# THE INFLUENCE OF ETHICAL ATTITUDES AND PURCHASE BEHAVIOUR FOR PIRATED SOFTWARE

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**Editor:** 

**Professor Ian Phau School of Marketing** 

# MARKETING INSIGHTS

Working Paper Series School of Marketing

ISSN 1448 - 9716

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# THE INFLUENCES OF ETHICAL ATTITUDES AND PURCHASE BEHAVIOUR FOR PIRATED SOFTWARE

#### ABSTRACT

This study investigates the ethical attitudes and purchase behaviour of Indonesian consumers towards software piracy. While previous studies have uncovered various motivations that drive consumers from different countries to engage in this undesirable behaviour, changes in the business landscape, including advancement in technology, necessitates a revisit into the attitudes and purchase intentions towards pirated software. It is found that habitual behaviour, integrity, facilitating conditions, and personal gratification are significant predictors of consumers' attitudes towards software piracy. Habitual behaviour and facilitating conditions are also found to be predictors of purchase intention. In contrast to prior studies, collectivism, normative and informative susceptibility, and value consciousness do not influence either attitudes towards and purchase intentions of pirated software. The main implication of this study is the clear indication that different strategies need to be formulated to curb software piracy in an emerging economy such as Indonesia.

#### **BACKGROUND**

Software piracy has been a major problem for the \$149 billion software market (Lau, 2007). The loss for legitimate businesses due to software piracy has reached US\$1.8 billion per annum (Wah, 2006). To date, no technological protection system is proven to be completely effective in curbing software piracy (Shin *et al.*, 2004). Research by the Business Software Alliance (BSA) has found that there is no record of any nation with a software piracy of less than 20% (Bagchi *et al.*, 2006). The vast scale of the pirated software market is actually urging illegal suppliers to meet the high demand in the market (McDonald and Roberts, 1994; Lau, 2007). Indonesia is ranked fourth after China as one of the largest software pirating countries in 2004 (Wah, 2006). The incompetent and lacking software protection system in Indonesia is regarded as one of the major problems that contribute to the high level of software piracy. The severity of the software piracy industry has resulted in Indonesia being included in the priority watch list of the United States Trade Representative (USTR) (Wah, 2006).

Despite the increasingly severe problem of software piracy in Indonesia, there is surprisingly very little research conducted to better understand this epidemic. As mentioned by Bloch *et al.* (1993), understanding software piracy from the demand side is necessary in order to better design competent software protection strategies. Thus, this study extends on prior research (such as Wang *et al.*, 2005; Ang *et al.*, 2001) by adding knowledge to existing literature on the area of counterfeit and pirated products. The findings from this study are expected to offer deeper insights to software companies and the government, to better capture and understand the software piracy issue in Indonesia, and to assist in designing better anti-piracy strategies. This paper will first examine the relationships between "social and personality factors" and "attitudes towards software piracy". Two factors, "habitual behaviour" and "facilitating conditions", were added to better explain the behaviour of Indonesian consumers. These were derived from past research and deem important in the Indonesian context. Second, it looked into the relationship between consumer "attitudes towards software piracy" and "purchase intention of

pirated software". The next section of this paper provides the software piracy literature and hypotheses development. This is followed by the methodology and data analysis. Finally the discussion and concluding comments are reflected.

#### RELEVANT LITERATURE AND HYPOTHESES DEVELOPMENT

#### Attitude towards software piracy

Research in software piracy has examined two broad perspectives. From the consumer behaviour perspective, research have investigated types and reasons for piracy behaviour (Conner and Rumlet, 1991; Glass and Wood, 1996), effectiveness of curbing strategies (Gopal and Sanders, 1997; Moseley and Whitis, 1995), pricing issues (Bloch *et al.*, 1993), and non price determinants (Ang *et al.*, 2001; Wang *et al.*, 2005; Limayem *et al.*, 2004; Al-Rafee and Cronan, 2006; Tang and Farn, 2005). From the social policy perspective research have focused on; the weaknesses of legislation in protecting intellectual property (Straub and Collins, 1990; Maholtra, 1994; Koen and Im, 1997), importance of education on software piracy, ethics and copyright laws on consumers (Cohen and Cornwell, 1989; Villazon and Dion, 2004; Lau, 2007), and how policy on software ethics could affect consumers' beliefs (Al-Jabri and Abdul-Gader, 1997; Loch and Conger, 1996; Kruger 2003; Mckibben, 1983; Straub and Nance, 1990).

Ang et al. (2001) proposed that social and personality factors influences consumers' attitudes towards piracy. This notion was supported by several other studies (including Simpson et al., 1994, Harrington, 1996 and Limayem et al., 2004) who have found that these antecedents significantly affect intention of unethical behaviour. Al-Jabri and Abdul-Gader (1997) claimed that these variables directly influence behavioural intention and the actual behaviour. Social factors include information susceptibility and normative susceptibility (Bearden et al., 1989), while personality factors include value consciousness, integrity and personal gratification (Ang, et al. 2001; Wang et al., 2005; Phau and Teah, 2008), habitual behaviour (Limayem et al. 2004) and facilitating conditions (Triandis, 1979; Limayem et al. 2004).

#### Social factors

#### Information and normative susceptibility

Tang and Farn (2005) found that both normative and informational influences affect consumer's pirating intention. Normative influence has a stronger effect as compared to informational influence in shaping consumer's behaviour (Bearden *et al.*, 1989). Consumers who are normatively susceptible to interpersonal influences base their purchase decision on the expectations of what would impress other people. Ang *et al.* (2001) also showed that normatively susceptible people have a less favourable attitude towards piracy. Jones and Kavanagh (1996) and Al-Jabri and Abdul-Gader (1997) also found that peer influence have dominant effects on an individual's intention to act unethically in the workplace. Consumers who are susceptible (information) to interpersonal influences will seek the expert's opinion on the product which they are going to purchase. It is expected that information susceptibility will have a negative effect on attitudes towards piracy. This is due to the fact that those people who are experts in software will suggest the original software instead of the pirated ones. They

will present the advantages of the originals as well as the drawbacks of purchasing the pirated versions (Bearden *et al.*, 1989; Ang *et al.*, 2001). Building from the above discussion, the following hypotheses are formed:

- H<sub>1a</sub> There is a negative relationship between information susceptibility and consumer attitudes towards software piracy.
- $H_{1b}$  There is a negative relationship between normative susceptibility and consumer attitudes towards software piracy.

#### Collectivism

Teoh *et al.* (1999) found that ethical sensitivity is an important variable that affects ethical behaviour. In a highly collectivistic society, software is regarded as a resource that can be shared and used to increase the welfare of the whole group (Shin *et al.*, 2004). Software piracy is popular in highly collectivistic societies where people tend to create a psychological distance between members of the ingroup and the out-group (Bagchi *et al.*, 2006). In these societies, software bought by a member is expected to be shared among the others. Gopal and Sanders (1997) have also defined software piracy as a group activity. A highly collectivistic behaviour also has a positive relationship with software piracy, thus having a positive effect on consumers' attitudes towards software piracy. As such, the following hypothesis is formed:

H<sub>1c</sub> There is a positive relationship between collectivism and consumer attitudes towards software piracy.

#### Value consciousness

Value consciousness can be defined as a concern for paying lower prices, subject to some quality constraints (Bearden *et al.*, 1989; Lichtenstein *et al.*, 1990; Ang *et al.*, 2001; Wang *et al.*, 2005). Pirated software provides multiple benefits and cost saving for the consumers, hence the perceived value in the consumers' mind is high (Ang *et al.*, 2001). Price is expected to be an important attribute for choosing a pirated product (Bloch *et al.*, 1993).

Findings also suggested that the higher the price of the original software, the more encouraged consumers are to purchase pirated software (Moores and Dhaliwal, 2004; Al-Rafee and Cronan, 2006). Bloch *et al.* (1993) suggested that consumers with high value consciousness are expected to have a positive attitude towards software piracy. As such, the following hypothesis is formed:

 $\mathbf{H_{1d}}$  There is a positive relationship between value consciousness and consumer attitudes towards software piracy.

#### Integrity

Integrity is defined as the level of the consumer's ethical standards and obedience towards the law (Wang et al., 2005). Cordell et al. (1996) stated that those consumers who value integrity will have a negative attitude towards software piracy. More importantly, Rahim et al. (2000) suggested that when software is copied, nothing tangible is stolen and this is why people treat pirating software differently from pirating other goods. Cordell et al. (1996) found that buyers placed the blame on the sellers of pirated software instead of themselves. Ang et al. (2001) also found that buyers did not hold themselves accountable for their actions; instead they push the blame towards the manufacturers for

charging such a high price for the software. All these findings supported Sykes and Matza (1957) who explained that consumers may tolerate and participate in questionable behaviour by putting the blame on other parties. As such, the following hypothesis is formed:

H<sub>1e</sub> There is a negative relationship between integrity and consumer attitudes towards software piracy.

#### **Personal gratification**

Personal gratification concerns the need for a sense of accomplishment, social recognition and to enjoy the finer things in life (Ang *et al.*, 2001; Wang *et al.*, 2005). As pirated software does not provide the same level of quality as the genuine ones, consumers who value personal gratification will have a negative attitude towards software piracy. Consumers who purchase pirated goods are willing to trade quality with value in price. Hence, they do not consider personal gratification as important (Ang *et al.*, 2001). As such, the following hypothesis is formed:

H<sub>If</sub> There is a negative relationship between personal gratification and consumer attitudes towards software piracy.

#### **Novelty seeking**

Novelty seeking is the curiosity of human to seek variety and differences (Hawkins *et al.*, 1980; Wang *et al.*, 2005). Studies in the past found that novelty seeking is an important variable which influences attitudes towards software piracy (Wee *et al.*, 1995). Novelty seeking consumers are particularly inclined towards products with low purchase risk. Hence the low cost of pirated software is well suited to satisfying their curiosity and the need for experimentation (Wee *et al.*, 1995). Cheng *et al.* (1997) even found that novelty seeking was the second most important motive to use pirated software. As such the following hypothesis is formed:

 $H_{1g}$  There is a positive relationship between novelty seeking and consumer attitudes towards software piracy.

#### Habitual behaviour

Habitual behaviour is situation-behaviour sequences which have become automatic and occur without self instruction (Triandis, 1979; Limayem *et al.*, 2004). Habitual behaviour is also a portion of an individual's past experience. Hunt and Vitell (1986) have also argued that an individual's personal experience will affect their ethical behaviour. Software piracy involves some ethical judgment, so it is expected that habitual behaviour has a positive effect on consumers' purchase intention towards pirated software. As such the following hypothesis is formed:

H<sub>1h</sub> There is a positive relationship between habitual behaviour and consumer attitudes towards software piracy.

#### **Facilitating conditions**

Facilitating conditions is defined as the objective factors in the environment that make an act easy to perform (Triandis, 1979; Limayem *et al.*, 2004). Triandis (1979) argued that facilitating conditions directly affect the purchase of pirated software, instead of only affecting the intention to purchase. This

is because a person might already have the intention to purchase pirated software but is unable to do so because the environment does not support his behaviour to be performed. In this case, facilitating conditions are those factors in the environment that support software piracy (Limayem *et al.*, 2004). Examples of facilitating conditions that support software piracy include the absence of penalties, absence of law enforcement, the readily available and accessible pirated software for purchase, organizational ethical climate, and the ease of copying software (Limayem *et al.*, 2004). There are many studies including Bagchi *et al.* (2006), Glass and Wood (1996) and Traphagan and Griffith (1998) that also found that facilitating conditions contribute to the astounding level of software piracy. As such the following hypothesis is formed:

H<sub>Ii</sub> There is a positive relationship between facilitating conditions and consumer attitudes towards software piracy.

#### **Purchase intention**

According to the theory of planned behaviour (TPB), attitudes determine the purchase intention, which in turn determines the purchase behaviour (Fishbein and Ajzen, 1975). Purchase intention refers to the individual's intention to pirate software. It is an indicator that shows how much an individual is willing to try and how much effort he is willing to contribute in order to perform a specific action (Triandis, 1979). Fishbein and Ajzen (1975) model suggested that an intention to illegally copy software will lead to the actual action of copying (Al-Jabri and Abdul-Gader, 1997). An individual's intention to commit software piracy is correlated to their moral judgment, attitudes and personal normative beliefs towards it (Ajzen and Fishbien, 1980; Lau, 2007). It is directly affected by people's attitude towards software piracy and the facilitating conditions. The more (less) favourable consumer attitudes towards software piracy, the higher (lower) the chances that they will purchase pirated software (Wee *et al.*, 1995). It is therefore postulated that:

H<sub>2</sub> There is a significant positive relationship between attitude towards pirated software and purchase intention of pirated software.

From those variables described, **Figure 1** is created to illustrate the relationships between each variable.

#### -- Insert Figure 1 here --

#### METHODOLOGY

#### **Data collection**

Respondents were approached at malls, offices and university campuses to complete a self-administered questionnaire in the major city of Jakarta, Indonesia. The survey took about 5 minutes to complete. Only about 18 percent of the respondents approached agreed to participate in the survey. 284 surveys were collected in total. However, only 200 were usable as others were either incomplete or were not properly completed.

#### **Survey Instrument**

The survey instrument was developed in English and translated into Bahasa Indonesia by a professional native speaker. It was then back translated and checked for inconsistencies by another professional translator. The five sections consisted of established scales and demographics. The description of scale items and their reliabilities are reflected in **Table 1**. Sections A and B measured social factors and personality factors. Section C examined attitudes and the purchase intentions towards software piracy. Section D comprised of items regarding purchasing habits of pirated software. Section E comprised of demographic information of respondents. All items were measured on a seven point Likert scale with 1 representing "strongly disagree" and 7 representing "strongly agree".

#### -- Insert Table 1 --

#### **Samples**

Of the usable sample, 46% of the respondents were male. Buyers made up 71% and non buyers 29% of the total respondents. The ratio of buyers to non-buyers was more than 2:1 and this result confirmed the high level of software piracy in Indonesia (Wah, 2006). One third of the non buyers are males. The ratio between male buyers and female buyers was about 1:1. This result contradicted some studies which found that females were less likely to use pirated software (Solomon and O'Brien, 1991; Simpson et al., 1994; Gopal and Sanders, 1997; Goode and Cruise, 2006). About 61% of the buyers were aged 21-35 years old. There were more non-buyers (17.2%) as compared to buyers (4.2%) in the age group above 46-55, 56-65 and 66 years and above. This supported various studies which found that older people were less likely to use pirated software (Solomon and O'Brien, 1991; Simpson et al., 1994; Gopal and Sanders, 1997 and Goode and Cruise, 2006). Most of the buyers were students (30.3%) and involved in business (29.6%) and most of the non-buyers were skilled workers (43.1%). Majority of the buyers had Diploma or Certificate (25.4%) and Bachelor Degree (51.4%). The situation was also similar with the non-buyers while 37.9% of them had a Diploma or Certificate and another 37.9% had a Bachelor Degree. In terms of personal income 53.5% of the buyers' income was under Rp. 2.000.000 (equivalent to USD 211.544) and 27.5% of them earn Rp. 2.000.001 - Rp. 5.000.000 (equivalent to USD211.544 – USD 538.860). Most of the non-buyers' (43.1%) income was Rp. 2.000.0001 - Rp. 5.000.000.

#### **ANALYSIS AND RESULTS**

Firstly, the original 10-item attitudes towards software piracy scale (Wang *et al.*, 2005) was subjected to factor analysis. Two factors, namely; "social consequences" with four items ( $\alpha = 0.877$ ) and "software attributes" with three items ( $\alpha = 0.817$ ) emerged from this analysis. This is in contrast to Wang et al.'s (2005) study which has three factors. All items with factor loadings below 0.4 were removed from further analysis. Thus the original 10-item scale was reduced to seven items in order to achieve a better alpha coefficient. The relevant statistics are reflected in **Table 2.** 

-- Insert Table 2 here --

Stepwise regressions were conducted between the social and personality variables and the two factors of attitude towards software piracy. There were two variables which significantly influenced "social consequences" (Factor 1) namely *integrity* (Sig. = 0.000,  $\beta$  = 0.312) and *personal gratification* (Sig. = 0.001,  $\beta$  = 0.222). The two variables which significantly influenced "software attributes" (Factor 2) were *habitual behaviour* (Sig. = 0.000,  $\beta$  = 0.536) and *facilitating conditions* (Sig. = 0.002,  $\beta$  = 0.196). These results were summarized in **Table 4.** Therefore, **H**<sub>1e</sub>, **H**<sub>1f</sub>, **H**<sub>1h</sub> and **H**<sub>1i</sub> are partially supported whereas **H**<sub>1a</sub>, **H**<sub>1b</sub>, **H**<sub>1c</sub>, **H**<sub>1d</sub> and **H**<sub>1g</sub> are rejected.

#### -- Insert Table 3 here --

Stepwise regression was conducted between the two factors of attitudes towards software piracy, and purchase intention. The results showed that only the factor "software attributes" was a significant predictor ( $\beta = 0.653$ , t = 12.121, Adjusted  $R^2 = 0.423$ , Sig = 0.000) of purchase intention. This means that the factor "software attributes" explains 42.3% of the variance and has a positive effect on purchase intention. These results partially supported  $H_2$  as only one of the two factors of consumer attitudes towards software piracy led to purchase intention.

#### **DISCUSSION AND IMPLICATIONS**

Previous studies found collectivism to be an important influencer of software piracy (Wang et al., 2005; Ang et al., 2001; Gopal and Sanders, 1997; Shin et al., 2004). Although Hofstede (1985) regarded Indonesia to be a collectivistic society, the findings of this study did not find collectivism to be a significant predictor of Indonesian consumers' attitudes towards software piracy and purchase intention.

Value consciousness also did not appear to be a significant predictor, hence contradicting past studies (Gopal and Sanders, 1998; Gopal and Sanders, 2000; Moores and Dhillon, 2000; Cheng *et al.* 1997; Harrington, 1989; Tan, 2002 and Traphagan and Griffith, 1998). The finding that normative susceptibility was also not a significant influencer of consumer's attitude towards software piracy and their purchase intention contradicted prior studies as well (Tang and Farn, 2005; Jones and Kavanagh, 1996; Ang *et al.*, 2001; Wang *et al.*, 2005; Al-Jabri and Abdul-Gader, 1997). Obviously value consciousness and susceptibility to interpersonal influence have different meanings and are perhaps defined differently in Indonesian societies. As such, successful campaigns to curb piracy in other countries may not have the same resonance here.

Habitual behaviour was the most significant factor which directly influenced consumer's attitudes towards software piracy and their purchase intention. This finding was consistent with the study done by Limayem et al. (2004). It is common practice for Indonesians to purchase and use pirated software so it shaped a positive attitude towards software piracy in their minds which then reinforced their purchase behaviour.

Leading from habitual behavior, it can be argued that consumers do not feel guilty when they buy pirated software because integrity does not have a negative effect on consumer's attitude. The findings of this paper suggest that although Indonesians value integrity, they still hold a favourable attitude towards software piracy. This finding is in contrast to Cordell *et al.* (1996), Wang *et al.* (2005) and Ang *et al.* (2001) who found that those consumers who value integrity have negative attitudes towards software piracy. Basically,

Indonesian consumers may be honest and value integrity and will not commit any crime such as stealing, but they will still buy pirated software. They do not perceive purchasing pirated software as a form of stealing (Rahim et al., 2000; Siegfried, 2005). Similar findings were found by Wang et al. (2005) which stated that good people do not think evil of pirated software and good people do pirate. Jackson (1999) found in his study that people do not feel that they were stealing when they buy pirated software, because it is an invisible product. However, this finding might only apply to software and not to luxury products. Rettig and Rawson (1963) found that consumers' moral intensity was claimed to vary from one issue to another which then affect their ethical decision-making and behaviour process. Having a clear policy on software ethics in organization and workplace would also work in changing Indonesian consumers' beliefs (Al-Jabri and Abdul-Gader, 1997). Villazon and Dion (2004) also found that having a clear code of practice in business helped to shape the moral of their employees. Therefore, it is very important to have specific and clear guidelines and policies on software piracy. Business Alliance Association and the Software & Information Industry Association reported a decline in software piracy in United States from 33% to 24% in 2002 partly due to the ethics education given to the public (Kruger, 2003). Having policies in place as well as penalties associated with the use of pirated software is proven to be effective in discouraging consumers from using it (Mckibben, 1983; Straub and Nance, 1990).

Buying pirated software has become a habitual behaviour for Indonesians. This behaviour was also supported by the *facilitating conditions* in Indonesia which made it easy for consumers to purchase pirated software (Triandis, 1979; Limayem *et al.*, 2004). In Indonesia the absence of penalties and well defined law enforcement, availability of pirated software, and the ease of copying software (Limayem *et al.*, 2004) encourage consumers to purchase pirated software. This finding was also consistent with the study by Limayem *et al.* (2004) which also found that there is a positive relationship between facilitating conditions and software piracy behaviour.

To reduce the software piracy rate in Indonesia, stronger law enforcement needs to be implemented. Based on the findings of this study, Indonesian consumers understand that software piracy is illegal and unethical, but are still inclined to purchase them. One way to handle this problem is to introduce penalties that will be imposed on anyone who are caught dealing with pirated software which includes the buyers and the sellers. Social policy makers need to improve their justice system so they would be able to enforce the improved regulatory and legal framework for protecting the Intellectual Property Rights (IPR). Besides improving their regulatory and legal framework, the government is urged to ban trading of pirated software. It is said that when persuasion fails to stop illegal usage, then software firms need to take legal actions (Bickers, 1998).

It is believed that ethical behaviour can be changed if the belief structure of the target population is altered, in turn changing behaviour intention (Al-Jabri and Abdul-Gader, 1997). Sending messages through advertising campaigns that highlight the software copyright laws, legal implications and penalties involved by using pirated software can also be utilized to alter Indonesian consumers' attitudes towards software piracy and their buying behaviour (Villazon and Dion, 2004; Phau and Teah, 2008).

The rampant availability of pirated software is also a contributing factor to the high level of software piracy in Indonesia (Moores and Dhaliwal, 2004). The Indonesian government needs to close down places where pirated software is being traded and have in place constant surveillance systems to ensure that there is no future trading conducted at these locations. Tracking the actual distributors will also help to reduce the availability of pirated software to consumers. High penalties will need to be imposed to those distributors to discourage others into getting into the business of selling pirated software. Reducing the availability of pirated software will slowly encourage the consumers to change their habitual behaviour of using pirated software because the more they are exposed to pirated software, the higher the chances that they will purchase without feeling guilty (Moores and Dhaliwal, 2004). Instead they will have to buy the original software that they need to use which will become a habit, especially for the future generations.

The last factor found to be a significant influencer of consumers attitude is *personal gratification*. It suggested that Indonesian consumers who value both social recognition and sense of accomplishment highly still buy pirated software. They do not think buying pirated software will actually lower their status and social recognition. While this finding is in contrast with previous studies (e.g. Ang *et al.*, 2001; Wang *et al.*, 2005), it is reasonable because Indonesian consumers who buy pirated software are not only those with poor financial conditions. Some consumers with medium to high level of income also buy pirated software. Some businesses and companies were found to use pirated software instead of the original ones.

#### **CONCLUDING COMMENTS**

This study has clearly shown that the predictors of the attitudes towards software piracy and the purchase intention differ quite substantially for different geographical locations. This research was one of the first that looked at Indonesian consumer attitudes towards software piracy. It extended a previous study by Wang *et al.* (2005) on Chinese consumers with the addition of two factors namely "habitual behaviour" and "facilitating conditions". These two factors were found to be significant predictors of consumer's attitudes towards software piracy and purchase intention.

No doubt, it is also clear that software piracy is a serious problem to the whole software industry. It discourages software developers to create new software because they are afraid that their software will be pirated and distributed illegally. Investors would also be discouraged to invest their money in the software industry because of the monumental losses caused by software piracy. This will limit the

development of the software industry in Indonesia and therefore limit the capacity of Indonesia to compete in an international arena. The government and software developers would need to work together to combat software piracy in order to create a better future for the industry.

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Figure 1: A model of consumer responses on purchasing pirated software

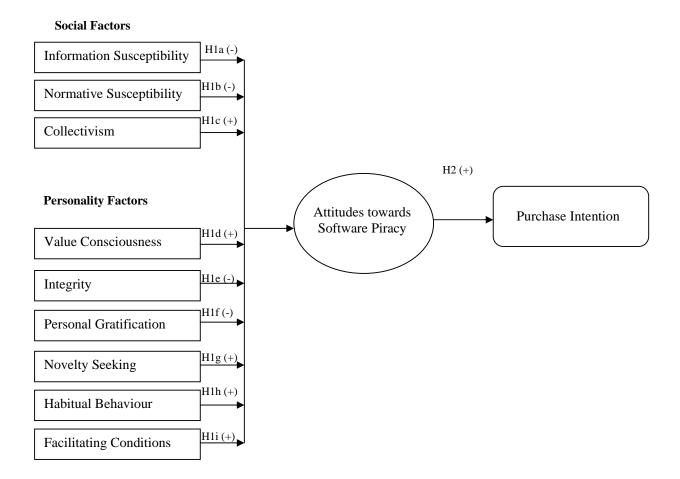


Table 1: Source and  $\boldsymbol{\alpha}$  coefficients of measurement scale items

Scale Measure	Source	Number of <u>Items</u>	α Coefficient
Information Susceptibility	Bearden et al. 1989	4 items	0.671
Normative Susceptibility	Bearden et al. 1989	4 items	0.667
Collectivism	Wang et al. 2005	4 items	0.188
Value Consciousness	Lichtenstein et al. 1990	4 items	0.793
Integrity	Rokeach 1973	4 items	0.865
Personal Gratification	Vinson et al. 1977	5 items	0.750
Novelty Seeking	Wee et al. 1995	4 items	0.683
Habitual Behaviour	Limayem et al. (2004)	5 items	0.907
<b>Facilitating Condition</b>	Limayem et al. (2004)	5 items	0.610
Attitudes towards software piracy	Adapted by Wang et al. 2005	7 item	0.672
<b>Purchase Intention</b>	Ang et al. 2001	4 items	0.812

Table 2: Factor Analysis for attitudes towards software piracy construct

	Factor 1	Factor 2	
	Social Consequences	Software Attributes	
Buying pirated software infringes intellectual property	0.831		
Buying pirated software will hurt the software industry	0.806		
Purchasing pirated software is illegal	0.779		
Purchasing pirated software is unethical	0.729		
Pirated software has similar quality to the original version		0.909	
Pirated software is as reliable as the original version		0.772	
Pirated software provides similar functions as the original version		0.705	
% of Variance	31.894	27.354	
Eigenvalue	3.189	2.735	
Cronbach Alpha	0.877	0.846	
Cronbach Alpha	0.672		
KMO	0.771		
Barlett's Coefficient	0.000	0.000	

Table 3: Stepwise regression results on factors influencing "social consequences" and "software attributes"

	B-Values	Standard Error	Beta	Adjusted R <sup>2</sup>	t-value	Sig.		
Dependent variable: Social consequences								
<u>Integrity</u>	0.552	0.121	0.312	0.149	4.549	0.000		
Personal Gratification	0.348	0.108	0.222	0.188	3.240	0.001		
Dependent variable: Software attributes								
Habitual behaviour	0.476	0.054	0.536	0.386	8.811	0.000		
Facilitating Condition	0.269	0.083	0.196	0.414	3.218	0.002		