

The Correlation between Trust and Security, Attitude and Perceive Usefulness towards Online Payment Practice among UTHM Diploma Students

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Abstract

The aim of this study is to assess the percentage of practices of online payment methods among the Universiti Tun Hussein Onn Malaysia (UTHM) diploma students, to determine the factors affecting the use of online payments among UTHM diploma students and to identify the relationship between trust and security, attitude and perceive usefulness. In order to conduct this study, a Google Form was utilised to deliver a questionnaire to UTHM diploma students. The questionnaire consists of 4 sections: demographic, trust and security, attitude and perceive usefulness. The collected data was analysed by using Statistical Package for Social Science (SPSS). This research was able to access the percentage of awareness which 95.5% from the respondent do aware about online payments and there is 51.5% of the respondents who practices online payments every day. The correlation of the factors affecting the use of online payments was also determined where attitude has a Pearson Correlation Coefficient of 1, which is very high, which means that attitude contributes the most for the use of online payments within UTHM Diploma Students. Additionally, this research revealed that familiarity with the other variables, it is shown that only security has no significant correlation with the familiarity variable. Besides, for familiarity against the other variables, it is shown that only security has no significant correlation with the familiarity variable. The P-Value for security is higher than 0.05 which will cause an acceptance to null hypothesis. However, despite having significant correlation, all of the variables have a weak correlation with the familiarity variable.

1. Introduction

Online payment can be defined as the process of undergoing financial transactions over the internet, allowing people to pay bills, transfer money and shop online. This method of payment can eliminate the need for physical cash, providing a virtual option that is more accessible and convenient. In modern times, the internet has dramatically reshaped how people make payments and transfer money [1] and constantly shifting from cash-based transactions to those that are electronic-based [2]. E-payments can be defined as a payment process that electronically began, controlled and acknowledge the payee [3]. These exchange materials are usually some

forms of digital financial instruments [2]. The payment method evolution starts from barter to currency to check, check to credit and now mobile payment is the focus of electronic and mobile commerce [4].

Online payment techniques are set to advance further in the ongoing story of technological advancement especially among students which is in this study, the students were specifically only from the Universiti Tun Hussein Onn Malaysia (UTHM) diploma students. Digital transactions will become more efficient and secure in the future, providing people and organizations with never-before-seen opportunities to deal with the complexities of digital economy. As regards online payments, effortless transactions like paying utility bills, recharging mobile devices and satellite TV, sending and receiving money, shopping on mobile devices, and transferring balances are signs that the system is beneficial [5]. Moreover, electronic payments are becoming a popular trend and by virtue of rapid development of information technology [6]. This research can be used for those who are willing to study more in statistical study with the same context and objectives which are to assess the percentage of practices of online payment methods, to determine the factors affecting the use of online payments and to identify the relationship between trust and security, attitude and perceive usefulness among UTHM diploma students.

2. Materials and Method

This section discussed how the study is completed. This statistical study typically uses quantitative methodology. The population and sample for this study is diploma students from UTHM and the data only take from 200 respondents of diploma students in UTHM who are responding to the questionnaires.

2.1 Materials

The data for this study is obtained quantitatively through survey methods. The questionnaire then be distributed via Google Form on WhatsApp and Telegram. The data obtained from the surveys have been analysed using the Statistical Package for the Social Sciences (SPSS) statistical tool.

2.2 Method

The plan design is an essential component in this study after the research problem statement has been formed. This study targeted UTHM diploma students as respondent to answer the questionnaires and the sample in this study is 200 peoples from UTHM diploma students who is responded to the questionnaires. The design focusing on testing techniques linked to the subject matter and structuring the research until it accurate. This research used two types of data which is primary data and secondary data. The research questions and hypotheses used in this study act as primary data. Secondary data obtained from already-existing sources such as websites, articles, journal and theses. The software called SPSS has been used as a statistical tool in this study. By applying a statistical tool, the collected data in this study have been analysed and the raw data from the targeted respondents has been interpreted.

2.3 Research Procedure

The research procedure involves several key steps from research design from objectives, sample selection, data collection, data analysis, findings and interpretation, and conclusion and recommendations. The study will use a quantitative research design with a survey methodology to collect data from UTHM diploma students. The data will be analysed using correlation analysis to examine the relationships between trust, security, attitude, and perceived usefulness towards online payment practices as shown in Fig. 1.

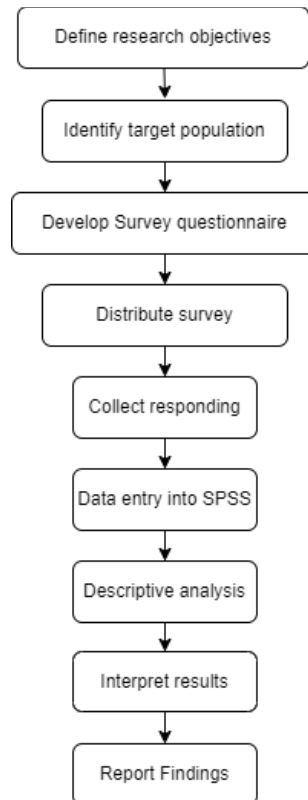


Fig. 1 Flow chart of research activity

3. Results and Discussion

The result consists of the respondent's demographic, the percentage of awareness and practices of online payment methods among the UTHM diploma students, determination of the factors effects of trust, security and attitude on online payment practice among UTHM diploma students.

3.1 Demographics

The survey included a total of 200 respondents, with a balanced representation of both genders.as shown in Table 1.

Table 1 Demographic information of respondents

		Count	Percentage %
Gender	Male	88	44.0%
	Female	112	56.0%
Program of study	DAU	46	23.0%
	DAK	21	10.5%
	DAT	21	10.5%
	DAG	18	9.0%
	DAM	29	14.5%
	DAA	37	18.5%
	DAE	28	14.0%

The research includes an analysis involving of 200 respondents from diploma students of UTHM which 88 individuals identify as male (44%) and other 112 individual identify as female (56%) as shown in Table 1. Examining the distribution of courses selected by the participants who completed the questionnaire on Table 1, it was found that the DAU course received the greatest percentage, with 46 respondents (23%), suggesting a

high level of interest and involvement in this academic field. After DAU, the following courses showed a varied distribution across the different fields of study in which 37 individuals (18.5%), 29 individuals (14.5%), 28 individuals (14.0%), 21 individuals (10.5%), 21 individuals (10.5%), and 18 individuals (9%) for DAA, DAM, DAE, DAK, DAT, and DAG, respectively.

Table 2 Frequency and percentage of respondent's choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Online payment	154	77.0	77.0	77.0
	Cash	46	23.0	23.0	100.0
	Total	200	100.0	100.0	

Table 3 Frequency and percentage of respondent's awareness with online payment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	193	96.5	96.5	96.5
	No	7	3.5	3.5	100.0
	Total	200	100.0	100.0	

Based on Table 2, it was found that out of the surveyed population, a significant majority of 154 individuals, accounting for 77% of the total respondents, indicated a preference for using online payment methods. In contrast, the remaining 46 individuals, representing 23% of the respondents, expressed a preference for using cash as their mode of transaction. Despite these preferences, Table 3 revealed that an overwhelming majority of the participants, specifically 193 out of 200 individuals, which corresponds to 96.5%, are acquainted with and have a good understanding of online payment systems.

3.2 The Practices of Online Payment Methods Among UTHM Diploma Students

A survey was conducted to analyze the usage of various online payment methods among UTHM diploma students. The findings revealed that online payment practices are widely adopted by the students, with varying levels of preference for different methods.

Table 4 Percentage of practices of online payment methods among UTHM diploma students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Everyday	104	52.0	52.0	52.0
	Often	61	30.5	30.5	82.5
	Rarely	35	17.5	17.5	100.0
	Total	200	100.0	100.0	

Some inferences with belief are based on the statistical table that provides information on the percentage of UTHM diploma students who use online payment methods. As shown in Table 4, over fifty percent of the students are very active users of online payment methods, as evidenced by the large percentage of students (52%), who use them daily. An additional 30.5% of students frequently make payments online. This indicates that 82.5% of students use online payments on a regular basis, either frequently or daily, when combined with the daily users. Conversely, 17.5% of students use online payments infrequently, suggesting that only a greater minority of students use online payment methods less frequently. Overall, the data indicates that more than half of UTHM diploma students use online payment methods on a daily basis, making up the majority of users.

3.3 The Factors Affecting The Use of Online Payments Among UTHM Diploma Students

This study examines the factors influencing the use of online payment systems among UTHM diploma students, focusing on trust and security, attitude, and perceived usefulness.

Table 5 Factors affecting online payments among UTHM diploma student

		Trust and security	Attitude	Perceive usefulness
N	Valid	200	200	200
	Missing	0	0	0
Mean		4.359	3.996	4.236

The presented statistics from Table 5 provides insight into the three factors that influence online payments among UTHM diploma students which is trust and security, perceived usefulness, and attitude.

With a mean score of 4.3590 for trust and security, students generally have a positive perception of these areas. This suggests that students have faith in the online payment systems' security protocols. The fact that all 200 respondents gave valid answers and that there were no missing values highlights how significant and pertinent this factor was to their decision-making process when it came to making online payments.

Next, the mean score for attitude toward online payments is 3.9960, which is marginally lower than the scores for the other factors. Although the score indicates a reasonably positive attitude, it may indicate that students' perceptions of online payments could be improved. This score might be raised by improving the user experience or by educating people more about the advantages of making payments online.

Furthermore, with a mean score of 4.2360 for the Perceived Usefulness factor, students generally consider online payment methods to be useful. This high rating shows that students recognize and value the functionality and convenience offered by online payment systems.

In conclusion, the majority of UTHM diploma students view online payments favourably, especially when it comes to perceived usefulness and trust and security. While there is a positive attitude toward online payments, it is not as enthusiastic as the other factors. In order to further increase student adoption and satisfaction, this suggests possible areas for improvement in the promotion of the advantages and benefits of online payments.

3.4 The Relationship Between Trust and Security, Attitude and Perceive Usefulness

This study explores the relationship between trust, security, attitude, and perceived usefulness in online payment systems as shown in Table 6.

Table 6 Relationship between trust and security, attitude and perceive usefulness

		Trust and security	Attitude	Perceive usefulness
Trust and security	Pearson Correlation	1	.566**	.694**
	Sig. (2-tailed)		.000	.000
	N	200	200	200
Attitude	Pearson Correlation	.566**	1	.631**
	Sig. (2-tailed)	.000		.000
	N	200	200	200
Perceive usefulness	Pearson Correlation	.694**	.631**	1
	Sig. (2-tailed)	.000	.000	
	N	200	200	200

Using Pearson correlation coefficients, the statistical in Table 6 shows the relationships between perceived usefulness, attitude, and trust and security. All three of the variables show strong positive correlations in the results, which are significant at the 0.01 level.

First, there is a moderately positive correlation ($r=0.566$) between trust and security with attitude. This implies that a positive attitude toward the topic under study rises along with trust and security. With a p-value of less than 0.001, this relationship is significant, demonstrating the power and consistency of the correlation.

Second, there is a significant positive correlation ($r=0.694$) between perceived usefulness and trust and security. According to this significant relationship ($p < 0.001$), perceived usefulness is positively correlated with trust and security levels. This research emphasizes how crucial trust and security are to improving users' opinions of how beneficial a system or piece of technology is.

Ultimately, attitude and perceived usefulness have a strong positive correlation ($r=0.631$). With a p-value of less than 0.001, this indicates that a positive attitude is strongly associated with a higher perception of usefulness.

All things considered, these correlations show that increased trust and security can result in more positive attitudes and higher perceived usefulness, both of which are essential for the effective uptake and application of new systems or technologies. The important affirmative correlations between these variables highlight the interdependence of trust and security, attitude, and perceived usefulness in shaping user acceptance and satisfaction.

4. Conclusion

Based on this research, the assessment the percentage of practices of online payment methods among the UTHM diploma students, the factors affecting the use of online payments among UTHM diploma students and the relationship between trust and security, attitude and perceive usefulness has been successfully studied. To sum up, three factors which is security, attitude, and perceived usefulness can put impacts on the adoption of online payment systems. Ensuring strong security measures creates a safer environment for users by preventing fraud and building trust. Adoption readiness is increased by a favourable attitude toward online payments that is formed by social influence and user-friendly experiences. Ultimately, customer happiness and retention are driven by perceived utility, which is based on the real-world advantages and effectiveness of online transactions. Service providers may successfully encourage the uptake and continued usage of online payment systems by taking these elements into consideration.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

*The authors confirm contribution to the paper as follows: **study conception and design:** Hafisah Hairuddin, Siti Aisyah Md Nasir, Nuramirah Juma'at; **data collection:** Hafisah Hairuddin, Siti Aisyah Md Nasir, Nuramirah Juma'at; **analysis and interpretation of results:** Hafisah Hairuddin, Siti Aisyah Md Nasir, Nuramirah Juma'at, Norain Ahmad Nordin; **draft manuscript preparation:** Hafisah Hairuddin, Siti Aisyah Md Nasir, Nuramirah Juma'at, Norain Ahmad Nordin. All authors reviewed the results and approved the final version of the manuscript.*

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