

# The Effect of Information Privacy Concern, Privacy Policy on Online Purchase Intention on Students in Bandung

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## ABSTRACT

This study mainly discusses the concern about sharing personal data with e-commerce companies when consumers make online shopping transactions. This concern includes the use of consumer personal data by e-commerce companies without the consumer's knowledge. This study was conducted using a descriptive analysis design with a quantitative approach method. In this study, 428 Undergraduate Accounting Study Program students were involved as the sample who were selected using a sampling technique, random sampling. The obtained data were then analyzed using the Structural Equation Model (SEM) data processing through PLS. The results of this study form a model that shows that the higher the level of consumer concern over their personal information, the higher the consumer's perception of negative risks during an online transaction. Meanwhile, the higher the privacy policy indicates the lower the consumer's perception of negative risks during an online transaction. Furthermore, the higher the level of consumer concern over personal information, the lower the level of trust while the higher the privacy policy, the higher the trust. Additionally, the lower the level of consumer perceptions of negative risks during an online transaction, the higher the level of trust. Besides, the higher the consumer's trust, the higher the online purchase intention. This model provides an overview in terms of consumer intentions to shop online through information privacy concerns and privacy policies. The model formed might be a solution to be a basic principle in shaping online shopping intentions through information privacy concerns and privacy policies.

## Keywords

Accounting Information System, Information Privacy Concern, Privacy Policy, Perceived Risk of Transaction, Trust, Online Purchase Intention

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## Introduction

The Accounting Information System (AIS) is an activity that starts from providing data for managers' decisions to providing financial reports and internal control reports for the company. Internal control in the field of accounting information systems is a very important mechanism since internal control guarantees the compliance of company policies by employees, avoiding errors (misinformation), and misuse (abuse) of information (Romney and Steinbart, 2018). As AIS becomes more sophisticated and more readily available for businesses of all types and sizes, the need to understand and use adequate security systems is an issue that business owners cannot ignore (Henry, 1997). In the event of a security breach, management can be held personally responsible for the loss of organizational data (FEMA, 1993) (Schneider, 1996).

Security issues are important for consumers in the era of information technology, namely information privacy concern (IPC) relating to the misuse of information. Furthermore, seen from the perspective of individual and consumer behavior, the issue of information privacy concern encourages accounting information systems (AIS) researchers to look at the nature of people's beliefs and attitudes about privacy. Moreover, ways such as attitudes influence intention and behavior as well as how individual behavior can be influenced by organizational privacy policies (Kauffman *et al.*, 2011).

Indonesia has very broad potential, especially in the digital market (Binus, 2019). The digital market is dominated by the millennial generation. According to Statistics Indonesia data, around 32% of the population of productive age in

2016 were millennials (Sugiarto, 2019). One of the millennial generations is accounting students. Accounting students as stakeholders involved in e-commerce transactions know internal control. Thus, this study was conducted to answer the following questions; (1) Is there an effect of information privacy concern on the perceived risk of transactions? (2) Does information privacy concern affect trust? (3) Is there an effect of the privacy policy on the perceived risk of transactions? (4) Does privacy policy affect trust? (5) Is there an effect of the perceived risk of transaction on trust? (6) Is there an effect on the perceived risk of transactions on online purchase intention? (7) Does trust affect online purchase intention?

## Literature Review

### 2.1 Information Privacy Concern

Clarke (1999) defined information privacy as the expectation that someone has in controlling or at least significantly influences the handling of data about themselves. Information privacy refers to an individual's right to control data concerning the collection, use, and transfer of consumer data to e-commerce entities. Personal information is data related to an individual that can be identified. In the context of e-commerce, a breach of privacy is usually seen as the collection, use, and transfer of unauthorized personal information as a direct result of an e-commerce transaction ((Milberg, Smith and Burke, 2000); (Petty, 2000); (Rezgui, Bouguettaya, and Eltoweissy, 2003)

## 2.2 Privacy Policy

Perceptions of risk harm the level of online purchases (Miyazaki and Fernandez, 2001). Thus, consumers who experience a relatively high level of risk might be reluctant to disclose information such as name, address, phone number in online shopping that leads to online transactions. Therefore, the use of a privacy policy is needed to reduce risks in online shopping and encourage the disclosure of consumer personal information. Studies on e-commerce prove that there is a negative effect of perceived risk on the intention to make a transaction (Jarvenpaa and Vitale, 1999); (Pavlou and Gefen, 2004).

## 2.3 Perceived Risk of Transaction

Perceived risk refers to the expectation that a high potential loss is associated with disclosing personal information to online companies (Malhotra, Kim, and Agarwal, 2004). Consumers feel there is a risk that online companies might behave opportunistically in the wrong actions against consumers' personal information. Besides, consumers also consider various security threats to online company databases. Consumers are also not sure whether their personal information will be leaked, violated, or stolen by hackers (Pavlou, 2003).

## 2.4 Trust

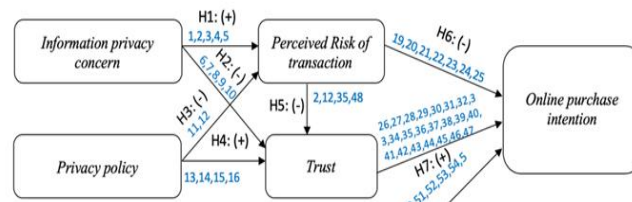
Trust is defined as the willingness of a party to be vulnerable to the actions of other parties (Mayer, Davis and Schoorman, 1995). To reduce risk perceptions, building trust is important (Romi et al., 2020). E-commerce consumer trust and perceived risk have a strong impact on online purchase intention (Kim, Ferrin, and Raghav Rao, 2009).

## 2.5 Online Purchase Intention

Interest is the desire to perform a behavior. In this study, interest is reflected in the intention to purchase variable. Ajzen (1991) revealed that intention is an important indicator of the extent to which an individual performs certain behaviors and how much effort the individual puts into actual behavior (Rehman et al., 2019).

## 2.6 Conceptual Framework

Based on some of the results of empirical studies and literature reviews described above, the researchers compiled the research model as follows;



**Figure 1.1** Conceptual Framework

1. H1: There is a significant influence between information privacy concerns on the perceived risk of transactions.
2. H2: There is a significant relationship between information privacy concerns with trust.
3. H3: There is a significant relationship between the privacy policy and the perceived risk of transactions.
4. H4: There is a significant relationship between the privacy policy and trust.
5. H5: There is a significant relationship between perceived risk of transaction and trust.
6. H6: There is a significant relationship between perceived risk of transactions and online purchase intention
7. H7: There is a significant relationship between trust and online purchase intention.

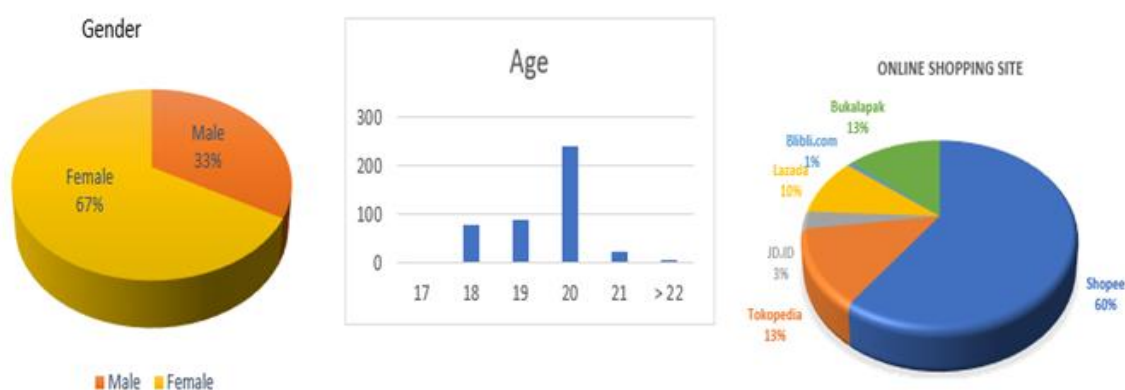
## Methodology

### 3.1 Population and Research Sample

This study was conducted at a university in Bandung. The unit of research analysis was active students majoring in accounting at a university in Bandung sampled using probability sampling techniques.

### 3.2 Research Instruments and Data Analysis Techniques

To determine the relationship between variables of this study, hypothesis testing was done using structural modeling (Structural Equation Model-SEM) with the Partial Least Square (PLS) approach.



**Figure 2.** Personal Characteristic of the Participants

3.3 Descriptive Analysis Results

Based on the results of the descriptive analysis, the variables of information privacy concern, privacy policy, perceived risk of the transaction, trust, online purchase intention in this study showed results that might be categorized as high and sufficient. This can be seen from the average total score below;

Table 1 Research Variable Descriptive Analysis Results

Variable	Score Percentage
Information privacy concern	4.55
Privacy policy	4.96
Perceived risk of the transaction	3.99
Trust	4.25
Online Purchase Intention	3.76

Based on the results of the descriptive analysis presented in table 1, of the five variables, namely the information privacy concern, privacy policy, perceived risk of the transaction, trust, and online purchase intention, the highest percentage score was found in the privacy policy variable with a total average score of 4.96. The lowest score from the results of the descriptive analysis of this study was the online purchase intention variable with an average total score of 3.76 included in the sufficient category.

4.3 Hypothesis testing

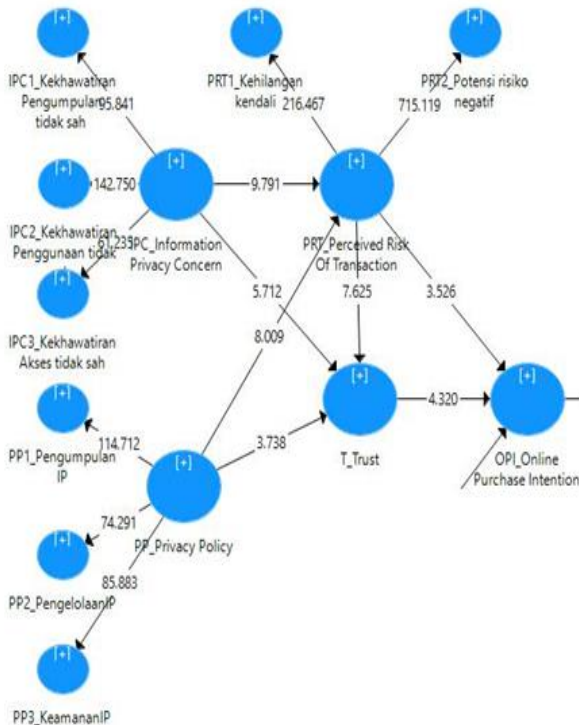


Figure 3 Structural Model

In testing the 7 hypotheses, this study was carried out based on the results of the analysis of the causality relationship between the research constructs with the following details;

Table 2 Results of Significance Test

No		Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
1	IPC_Information Privacy Concern -> PRT_Perceived Risk Of Transaction	0.457	0.456	0.047	9.791	0.000
2	PP_Privacy Policy -> PRT_Perceived Risk Of Transaction	-0.392	-0.392	0.049	8.009	0.000
3	IPC_Information Privacy Concern -> T_Trust	-0.336	-0.332	0.059	5.712	0.000
4	PP_Privacy Policy -> T_Trust	0.187	0.189	0.050	3.738	0.000
5	PRT_Perceived Risk Of Transaction -> T_Trust	-0.410	-0.413	0.054	7.625	0.000
6	PRT_Perceived Risk Of Transaction -> OPI_Online Purchase Intention	-0.272	-0.274	0.077	3.526	0.000
7	T_Trust -> OPI_Online Purchase Intention	0.280	0.277	0.065	4.320	0.000

Source: PLS Calculation Results

Discussion

1. The results of hypothesis testing show that the relationship between information privacy concern and perceived risk of transactions is indicated by the path coefficient value of 0.457 with a t-count of 9.791 and the p-value that smaller than 0.000. The t-statistic value obtained was greater than the t-critical value (1.960) and the p-value that smaller than the alpha value of 0.05. This result indicates that information privacy concern affects the perceived risk of transactions. This finding is in line with previous studies conducted (Malhotra, Kim, and Agarwal, 2004), (Liu *et al.*, 2005), (Jarvenpaa, Tractinsky, and Vitale, 2000).
2. Based on the results of the data processing, the results of hypothesis testing show that the relationship between the privacy policy variable and perceived risk of the transaction is indicated by the path coefficient value of -0.392 with a t-count value of 8.009 and a p-value of 0.000. This finding is in line with previous studies conducted (Miyazaki and Fernandez, 2001)(Romi *et al.*, 2019).
3. Based on the results of the data processing, the results of hypothesis testing show that the relationship between information privacy concern and trust variables is indicated by the path coefficient value of -0.336 with a t-count of 5.712 and a p-value of 0.000. The t-statistic value obtained was greater than the critical value (1.960) while the p-value was smaller than the alpha value of 0.05. This means that information privacy concern affects trust. This result is in line with previous studies conducted (Milne and Rohm, 2000) (Pavlou, 2003).
4. Based on the results of the data processing, the results of hypothesis testing show that the relationship between the privacy policy and the trust variables is indicated by the path coefficient value of 0.187 with a t-count of 3.738 and a p-value of 0.000. The t-statistic value obtained was greater than the critical value (1.960) while the p-value was smaller than the alpha value of 0.05. This indicates that the results are in line with previous studies

conducted (Rutter, 2007). (Peslak, 2006), (Lee and Turban, 2001) (Pennington, Dixon Wilcox, and Grover, 2003).

5. The results of hypothesis testing show that the relationship between the perceived risk of transaction and trust variables is indicated by the path coefficient value of -0.410 with a t-count value of 7.625 and a p-value of 0.000. The t-statistic value was greater than the critical value (1.960) while the p-value was smaller than the alpha value of 0.05. This result indicates that the perceived risk of the transaction affects trust. The finding is in line with the previous studies conducted (Chang *et al.*, 2016), (Pennington, Dixon Wilcox, and Grover, 2003)(Vrans *et al.*, 2021).

6. The results of hypothesis testing show that the relationship between perceived risk of transactional and online purchase intention is indicated by a path coefficient of -0.272 with a t-count of 3.526 and a p-value of 0.000. The t-statistic value obtained was greater than the critical value (1.960) and the p-value was smaller than the alpha value of 0.05. This result indicates that the perceived risk of transaction affects online purchase intention. This finding is in line with previous studies conducted (Jarvenpaa and Vitale, 1999) (Heijden, Verhagen, and Creemers, 2003).

7. The results of data processing obtained from the results of hypothesis testing show that the relationship between the trust and online purchase intention variables is indicated by the path coefficient value of 0.280 with a t-count of 4.320 and a p-value of 0.000. The t-statistic value obtained was greater than the critical value (1.960) and the p-value was smaller than the alpha value of 0.05. This finding is in line with previous studies conducted (Hoffman, Novak, and Peralta, 1999), (Lee and Turban, 2001).

## Conclusion

This study found the basic principles of the influence of information privacy concern and privacy policy on pre-existing online purchase intention, both practices, and habits, as the basis for increasing online purchase intention through the incorporation of the constructs of information privacy concern, privacy policy, and endogenous variables (dependent variable) such as perceived risk of transaction, trust, online purchase intention, and survey of undergraduate students majoring accounting in Bandung.

The results of this study are in the form of a model that shows that the higher the level of consumer concern over their personal information, the higher the consumer's perception of negative risks during an online transaction. Moreover, the higher the privacy policy, the lower the consumer's perception of negative risks during online transactions. The higher the level of consumer concern over personal information, the lower the level of trust while the higher the privacy policy, the higher the trust. Besides, the lower the level of consumer perception of negative risks during online transactions, the higher the level of trust and the lower consumer perceptions of negative risks during a transaction, the higher the online purchase intention. At last, the higher the consumer's trust, the higher the online purchase intention. This model provides an overview in terms of consumer intentions to shop online through information privacy concerns and privacy policies. The model formed is a solution to become a basic principle in

shaping online shopping intentions through information privacy concerns and privacy policies. However, this study has a limitation since this study was only conducted in the university environment and not thoroughly studied various types of universities, both public and private in Indonesia.

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