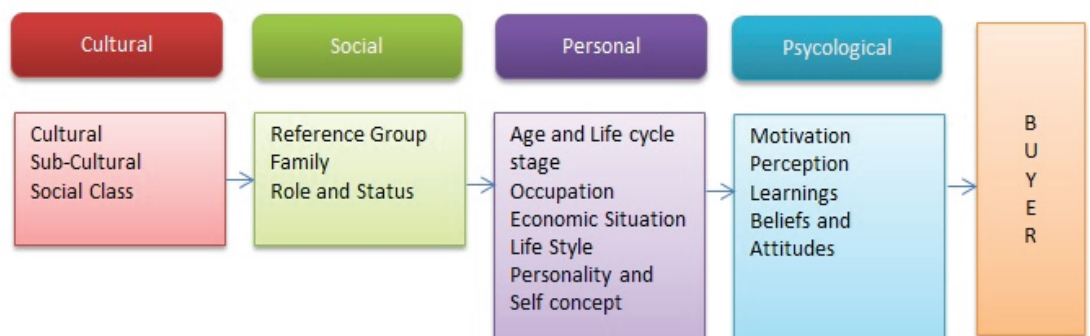


Figure 2

According to Kotler and Keller (2009), the consumers’ purchasing behaviors are affected by several factors namely cultural, social, personal, and psychological.

1. Cultural Factors. Cultural factors are divided to cultures, sub-cultures, and social classes. Sub-cultural factors include nationality, ethnicity, religion, race, and group for its members.
2. Social Factors. Consumer behavior is also influenced by social factors such as the reference group, family, participation and social status. Participation and social status factors will be felt when consumers become one of the member of the club, race, organization, community or specific social groups. The roles will include their activities within the group, and each role generates a status.
3. Personal Factors, all decisions are influenced by personal characteristics such as age and stage of life cycle, job, status situation, lifestyle and personality of the consumers themselves.
4. Psychological Factors, there are 4 psychological factors namely; motivation, perception, learning, and beliefs attitude.

2.4. Previous research

There have been several studies prior to this study. Those studies have made e-marketing a variable in their research. This thought can be used as a reference in completing the current study. In 2013, a research conducted by Shinta Aprilia titled 'Analysis of Strategies Online Marketing and Its Effect on Purchase Intentions Consumer Products Clean & Clear' showed that website, Facebook, and twitter partially influenced purchase intentions of consumers to buy the product of Clean & Clear in Surabaya and the dominant influencing variable on purchase intentions was Facebook variable. This study uses multivariate statistical analysis techniques, which is a multivariate statistical analysis techniques using SPSS.

3. Research Method

3.1. Research design

As mentioned on the research objectives, this is a descriptive statistical research with associative approach, to define the causal relation analysis between two or more variables, as well as the correlations that exist between the variables studied. Primary data were collected through questionnaires that are distributed randomly to a population

of consumers possessing social media account. Secondary data were collected from literature studies.

This study used a quantitative approach. In sampling, researchers used the Taro Yamane calculation formula with an error rate of 10%. Analysis of this study was done through validity test, reliability test, and normality test of the questionnaires distributed. The results of the questionnaire were then analyzed by *t*- and *F*-tests. Data processing was performed with SPSS 16.0 (Statistical Package for the Social Science).

3.2. Research variable

This study has three independent variable or variables that affect e-marketing (X) and consumer behavior variable (Y). As for the relationship between the independent variables with the dependent variables under study can be shown as follows:

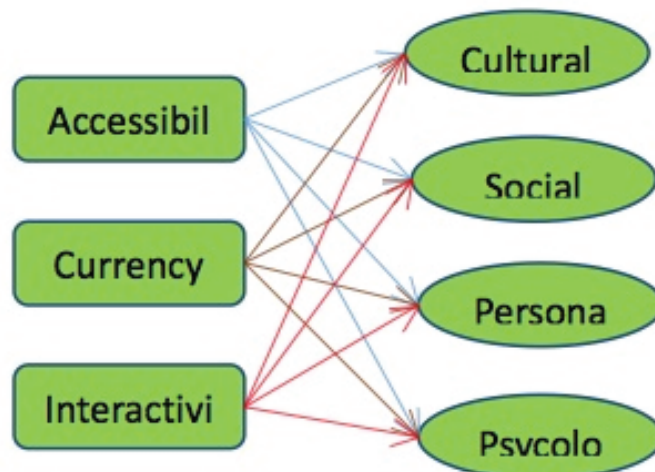


Figure 1 relationship between variables
 Source: *Personal Documentation*

Figure 3

3.3. Sampling technic

The population of this research was the whole student studying in Vocational Higher Education Student with a minimum age of 19 years. The sample of respondents is students from the Communication studies, a total of 100 respondents. The reason being that at that age, respondents could understand each question in the questionnaire, are usually at a productive age, are technology literate, and also are the students of the

authors. Sampling technique used is incidental non-probability sampling to respondent relevantly available at the moment of research.

3.4. Locations and time research

This research was conducted in the Vocational Higher Education, Universitas Indonesia. Research began in July until August 2016.

3.5. Data collection technique

Besides interview, the authors gathered information through questionnaires distributed to respondents via google.doc. The questionnaire used in this study is a questionnaire collected through a structured interview process. This questionnaire took form numbered questions, each contain four alternative answers.

This study measured the attitude of visitors; therefore it is a questionnaire using Likert attitude scales.

3.6. Data analysis technique

3.6.1. Validity and reliability

Because the researchers used primary data deriving from questionnaires therefore prior to testing the hypothesis, a validity and reliability to each questions indicator has to be tested. A total of 20 questionnaires are distributed as a pilot test to measure how closely a question is able to measure its object. The question item is considered valid if there is a correlation with a particular significance value. The significance value is used to determine the validity of each item. If the significance value < 0.05 , then the item is valid. Constancy of the Cronbach Alpha of 0.6 for reliability is considered appropriate. The test was then calculated using SPSS 17.0 (Statistical Product and Service Solution). The number of r table for $N = 100$ at the 5% significance is 0.284.

3.6.2. Test assumptions

To obtain unbiased research result, which can be used effectively, assumption test on the sample needs to be done. Assumption test used were normality, multicollinearity, and autocorrelation tests.

3.6.3. Hypothesis testing

To measure and determine causal relation between one variable and other variables, a hypothesis testing is conducted through regression analysis (*t*-test and *F*-test). The *t*-test aims to see the influence of each individual independent variables to the dependent variable. While the *F*-test aims to see the influence of independent variables all together to the dependent variable. In the ANOVA table, there is a significant probability value (Sig.) that serves to compare the mean of a sample with the \bar{x} value from one side. In the *t*- and *F*-tests, the Sig. value compared to the set significance limit is 0.05. If the significance probability value is < 0.05 it indicates that there is a partial influence of independent variables to the dependent variable. On the contrary, if the significance probability value is > 0.05 it indicates that there is no partial influence of independent variables to the dependent variable.

3.7. Testing statistical hypotheses

To determine whether the regression results are correct, a proper test needed to be done. Model testing can be performed using *F*-value or by using a probability value or sig. value in the ANOVA table. The *F*-test statistic used in the One Way ANOVA was calculated using the formula $(k-1)$. *F*-test was done by comparing the value of *F* value (the output) with *F*-table. While the degree of freedom that is used is calculated by the formula $(n-k)$, where *k* is the number of sample groups, and *n* is the number of samples. A low *p*-value for this test indicates rejection of the null hypothesis, or in other words, there is evidence that at least one pair of the mean are not the same. To test whether the hypothesis is accepted or rejected, *t*-statistic (one-tailed test) was used with the following assumptions:

- If $-t\text{-table} \leq t\text{-value} \leq +t\text{-table}$ then H_0 is accepted and rejected
- If $t\text{-value} \leq -t\text{-table}$ or $t\text{-value} > +t\text{-table}$ then H_0 is rejected and H_a accepted. In *t*-test was conducted on the degree of freedom $(n-k-1)$, where *n* is the number of respondents and *k* is the number of variables. The confidence level used is 95% or $\alpha = 5\%$.

4. Results and Discussion

In this study 100 respondents were taken as respondents. Data collection technique was in depth interview with the student to answer the questions. From the data, it

is known that the different number of male respondents and women are not very significant. From recapitulation table of respondents e-marketing shopping behavior, there are a variety of answers to each dimension of question. The results answer is no level values are zero; it is due to the similarity of the responses. The results of these answers are then analyzed all the variables e-marketing the shopping behavior of respondents.

Student responses to e-marketing variables with sub variable accessibility, it turns out many of the respondents, especially those with limited time to shop like transactions via social media for quick and easy access, the competitive price and saving. Some respondents do not mind having a few social media accounts. It can be seen that from the number of respondents' 100 people, who use applications for Facebook, Twitter, Instagram, WhatsApp and BBM there was at 187. Therefore, it can be concluded that almost every student have more than one social media accounts. To the satisfaction of transacting via social media completed, some respondents were quite satisfied. So is the currency of sub variables that include pictures, factor imported products, the products up to date, up to date applications and ease of transactions considered to be the reason for a student transact via social media. For the sub-variable interactivity that includes familiar with the seller/buyer, secure transaction, easy to get information and exchange the products of the seller/buyer as well as the existence of several groups of buying and selling in social media enough consideration to do transaction.

Judging from shopping behavioral variables, respondents with sub variable cultural factors did transaction via social media not always because of the trend and the urge to try new things. Even the intensity of student's transactions is not too often, respondents do not always use their money just to shop and raise prestige. Likewise with sub variable social factors, respondents did not do transaction via social media only for self-declaration that they are not outdated and raise social status. The respondents normally do not always follow the advice of family, friends or her social community in the transaction. Responses student in the sub-variable personal factors say that they shop via social media because the price is affordable and practical. Respondents are accustomed to shop via social media, but it's not something they do continuously in daily life or the life of the operation. Most respondents stated in sub variable psychological factor that they like to shop via social media because it is simpler than having a shopping mall and they know the recommendation of the seller/buyer. The average student already know the quality of goods and curious to try the shop, but that does not mean they are hobby shop

4.1. Validity and the reliability

With a sample size of 100 it is 96 degrees of freedom, so the r table is 0.284. It is known from Table 1 that the value of r value using bivariate Pearson on each sub-variable is greater than 0.284 so that the sub-variables in the questionnaire are valid.

For Cronbach's alpha values for all variables the value is 0.893. Therefore the value of Cronbach's Alpha ($r = 0.893$) is greater than the r table (.284). It can be concluded that the data is reliable and the research data could be used.

4.2. Test assumptions

- a. Normality Normality test for sub variable of e-marketing which includes Accessibility (X1), Currency (X2) and interactivity (X3) to cultural factors on shopping behavior of respondents (Y1), data obtained showed that sig. of Kolmogorov Smirnov normality test was 0.848. Normality test of e-marketing sub variable which includes Accessibility (X1), Currency (X2) and interactivity (X3) on social factors on shopping behavior of respondents (Y2), the sig. is 0.723 whereas for sub normality test of e-marketing variables which include Accessibility (X1), Currency (X2) and interactivity (X3) on personal factors on shopping behavior of respondents (Y3) showed 0,692. Normality test of e-marketing sub variable which includes Accessibility (X1), Currency (X2) and interactivity (X3) on psychological factors on the buying behavior of respondents (Y4) the sig. Is greater than 5% alpha is 0.674, so all data variables have already meet the normal assumption.
- b. Multicollinearities VIF value for the e-marketing sub-variables which includes Accessibility (X1), Currency (X2) and interactivity (X3) to cultural factors (Y1), social factors (Y2), personal factors (Y3) and psychological factors (Y4) on behavior respondents spending is less than 10, meaning there is no multi-collinearity in regression analysis, therefore it meets the assumptions of multiple regression analysis.
- c. Autocorrelation The value of Durbin Watson to four equations are in the range of 1.6159 to 2.3481 and it can be said that the regression model free of autocorrelation.

4.3. Testing statistical hypotheses

Based on the data processing via SPSS 17.0, note in Table ANOVA sig = 0.000 less than 5% alpha, it means reject H_0 or can be said that the overall regression model effect or at least one variable of e marketing factors that influence shopping behavior of respondents. The survey results revealed sig value of each variable. In the first equation, accessibility and currency sub variable has a value of sig is below 5% alpha so that the t -test for both sub variable are rejected H_0 means accessibility and currency effect on shopping behavior of respondents. As for the second equation no sub variables that have a sig value is below 0.05, which means that all variables H_0 receive e-marketing does not affect the shopping behavior of respondents visits from social factors. For only the third equation accessibility alone have sig below 0.05 so that only accessibility that influence shopping behavior of respondents when viewed from the personal factor. In the final equation, the obtained data is that only the interactivity that signya value below 0.05 so that interactivity can be said psychological factors affect the shopping behavior of respondents.

To test the goodness of the model, the known value of R-square for the first equation of 0.425 or 42.5% means that the diversity of the shopping behavior of the student seen from the cultural factors were able to be explained by factors of e-marketing is by 42.5% while the remaining 57.5% influenced by other factors outside the model. To model the equation second, third and fourth, respectively, known R-square value is 0.071, 0.393 and 0.42, so it can be said that the diversity of the shopping behavior of the student seen from the social, personal and psychological factors able to be explained by e-marketing is 7.1%, 39.3% and 42% while the remaining 92.9%, 61.7% and 58% are influenced by other factors outside the model.

4.3.1. The influence of e-marketing to shopping behavior (social factors)

For the second equation if the data is obtained the data that e-marketing variables did not affect the shopping behavior of respondents when seen from social factors. In a sense, without any online transaction via social media, respondents still would have high shopping behavior because they do not want to be outdated and they also need to shop. Sometimes there are respondents that need help from others such as family or friends to pick the model items he/she needed. Therefore, in certain respects, they have more confidence when buying directly to the store, because they can try or use a sample of the goods. Access to the internet also means access to other individuals

who are a part of the network [3]. Besides shopping directly gives the impression for some respondents because they can ask for opinions with their community friends, family or relatives after shopping and it can enhance friendship, kinship or friendship among all.

4.3.2. The influence of e-marketing to shopping behavior (personal factors)

In this third equation, only the accessibility impacts the buying behavior of respondents seen from personal factors. Respondents are happy with their practical lifestyle certainly take into account the ease of access to do transaction via social media, especially if the price is still affordable. They will be familiar with the product pictures sent by the seller through social media application and it will influence the shopping behavior of the respondent. For the respondents who are busy and have limited time, transaction via social media is a convenient way. They did not have enough time to hang out with friends of friends or family so they usually rely on social media to shop for their needs.

4.3.3. The influence of e-marketing to shopping behavior (psychological factors)

Interactivity variable is influential in the shopping behavior of the respondent especially from psychological factors. Some of them are happy to receive pictures of the products sold by online sellers. Especially if they've bought via online and are satisfied with the quality of goods, therefore they will continue purchasing goods via online methods. Most respondent do transactions because they are familiar with the seller or the buyer, so that gives them access to exchange information, bargain, trade or selling service will be easy and secure. If it is met, then the shopping behavior of the respondents will be higher.

5. Conclusion

All e-marketing variables influence the behavior of consumers. However, some e-marketing variables affects shopping behavior of respondents in different factors. For culture, shopping behavior is influenced by the accessibility and currency variables, while the variables only for personal factors that affect accessibility alone. Meanwhile,

on psychological factors, the only variable that has high affect is interactivity. But overall, e-marketing variables have high affect to the shopping behavior of respondents. In conclusion, E-marketing is an essential future qualification needed to be able to compete in the digital era.

Samples research focuses on student at Universitas Indonesia Vocational students, therefore the results of this study cannot be generalized to all university in Indonesia, and the expected results of this study can be used as a reference and research for all parties.

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