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A STUDY ON STUDENT BEHAVIORAL INTENTIONS TO ELECTRONIC PAYMENT APPLICATION AS REPLACEMENT OF TRADITIONAL PAYMENT OPTION

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Abstract

Currently the university has provided both electronic and traditional payment options to students. This study employs a quantitative analysis method to explore the utilization behavior of the financial management system in the College of Continuing Education. Additionally, the study examines the impact of perceived risk, service quality, and convenience conditions on user behavior concerning the financial management information system. The research was conducted at a private vocational college in Guangdong Province, China. Data was collected through 378 online questionnaires administered to current students at the college. The relationship between each function and consumer satisfaction was analyzed, identifying core functions that significantly contribute to ease of use, thus providing valuable insights for system function enhancement. This system holds immense theoretical and practical significance.

Keywords: Electronic Payment, Traditional Payment, Behavioral Intention.

INTRODUCTION

Since entering the new century and new era, China's continuing education has been remarkable. According to the "Implementation Opinions of the Ministry of Education on Promoting the Reform of Continuing Education in General Higher Education in the New Era" in August 2022, continuing education in higher education is an important part of higher education, an important element in building an education system that serves lifelong learning for all, and an important way for the people to create a better life and achieve common prosperity. In recent years, the rapid development of academic continuing education held by general higher education institutions has made important contributions to the promotion of mass and universal higher education and educational equity, as well as to economic and social development and the construction of a learning society. The Opinions propose to promote digital transformation and development and enhance digital public services. Based on the business development status of the College of Continuing Education in the era of big data, smart financial management emerges at a historic moment. Moreover, as mobile terminal devices have penetrated People's Daily life, people's consumption modes and means of payment have undergone tremendous changes, and consumption concepts and behavior cannot be ignored. (Fang shan, 2016) Convenience and quality of service for mobile payments technology has improved people's work efficiency and quality of life. Currently, more and more people choose to use mobile payment services (Li & Benjamin 2022).

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Financial management is one of the core work of colleges and universities. With the expansion of the school scale of colleges and universities in recent years, the workload surges, and the single financial office software of the financial department can no longer meet the daily management needs and cannot match the resources integration of colleges and universities (Chu Yu, 2016). Meanwhile, (Wang & Wang 2018) in their study found that students have high expectations for timeliness, accuracy, and transparency of financial information. Students expect to easily inquire and understand financial information through the information system, and improve their trust and satisfaction in school financial management.(Liu Yingfei, Liu Jingyu, Zhao Yushan,2019) Students have a high demand for participation in the financial information construction of colleges and universities, and they hope to participate in the feedback and opinion collection during the financial information construction process, so as to improve the user-friendliness and applicability of the financial system.(Zhang Xiaohong, Gao Jie,2020) This study investigated the current status of financial information construction in many colleges and universities, found that there are information islands and data quality problems in financial information construction in colleges and universities, and put forward corresponding development strategies, such as strengthening information sharing and improving data quality. In recent years, universities have been paying more and more attention to information technology construction, and are also accessing diversified information systems to help them realize university operations, such as academic affairs management systems, OA systems, research platform systems, procurement declaration systems, asset management systems, etc. However, due to the lack of good top-level design and the fact that most of them come from different third-party manufacturers, the software application procedures are complicated, making it impossible to effectively interoperate between these systems and prone to the phenomenon of information silos. For example, the OA system approval process cannot be connected to the database of the financial reimbursement system, resulting in duplicate approval processes, which affects the progress of project reimbursement payments. At present, many school information systems lack high-level design due to insufficient preliminary research and information technology construction, this ultimately leads to the inability to play one's role better.

The purpose of this article is to investigate the implementation of the financial management information system at one of the Guangzhou College in China. This research tries to answer the following questions, namely (1) The causal relationship between safety construction of FMIS perceived Risk and behavior intention, (2) The causal relationship between safety construction of FMIS quality of service and behavior intention, (3) The causal relationship between safety construction of FMIS Facilitating condition and behavior intention.

LITERATURE REVIEW

It points out that perceived risk can be divided into the following categories: financial risk, possible capital loss; Performance risk, the product is not so good, the possibility of work there are risks; Physical risk, the possibility that the product may harm the user; Psychological risk, that is, the purchase process and environment do not meet customer expectations. This risk refers to the risk that a consumer's purchase behavior will cause the rest of society to have a

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different view of the consumer. Many scholars have found that personal perception of security risks and the above risk forms will significantly affect consumers' online purchase intention (Bauer, 1960). It is considered that the service quality is a kind of subjective feeling about the service produced by the user after purchasing the product or service, and it is a comparison between the expected quality and the actual perceived quality of the consumer before purchasing. If the actual experience of consumers is lower than the expected expectation, they will think that the service quality is low. If the actual experience of consumers is higher than the expected expectation, then they will think that the service quality is better (Gronroos, 1982).

Facilitating conditions refer to the favorable and objective factors provided by the surrounding environment and resources to support learners to achieve their learning goals in the process of completing specific experimental tasks. Zheng Ling (2020). Facilitating conditions include technical conditions, technical services, etc., which support the use of information technology for individuals by society or organizations. According to Ajzen (1985), the decision-making of individual behavior is influenced by both internal and external factors. In addition to being regulated by an individual's own will, external factors such as resources and environment will also play a role in the decision-making of individual behavior.

Expectation theory, also known as valence - means - expectation theory, is a theory of management psychology and behavioral science. The theory can be formulated as excitatory power = expected value x valence. It is a motivation theory put forward by Victor H. Vroom, a famous North American psychologist, and behavioral scientist, in Work and Motivation in 1964. The theory of expected valence extends the implications of costs and benefits by increasing the probability of assessing the occurrence of each alternative.

The theory holds that decisions should be made based on the following two factors :(1) the value of each possible outcome or choice; (2) The probability or "expectation" of the actual occurrence of each possible outcome resulting from the decision. Based on the perspective of rational cognition, valence theory holds that consumers consider both perceived disutility and positive utility when they decide to take a certain decision. Generally, perceived benefits represent perceived positive utility and perceived risks represent perceived negative effects. The positive and negative utility will have an impact on consumers' behavioral intentions. Valence is influenced by personality characteristics, knowledge ability, and values, and different people have different evaluations of the same strategy. When an individual takes a certain behavior, it is driven by valence.

Venkatesh, Morris et al. (2003), based on the summary of TAM related studies over the years, aiming at the problem of "factors affecting user cognition", a Unified Theory of Acceptance and Use of Technology/UTAUT called "authority model" has been proposed. The four core dimensions of Performance Expectancy (PE) in UTAUT refer to "the extent to which individuals feel that using the system will help their work"; Expectancy refers to "how many efforts an individual needs to undertake to use a system"; Social Influence (SI) refers to "the degree to which an individual feels influenced by the groups around him or her". It mainly includes Subjective norms, social factors, and public Image (displayed externally).

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Composition, Facilitating the Conditions, FC) means "person feel organization in related technology, equipment on the degree of support system USES". UTAUT also points out that there are four control variables that have a significant impact on the above core dimensions, namely gender, age, experience, and willingness. Venkatesh (2003) found that the compound effect of more than two control variables would make the effect more significant. In essence, FMIS is an application of modern Internet information technology, and the user's attitude and behavior towards FMIS are also the acceptance and use of FMIS. Therefore, this paper adopts relevant models as the basic framework of this research model. Need to pay attention to is that FMIS is a whole school activity, the use of behavior not only different by user behavior and user preferences, and the individual nature and preference attributes can also bring individual behavior choice of significant differences, therefore, this research model in service quality, convenience and so on to explore the extreme influence factors of FMIS accept and use. In addition, since the system involves user information security and property security, its use risk is also an important concern of users. Therefore, this study will also introduce the consideration dimension of perceived risk to explore its impact on system acceptance and use.

METHODOLOGY

In order to better study the problems related to financial information construction, this paper will adopt quantitative analysis method and select Guangzhou City Construction College as the object of investigation by appropriate sampling method. Out of a sample of 20,874 students (66% male and 34% female), 378 were selected as visitors. The results from Krejcie and Morgan (1970) formula suggested that 378 is the minimum sampling size of the survey. (Margin of error=5%; Confident level=95%).

In terms of the instrumentation, this study mainly obtains first-hand data through questionnaires, and the quality of the obtained data is directly related to the effectiveness of the research conclusions. Therefore, the design of questionnaires is crucial. Since the maturity scale verified by predecessors is more reasonable and representative, the data obtained from the survey will have higher credibility. Based on this, the questionnaire items in this study are mainly set up based on the previous maturity scale and combined with the characteristics of FMIS itself, and the scale suitable for this study. The questionnaire was analyzed by sending 378 questionnaires online. It is mainly divided into three parts: the first part is the basic personal information of the respondents, including gender, grade and major; the second part includes the use of perceived risk, service quality and convenience survey, and studies the influencing factors of students' use of FMIS. In the third part, users use the variable measurement index scale of attitude and willingness. The Likert5-level scale is adopted in this study, that is, numbers 1-5 are used to represent "strongly disagree", "disagree", "uncertain", "agree" and "strongly agree" respectively. The target group of this questionnaire survey refers to China students from Guangzhou, who have certain disposable income to pay for it, and the respondents are required to have certain Internet experience and have certain experience or understanding of online trading products and services. Data analysis is the process of finding the characteristics of measurement indicators, the correlation between variables and the change rule from the survey data by mathematical analysis. In this study, data analysis software SPSS

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26.0 was used to analyze the obtained sample data. This study described the sample data of the valid questionnaire, including statistical variables such as gender, grade and major as well as the basic information of Internet use. The sample description reflected the characteristics of the research samples and calculated the mean value, standard difference, and other indicators to determine whether the sample data could be analyzed in the next step.

Perceived risk

The instrument was adopted by Mitchell & Greatorex (1993), Christer Carlsson (2005). The instrument with a total of FOUR (4) statements was read to the respondents to identify the view whether they agree or disagree with the statements. All the FOUR (4) statements of the scale are in a positive statement.

PR1 I am worried that personal account information (such as mobile phone number, bank account information) will be leaked or resold.

PR2 I am worried that the private information of consumption (such as the place of consumption, payment amount) will be leaked or resold.

PR3, I worry about online payment systems being disrupted by viruses or intercepted by hackers.

PR4 I am worried about property loss due to lost mobile phone, stolen payment password, etc.

22% of the problem statements in the questionnaire were used to identify perceived risk factors. 33% strongly agree with "I am worried that personal account information (such as mobile phone number, bank account information) will be leaked or resold."

29% agreed with "I am worried that the private information of consumption (such as the place of consumption, payment amount) will be leaked or resold."38% of respondents strongly agree that"I worry about online payment systems being disrupted by viruses or intercepted by hackers."29 % agree that "I am worried about property loss due to lost mobile phone, stolen payment password, etc." This can reflect the respondents' risk perception of FMIS.

Quality of service

The instrument was adopted by Rust Oliver (1994), Parasuraman, Zeithaml and Malhotra (2005). The instrument with a total of FIVE (5) statements was read to the respondents to identify the view whether they agree or disagree with the statements. All the FIVE (5) statements of the scale are in a positive statement.

QS1 When you encounter problems with online payment, you can get timely help.

QS2 Using online payment can enable me to obtain many services beyond payment.

QS3 Online payment can help me better manage financial affairs.

QS4 The interface design of online payment platform is very friendly.

QS5 I can get a free trial of some new online payment products.

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28% percent of the statements in the questionnaire were used to identify quality of service factors.27% of people agree that “When you run into problems with FMIS online payments, you can get prompt help.”29% agree that“Using online payment allows me to get many services beyond payment.”30% agree that “Online payment can help me better manage my finances.” 31% agree that “Online payment platform interface design is very friendly.” 30% of respondents strongly agree that “I can get more information about the registration fee.” This can reflect respondents' satisfaction with the quality of FMIS services.

Facilitating conditions

The instrument was adopted by Abdullah et al. (2019), Badran (2019), Merhi et al. (2019), Duarte and Pinho (2019), Fishbein and Ajzen (1975). The instrument with a total of FIVE (5) statements was read to the respondents to identify the view whether they agree or disagree with the statements. All the FIVE (5) statements of the scale are in a positive statement.

FC1, I have the resources necessary to use the mobile health education website.

FC2, I have the knowledge necessary to use the mobile health education website.

FC3, The mobile health education website is compatible with other systems I use.

FC4, I can get help from others when I encounter difficulties using the mobile health education website.

FC5, I believe that the mobile health education website is adequately compatible with my preferences for searching for health knowledge.

28% statements are used to identify facilitating conditions factors. Reflecting the perception of Facilitating conditions, 30% respondents agreed to “I have the resources needed to use FMIS online payment.”28% agreed to “I have the necessary operational knowledge to use FMIS online payment.” 25% agreed that “The FMIS online payment system is compatible with other systems I use.” 28% agreed that “When I have trouble using the FMIS online payment system, I can get help from others.” and 25% agreed that “I am worried that personal account information (such as mobile phone number, bank account information) will be leaked or resold.”

Behavior intention

The instrument was adopted by Abdullah et al. (2019), Badran (2019), Merhi et al. (2019), Duarte and Pinho (2019), Fishbein and Ajzen (1975). The instrument with a total of FOUR (4) statements was read to the respondents to identify the view whether they agree or disagree with the statements. All the FOUR (4) statements of the scale are in a positive statement.

BI1 Assuming I had access to the mobile health education website, I intend to use it.

BI2 If I were to have access to the mobile health education website, I predict that I would use it.

BI3 If the mobile health education website becomes available permanently, I plan to use it.

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BI4, I plan to use the mobile health education website in the future.

22% statements are used to identify behavior intention factors. Reflecting behavioral intention, 27% of respondents agree that "I am worried that the private information of consumption (such as the place of consumption, payment amount) will be leaked or resold." 28% agree that "I worry about online payment systems being disrupted by viruses or intercepted by hackers." 28% strongly agree that "tie am worried about property loss due to lost mobile phone, stolen payment password, etc."and 27% agree that "When you run into problems with FMIS online payments, you can get prompt help."

FINDINSGS

Referring to the questionnaire, Part A asks the personal information of the respondents, such as gender, grade, major, etc. In this study, a total of 400 questionnaires were sent out through online enterprise WeChat signals, and 398 were recovered. After excluding 20 invalid questionnaires, 378 were valid. The total effective rate was 95%.

The questionnaire section will include statistical information about the respondents who completed the questionnaire. Demographic information for each respondent includes gender, age, and major. To collect data for this study, 400 questionnaires were sent to various classes with 378 respondents providing information about themselves. They are current students at the university as research projects are conducted at the campus.

The number of female respondents (224; 59.26%) was significantly higher than the number of male respondents (154; 40.74%). The grade distribution of respondents is 146 in grade 2020, 134 in grade 2021, and 98 in grade 2022. The professional distribution of the interviewees is 41 engineering majors, 67 architectural design majors, 98 architectural engineering majors, 66 technical software technology majors, and 106 computer network technology majors.

Variance analysis was used to study the differences of gender, grade and Major in perceived risk, service quality and Facilitating conditions. That samples of different genders do not show significant effects on Perceived risk, Quality of service and Facilitating conditions ($p>0.05$), which means that samples of different genders, grade and Major show consistency in perceived risk, quality of service and facilitating conditions, but there is no difference.

The independent variables of perceived risk($r=0.039$), quality of service ($r=o.333$) and Facilitating conditions (0.261) are positively correlated with the use behavior of dependent variables (the correlation coefficient is positive).

Taking perceived risk, Quality of service and Facilitating conditions as independent variables and behavior intention as dependent variables for linear regression analysis, the model formula is as follows:

Behavior intention=1.237 + 0.261* Perceived risk + 0.225* quality of service + 0.121* facilitating conditions.

Model is 0.188, that is the perceived risk, quality of service and facilitating conditions can explain 18.8% of the change in behavior intention.

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The purpose of this study is to test the variables and to test and study the hypotheses. 18.8% of the total number of possible independent variables associated with the dependent variable (use behavior) in this study. Each independent variable, namely perceived risk, service quality and convenience, influences the formation of the dependent variable (usage behavior). Therefore, the remaining 81.2% can be explained by other possible independent variables that were not included in this study due to tight deadlines. Thus, the beta of each independent variable shows the advantages of each variable: perceived risk (B=0.261), quality of service (B= 0.225), convenience (B=0.121). Therefore, from the significance value of the variable, decide whether to accept the hypothesis. If the significance value is greater than 0.05, the hypothesis should be discarded, and if the significance value is less than 0.05, the hypothesis is accepted. It is found that the model passes the F test (F=28.797, p=0.000<0.05), at least one of the perceived risk, quality of service and facilitating conditions will have an impact on the behavior intention. In addition, by testing the multidisciplinary of the model, it is found that all VIF values in the model are less than 5, which means that there is no col linearity problem. Moreover, the D-W value is near the number 2, indicating that there is no auto correlation in the model, and there is no correlation between the sample data, indicating that the model is good.

The results showed that the perceived risk was a significant positive effect on the intention to continue using. It indicates that when students use FMIS, if the user has enough facilities for correct access, under the background of risk prevention education, the user can overcome the fear and use FMIS correctly. The regression coefficient of service quality was 0.225(t=4.423, p=0.000<0.01), service quality has a significant positive effect on the intention to continue using. It indicates that students can get timely help or other information about application fee if they encounter problems in the process of using FMIS, which will affect their effective use of FMIS. The regression coefficient of convenience condition was 0.121(t=2.273, p=0.024<0.05), Facilitating condition has a significant positive effect on the willingness to continue using. It indicates that students attach great importance to the convenience conditions of using FMIS online payment operation. It is very important to meet the help of payment, registration, and inquiry in the system, which will affect students' effective use of FMIS.

CONCLUSION

This study introduces a significant dimension of service quality and facilitating conditions that impact students' utilization of FMIS. The research sheds light on identifying the primary factors influencing students' intent to engage with FMIS. By conducting an in-depth analysis of various facets of service quality and accessibility, a more comprehensive understanding of how to effectively reach the target demographic is attainable. The findings reveal substantial relationships between perceived risk, service quality, facilitating conditions, and usage intention. This correlation is exemplified in studies such as (Wang Yi Qi, 2015) and (Zheng Ling, 2020). Notably, a noteworthy positive correlation is observed between perceived risk and behavioral intention. Furthermore, a significant positive correlation is established between service quality and behavioral intention, as well as between convenience and behavioral intention. These results consistently underscore the importance of these factors in influencing students' behavioral intentions. The author believes that universities should pay attention to

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personnel training, information security and system integration, and promote the development of financial information construction to the direction of intelligence and digitization. According to the previous research and the actual situation, a research method of FMIS design for Continuing Education is proposed. The proposed method includes understanding the operational processes of different departments within the school and establishing functional modules that meet the requirements of data sharing. The goal of the system is to facilitate the sharing of data between the various departments of the College of Continuing Education for the convenience of improving student payment services. Including cost dynamics, data statistics, financial analysis, graduation management, etc., to form a new and open financial management model. The goal is to develop a fully functional system suitable for the continuing education business. Although this study attempts to strengthen the cognition of FMIS, the system construction is still improving, which is of great significance for future project management. But there are still some limitations that open interesting avenues for future research. Since the data studied in this paper came from one university, students' data from different schools will need to be collected in the future to explore whether the same results will be found. Future research could therefore be designed longitudinally to understand whether students' attitudes, expectations and loyalties change over time, while enhancing theoretical and practical exploration, especially in technological innovation. While considering the law and trend of the development of continuing education, it investigates the training business needs and financial management operation management experience, pays close attention to and studies the daily training management work of the college, has a deeper grasp of the macro and micro problems faced by the development of the college, and designs an information system suitable for continuing education business more pertinently.

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