

Antecedent Of Purchase Intention For Pirated Software On Personal Computer Among University Students In Samarinda City

1st Bela Barus 1

Applied Study Program in Marketing Management
Business Administration Department
Samarinda State Polytechnic Samarinda, Indonesia
faizal_barus@yahoo.com

2nd Hendrik Batoteng

Applied Study Program in Marketing Management
Business Administration Department
Samarinda State Polytechnic Samarinda, Indonesia
hendrikbatoteng@yahoo.com

3th Yandhika Dwi Saputra

Applied Study Program in Marketing Management
Business Administration Department
Samarinda State Polytechnic Samarinda, Indonesia
yandika_dwi_saputra@yahoo.com

Abstract This study aims to Analyze the antecedents of interest behaviour in buying pirated software on PCs among University students in Samarinda City. This study uses a quantitative approach using path analysis that is processed with IBM SPSS Statistics 23 software and Structural Equation Modelling (SEM) with IBM AMOS 23. software This study uses a sample of 180 people taken from a number of pirated software users who are active university students. in Samarinda City. The measurement scale uses a Likert scale with a score of 1-5. The questionnaire used was distributed as many as 30 at Samarinda University 17 August 1945, 118 at Mulawarman University, 11 at Muhammadiyah University Tepian University, 20 at Widiya Gama Mahakam University, and 1 at Nahdlatul Ulama University in East Kalimantan.

Based on the structural model it can be proven that Subjective Norms, Perceived Risk, and Self Efficacy have a significant effect on Attitude toward Purchasing; Integrity and Value Consciousness have no significant effect on Attitude toward Purchasing; Perceived Risk, Integrity and Attitude toward Purchasing have a significant effect on Purchase Intention; Subjective Norms, Value Consciousness and Self Efficacy have no significant effect on Purchase Intention.

Key Word : Subjective Norm, Perceived Risk, Integrity, Value Consciousness, Self Efficacy, Attitude toward Purchasing, Purchase Intention, pirate software, University at Samarinda City.

I. INTRODUCTION

Rapid technological development has provided high benefits for the community in helping their daily work both individually and in business. Likewise, especially in the use of computer technology both hardware and software has become a daily activity for students in helping their college assignments. However, there are problems in the use of the software, because from the results of temporary observations it was found that the software used in the midst of many people who do not have a license (pirated software) or doubt its authenticity. This is certainly a violation, namely a violation of Law No. 28/2014 concerning copyright where this Act is published as a form of protection for software makers for piracy which is very detrimental to them. As well as known violations of this law, the perpetrators can be fined 500 million to 1 trillion IDR. Besides that, the use of pirated software can make the hardware used is infected with destructive malware. However, violations of this Law continue to increase, meaning that the public continues to use pirated software, even the number continues to increase. According to Business Software Alliances (BSA) in 2002 nearly 90% of software used in Indonesia was illegal software, up from 88% in 2001 [9].

This is of course interesting to examine, what causes interest in buying pirated software in the community especially among university students in Samarinda City. Software piracy problems have been studied by many researchers with different approaches. The first approach is aimed to looking the differences in demographic characteristics of hijackers [11], [17], [16], & [20], while the second approach looks for factors that determine or explain why people hijack [13], [15], [20]. According to [20] decision-making processes related to software piracy are influenced by five factors: (1)

stimulus to act, (2) socio-cultural factors (3) legal factors, (4) personal factors (personal factors), and (5) situation factors). Whereas [13] stated that the intention to hijack software relates significantly to attitudes toward piracy, and subjective norms against piracy.

II. LITERATURE REVIEW

The variables studied consisted of 5 (five) exogenous variables namely subjective norms, perceived risk, integrity, value consciousness and self efficacy, and 2 (two) endogenous variables namely attitude and purchase intention. The causality relationship of exogenous and endogenous variables refers to the opinions of previous researchers. According to [5] subjective norms, have a significant effect on attitude, while the purchase intention is also significant [3] & [19]. But this is not the case according to [2] which states that the relationship of these variables is not significant. Thus a hypothesis can be raised, namely:

H1. Subjective norms have a significant effect on attitude and purchase intention

[5] also states that integrity has a significant effect on attitude together with other researchers, namely [24], [1], & [7]. But that is not the case according to [8] which states that integrity has no significant effect on attitude. While the purchase intention according to [18] the effect is not significant. Thus a temporary conclusion can be drawn namely:

H2. Integrity has a significant effect on attitude and purchase intention

[1] research states that perceived risk has a significant effect on attitude, as well as the same thing stated by [5], [14], [7], [8], & [22]. Similarly, intention to purchase is significant according to [24] & [10]. But that is not the case according to [23] which states that its influence is not significant. Therefore, a temporary conclusion can be drawn, namely:

H3. Perceived risk has a significant effect on attitude and purchase intention Value consciousness has a significant effect on attitude. This is the result of research by [24] & [12]. Furthermore [12] also stated that this variable has a significant effect on purchase intention. Thus it can be concluded that:

H4. Value consciousness has a significant effect on attitude and purchase intention

The other variable which is the factor causality attitude is self efficacy. According to [26] the effect is significant, but not according to [27] the effect of self efficacy is not significant on attitude. However, the purchase intention of self efficacy has a significant effect, which is shown by the results of [4]. It can be concluded that:

H5. Self efficacy has a significant effect on attitude and purchase intention.

The last causal relationship in this study refers to the opinion of [2], [18], [14], [4], & [10] all of whom stated attitude had a significant influence on purchase intention. However, this was not the case found by [25] who stated that their influence was not significant. Interim conclusions can be drawn that:

H6. Attitude has a significant effect on purchase intention

III. RESEARCH METHOD

In order to solve the research problem, the mind set model is built, which begins with the determination of the theoretical and empirical framework. The theoretical framework is taken from reference books such as the theory of consumer behaviour and marketing management. While the empirical framework is taken from previous research relating to the variables studied, namely [26], [25], [24], [3], [10] & [27] and from other studies. Furthermore, from the two studies the hypothesis is derived (a temporary answer to the research problem), then a statistical test is performed and the result is research.

Population and sample, the study population were all university students in Samarinda city, namely 1) Mulawarman University, 2) University 17 August, 3) Widyagama Mahakam University, 4) Nahdatul Ulama University, and 5) Muhammadiyah University Kalimantan Timur, with the total of 40,697 student colleges. Whereas the sample that is stabilized is in accordance with the analysis method analysis that is SEM is 180 students who are taken proportionally. Data retrieval method, is to use a questionnaire with a Likert scale of 1, 5, which is given in cross section or accidental sampling, which is given to students found during the enumeration, even though the proportionality is maintained especially by gender. The questionnaire was first tested with a pilot test of 40 respondents to ensure the truth.

Analysis tools, used are structural equation modelling (SEM). The tests carried out included 1) validity and reliability test, 2) model fit test, and 3) hypothesis testing. These tests are assisted by statistical software namely SPSS and AMOS.

IV. RESULT AND DISCUSSION

From the results of testing the validity and reliability of research instruments using Pearson correlation method and Cronbach alpha, the test results can be explained as follows:

Table 1.1
Validity dan Reliability Instrumen Research Test

| Variabels | Items | Code | Coefficient Correlation | Remark. *) | Reliability *) |
|---------------------------------------|-------------------------|------------------|-------------------------|------------|---------------------|
| X ₁ Subjective Norms | Approve a decision | X _{1.1} | 0,619 | Valid | 0.765 (Reliabel) |
| | Should Buy | X _{1.2} | 0,839 | Valid | |
| | Friends Encouragement | X _{1.3} | 0,781 | Valid | |
| | Will mind | X _{1.4} | 0,732 | Valid | |
| X ₂ Perceived Risk | Would be risky | X _{2.1} | 0,706 | Valid | 0.612 (Reliabel) |
| | High risk | X _{2.2} | 0,728 | Valid | |
| | Loss risk | X _{2.3} | 0,670 | Valid | |
| | Endangers | X _{2.4} | 0,613 | Valid | |
| X ₃ Integrity | Value of honesty | X _{3.1} | 0,707 | Valid | 0.628 (Reliabel) |
| | Value of politeness | X _{3.2} | 0,723 | Valid | |
| | Value of responsibility | X _{3.3} | 0,654 | Valid | |
| | Value of self control | X _{3.4} | 0,671 | Valid | |
| X ₄ Value Consciousness | Low price | X _{4.1} | 0,700 | Valid | 0.617 (Reliabel) |
| | Best value for money | X _{4.2} | 0,705 | Valid | |
| | Worth | X _{4.3} | 0,641 | Valid | |
| | Searching | X _{4.4} | 0,68 | Valid | |

| | | | | | |
|--|---------------------------------|------------------|-------|-------|---------------------|
| | for the best seller | | 0 | | |
| X ₅ Self Efficacy | Think have ability to use | X _{5.1} | 0,618 | Valid | 0.643 (Reliabel) |
| | Independent | X _{5.2} | 0,706 | Valid | |
| | Feel more understood than other | X _{5.3} | 0,796 | Valid | |
| | Think can handle the issue | X _{5.4} | 0,669 | Valid | |
| Y ₁ Attitude Toward Purchasing | Better Choice | Y _{1.1} | 0,571 | Valid | 0.604 (Reliabel) |
| | Considering Price | Y _{1.2} | 0,557 | Valid | |
| | Give Benefit | Y _{1.3} | 0,572 | Valid | |
| | Nothing wrong with purchasing | Y _{1.4} | 0,567 | Valid | |
| | Similar Function | Y _{1.5} | 0,586 | Valid | |
| | Have the same reliability | Y _{1.6} | 0,621 | Valid | |
| Y ₂ Purchase Intention | Would recommend | Y _{2.1} | 0,802 | Valid | 0.866 (Reliabel) |
| | Will consider to buy | Y _{2.2} | 0,863 | Valid | |
| | Will buy | Y _{2.3} | 0,861 | Valid | |
| | Easy to find | Y _{2.4} | 0,852 | Valid | |

Note : *) Comparing with Coefficient According to Sugiyono (2012)

While the test results for the suitability of the model and research hypothesis can be explained as follows:

Table 1.2
Fit Test Model

| Goodness of Fit Index | Cut of Value | Model Result | Description*) |
|--------------------------|--------------|--------------|---------------|
| Chi-square | 441,282 | 432,627 | Fit |
| Significance Probability | ≥ 0,05 | 0,088 | Fit |
| RMR | ≤ 0,10 | 0,081 | Fit |
| RMSEA | ≤ 0,08 | 0,023 | Fit |
| CMIN/ DF | ≤ 2,00 | 1,096 | Fit |
| TLI | ≥ 0,95 | 0,960 | Fit |
| CFI | ≥ 0,95 | 0,964 | Fit |

Note: *) Comparing with Coefficient According to Hair *et al.* (2006)

Table 1.3
Research Hypothesis Test

| Variable | Path Coefficient Standardized | C.R (Critical Ratio) | Probability *) | Description |
|---------------------------------|-------------------------------|----------------------|----------------|-------------|
| X ₁ → Y ₁ | -0,396 | -2,812 | 0,005 | sig |
| X ₂ → Y ₁ | -0,358 | -2,621 | 0,009 | sig |
| X ₃ → Y ₁ | 0,055 | 0,508 | 0,611 | Not sig |

| | | | | |
|---------|--------|--------|-------|---------|
| X4 → Y1 | -0,198 | -1,635 | 0,102 | Not sig |
| X5 → Y1 | 0,303 | 2,415 | 0,016 | sig |
| Y1 → Y2 | 0,455 | 2,551 | 0,011 | sig |
| X1 → Y2 | -0,093 | -0,940 | 0,347 | Not sig |
| X2 → Y2 | -0,333 | -2,875 | 0,004 | sig |
| X3 → Y2 | 0,196 | 2,103 | 0,035 | sig |
| X4 → Y2 | 0,106 | 1,096 | 0,273 | Not sig |
| X5 → Y2 | -0,074 | -0,790 | 0,430 | Not sig |

Note: Comparing with alpha value 0,05

Can be seen from the probability coefficients in table 1.3 obtained a significant relationship when the probability coefficient is smaller than 5%. So that it can be explained that:

- A. X2 (perceived risk) and X3 (integrity) directly have a significant effect on Y2 (purchase intention) with a coefficient of 0.004 <0.05 and 0.035 <0.05. This means that the higher X2 will decrease Y2 (because the beta coefficient is unstandardized -0.33). This is related to consumer perceptions of the risk of using pirated software among university students in Samarinda City. It can be explained that the greater the risk that will be received will reduce their interest in using pirated software. But in X3 it will increase Y2 (because the beta coefficient is unstandardized 2,103). They assume that pirated software is the same function as the original software so that their perception that pirated software can also be trusted, thus increasing their interest in using the software. This finding confirms the theory of [18].
- B. X1 (subjective norm), X2 (perceived risk), and X5 (self efficacy) have a significant effect on Y1 (attitude toward purchasing) with a coefficient of 0.005 <0.05 and 0.009 <0.05 and 0.016 <0.05 and a significant effect on Y2 (purchase intention) with a coefficient of 0.011 <0.05. Directly the variables X1 and X5 have no significant effect on Y2, but with the use of moderating variables Y1, these two variables have significant influence.
- C. X2 (perceived risk) both directly and indirectly have a significant effect on Y2 (purchase intention), but the direct effect is greater.
- D. X4 (value consciousness) both directly affect not significantly to Y2 (purchase intention) (0.273 > 0.05) as well as indirectly (0.102 > 0.05 and 0.273 > 0.05). This variable even though the coefficient is increased will not be able to decrease or increase the Y2 (purchase intention) variable, or it has no significant effect.

V. CONCLUSION

The conclusion of the study are:

- A. Although the attitude towards buying pirated software among Samarinda university students has a significant effect on buying, on the other hand they realize that there is also a risk therein, especially in the article of violation of Law No. 19/2002 concerning Copyright, and can be subject to penalties in the form of fines of 500 million to 1 trillion IDR. Therefore, it is expected that the university, especially those in Samarinda City, will provide students with an early understanding that the act of using pirated software is a violation of the Law.
- B. To other researchers who are interested in research in the field of marketing theory, can continue this research by adding other variables related to the behaviour of pirated software use, as well as taking the broader object of research.

REFERENCES

- [1] Albarq., A.N. (2013). Using Structural Equation Modeling To Explore Saudi Consumers' Intentions Regarding Counterfeit Goods. *American Journal Of Business And Management*.
- [2] Chihab, Z. O., & Abderrezzak, B. (2016). Factors Affecting Consumer Purchase Intention Of Luxury Perfumes In /Algeria /A Case Study Of Consumers In The Twin Cities Of Tlemcen And Sidi Bel Abbes. *Journal Of Research In Marketing*.
- [3] Chiu, W., & Leng, H.K. (2015). Consumer's Intention To Purchase Counterfeit Sporting Goods In Singapore And Taiwan. *Asia Pacific Journal Of Marketing And Logistics*, 23-36.
- [4] Delafrooz Narges, Laily H. Paim, Dan Ali Khatibi. (2010). Understanding Consumer's Internet Purchase In Malaysia. *African Journal Of Business Management*.
- [5] De Matos Celso Augusto, Cristiana Trindade Ituassu, and Carlos Alberto Vargas Rossi. (2007). Consumer Attitudes Toward Counterfeits: A Review And Extension. *Journal Of Consumer Marketing*, 36-47.
- [6] Hair, J.F. (2006). *Multivariate Data Analysis*. Edisi 5. Jakarta: Gramedia Pustaka Utama
- [7] Hanzaae, K.H., & Jalalian, S. (2012). Impact Of Non-Price Factors On Purchase Intention Counterfeits. *Research Journal Of Applied Sciences Engineering And Technology*.
- [8] Heidarzadeh, H.K., & J.T.M. (2012). Attitudes Toward Counterfeit Products And Generation Differentia. *Research Journal Of Applied Sciences, Engineering And Technology*.
- [9] Hidayat, A., & Diwasasri, A.H. (2013). Factors Influencing To Purchase Counterfeit Luxury Brands Among Indonsian Consumers. *International Journal Of Marketing Studies*, 5(4).
- [10] Hien, P.T., & Trang, N.T. (2015). Counterfeits And Their Costs. *Asian Journal For Poverty Studies*, 123-13.
- [11] Hinduja S., (2003). Trends And Patterns Among Software Pirates, *Ethics And Information Technology*, Vol. 5 134-140
- [12] Jin, B., & Suh, Y. G. (2005). Integrating Effect Of Consumer Perception Factors In Predicting Private Brand Purchase In A Korean Discount Store Context. *Journal Of Consumer Marketing*, 62-71.
- [13] Lin T.C Dan Hsu, M.H., Kuo F.Y. Dan Sun P.C. (1999). An Intention Model-Based Study Of Software Piracy. *Proceedings Of The 32nd Hawaii International Confrence On System Sciences*, 1-8
- [14] Mollahosseini Ali, Bahram Jabarzadeh Karbasi, and Zein'alabedin Sadeghi. (2012). Investigating The Influential Factors On Purchase Intention The 'Gray Market' Goods In South-East Of Iran. *International Business And Management*, Iv(1), 48-56.
- [15] Moores, T. and Dhilon G. (2000), *Software Piracy:A View From Hongkong*. *Communications Of The Acm*, 42(12), 88-93
- [16] Oz, E. (1990). The Attitude Of Managers-To-Be Toward Software Piracy. *Or/MS Today*, 17(4) 24-25
- [17] Rahim M.M., Rahman, M.N.A. and Seyal, A.H. (2000). *Software Piracy Among Academic : An Empirical Study In Brunei Darussalam*. *Informatika Management & Computer Security*, 8(1), 14
- [18] Rahpeima Aman Olla, Hosain Vazifedost, Kambiz Heidarzadeh Hanzaae, and Hamidreza Saeednia. (2014). Attitudes Toward Counterfeit Products And Counterfeit Purchase Intention In Non-Deceptive Counterfeiting: Role Of Conspicuous Consumption, Integrity And Personal Gratification. *Walia Journal* 30, 59-66.
- [19] Sharma, P., & Ricky, Y.C. (2015). Demystifying Deliberate Counterfeit Purchase Behaviour Towards A Unified Conceptual Framework. *Marketing Intelligence & Planning*, Xxxiv(3), 318-335.
- [20] Simpson, P. M., Banerjee, D., & Simpson, C. L. (1994). Softlifting: A Model Of Motivating Factors. *Journal Of Business Ethics*, 13(6), 431-438.
- [21] Sugiyono. (2012). *Memahami Penelitian Kualitatif*. Bandung, Alfabet
- [22] Swiley, E. (2010). Technology Rejection: The Case Of The Wallet Phone. *Journal Of Consumer Marketing*, 304-312.
- [23] Teik Derek Ong Lai, Terrance Chiang Tong Seng, Dan Amanda Pung Xin-Yi. (2015). To Buy Or To Lie: Determinants Of Purchase Intention Of Counterfeit Fashion. *International Conference On Marketing And Business Development Journal*, I(1).
- [24] Wang, Y.H., & Chen, L.Y. (2016). An Empirical Study Of The Effect Of Perceived Price On Purchase Intention Evidence From Low-Cost Carriers. *Center For Promoting Ideas*.
- [25] Wen, T. C., & Noor, N.A. (2015). The Importance Of Consumers' Attitudes Towards Purchase Intention Of Hybrid Car In Malaysia. *Academic Research International*, Vi(4).
- [26] Wu Lina, M. (2015). What Makes Users Buy Paid Smartphone Applications? Examining App, Personal, And Social Influences. *Journal Of Internet Banking And Commerce*, Xx(1).
- [27] Yoon, C., & Kim, H. (2013). Understanding Computer Security Behavioral Intention In The Workplace: An Empirical Study Of Korean Firms. *Information Technology & People*, Xxvi(4)