

# Research On Students' Demand For Paying Tutorial Fees Through Viettelpay E-Wallet At Hanoi University Of Industry

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## Abstract:

The industrial revolution 4.0 has been taking place at a rapid pace, affecting all aspects of the economy, especially with clear changes in the banking sector. Prominent trends in the application of the industrial revolution 4.0 in Vietnam include strengthening the development of digital banking, and serving customers in digital banking, the main products are e-wallets, peer-to-peer money transfer, financial information services, peer-to-peer lending, and crowdfunding... The combination of various types of digital technology, and the convergence of digital technology with other technologies help to improve operational efficiency, making the operation process simpler and more accurate. The birth and popularity of new technological devices such as mobile phones, the internet, and television ... gradually dominate people's living habits. This device not only acts as an information and communication device, but also a means to help people grasp trends and apply technology in shopping, paying, and serving their own needs. The study selects the scope of research students studying at Hanoi University of Industry. The research results have shown the influencing factors affecting the intention to pay tuition fees through the Viettel Pay application of ViettelStudent at Hanoi University of Industry. Through research, people can better understand the utility that the application brings. The promotion of paying tuition fees in particular and performing other transactions in general by e-wallets contributes to promoting the non-cash payment form that the government has set out.

**Keywords —Research students; promoting the non-cash payment; to pay tuition fees through.**

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## I. STUDY OVERVIEW

E-wallets first appeared in the world in the 1990s with a lot of conveniences and were quickly received by the public. E-wallet was born to bring great convenience to daily life. According to research What is an e-wallet? through the interview method Geoff Williams (2019) shows that people prefer to use e-wallets because, in addition to easily paying daily expenses, e-wallets also help users receive discount codes, and accumulate points and rewards at some famous trading brands such as Starbucks, Amazon, etc. However, the research paper only explains the utility of e-wallets without mentioning their inadequacies and limitations since it has not provided an overview and comprehensive

view. But thanks to Geoff Williams, it can be seen that e-wallets are gradually entering people's lives because of the great convenience it brings.

It can be seen that e-wallets have been around for a long time, but their popularity is extremely limited. 85% of transactions globally are still based on cash and checks and it is estimated that if all these numbers were to go digital and cashless, the world would save to zero. clown is 150 billion USD. The above study is by Nathan Chandler (2012) in the research paper Activity of e-wallets. In addition, the mentioned author also proposes that the operation of an e-wallet is based on absolute secrecy when every transaction on an e-wallet requires verification of the phone number, PIN, password or fingerprint of the user. user.

However, the author also pointed out that by stealing the identity of the bad guys, hackers can still break into the user's account and then take all the money in the account. The research article by Nathan Chandler helps to see the operation of e-wallets, but how to make e-wallets more popular in life is still a difficult question because paying in cash is a habit and difficult to change. every consumer.

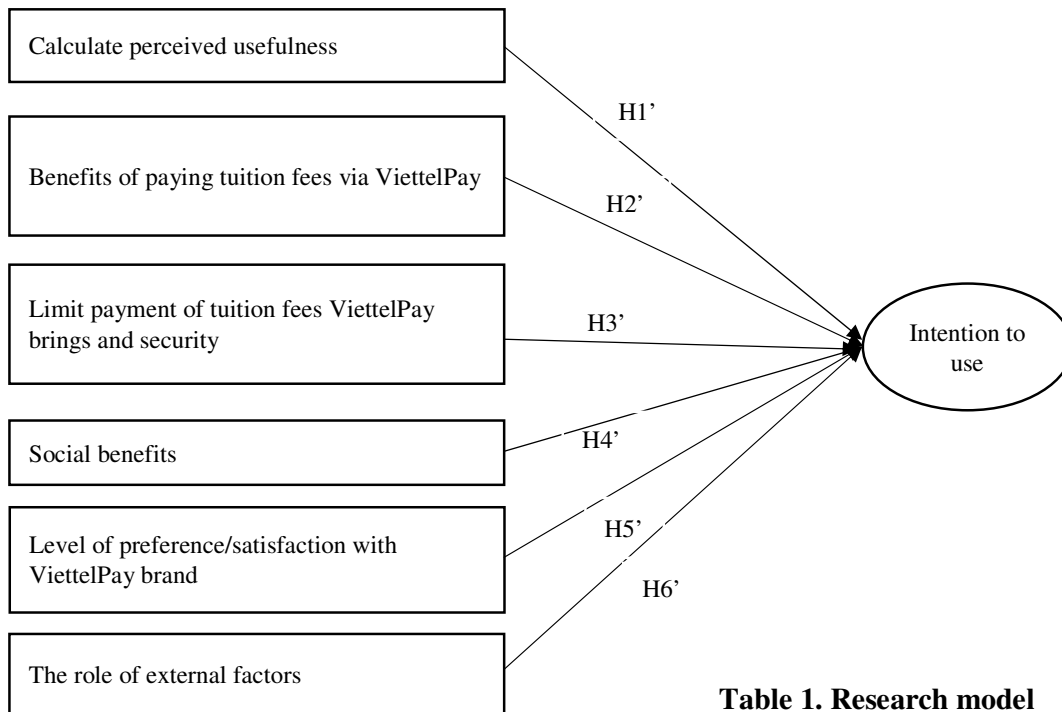
In addition to the overview studies from foreign works, the research team also consulted several domestic studies. In the article The current situation of using e-wallets in Hue city by Tran Thi Khanh Tram (2019), through a survey of people in Ho Chi Minh City. In Hue, consumers feel that the e-wallet service is really useful, and has many advantages and strengths such as saving time, many incentives, promotions and convenience. With e-wallets, users can make transactions anytime and anywhere.

In Vietnam, e-wallets play a great role for everyone. So this form is being popularized even in schools. According to Ly Thu Trang (2015), the topic "Research on some forms of payment in e-commerce" has successfully researched and applied e-wallets to the process of paying tuition fees for

university students. The University of Information and Communication Technology - Thai Nguyen. The effect when applying this method is not small, for the school, it not only reduces the cost of paper bills, and saves human resources, but also implements it accurately and safely.

Based on the TPB theory of Ajzen (1991) and qualitative research methods combined with in-depth interviews with students of Hanoi University of Industry. The study "Factors affecting intention to use internet banking in tuition payment: a case study of students at Hanoi University of Industry" was conducted by Bui Thi Thu Loan, Vu Duy Hao and Chu Thi Hien (2019). The article has discovered the difference in intention to use internet banking services between typical young students and those with stable jobs. In addition, the research results show that the use of traditional cash payment for tuition fees causes many inconveniences to students, thereby promoting an alternative form of payment that saves time and is safe, convenient and profitable.

**II. RESEARCH MODELS**



**Table 1. Research model**

*Research hypothesis:*

H1': Perceived usefulness that paying tuition fees through ViettelPay positively influences students' intention to use the application.

H2': The benefit that paying tuition fees through ViettelPay has a positive effect on student's intention to use the application

H3': Limiting the payment of tuition fees provided by ViettelPay and security hurts students' intention to use it.

H4': Social benefits have a positive influence on student's intention to use  
 H5: Service quality of ViettelPay positively affects students' intention to use

H5': The degree of preference/satisfaction with the ViettelPay brand has a positive impact on student's intention to use

H6': The role of external factors has a positive impact on student's intention to use

**III. RESEARCH RESULTS**

**3.1. Descriptive statistics of the study sample**

**Table 2. Statistics of study sample characteristics**

Group	Element	Amount of people	Ratio (%)
Gender	Male	39	26.0
	Female	111	74.0
Faculty	Mechanical	2	1.3
	Car technology	3	2.0
	Electricity	4	2.7
	Electronic	7	4.7
	Information technology	4	2.7
	Accounting and auditing	9	6.0
	Business management	106	70.7
	Chemical technology	3	2.0
	Sewing technology and fashion design	2	1.3
	Foreign languages	4	2.7
	Tourism	5	3.3
Using ViettelPay	No	13	8.7
	Yes	137	91.3
Monthly income (VND)	< 3 million	107	71.3
	3 – 5 million	32	21.3
	5 – 10 million	8	5.3
	> 10 million	3	2.0
Means of knowing ViettelPay	Through friends and relatives	72	48.0
	Through social networking sites Facebook, and Instagram.	42	28.0
	Through ads on TV, YouTube and music videos	15	10.0
	Through service consultation of Viettel staff	21	14.0
How long have used ViettelPay?	<1 month	26	17.3
	1-3 months	26	17.3
	3 months – 1 year	32	21.3
	>1 year	66	44.0
Reasons to use	Because everyone around uses	21	14
	Don't like carrying a lot of cash	24	16

Group	Element	Amount of people	Ratio (%)
	Don't like carrying a lot of cash	6	4
	Quick payment, save time	94	62.6
	Many promotions, attractive offers	5	0.4
Intended use	Transferring	115	76.7
	Paying conveniently (electricity, water, etc.)	16	10.7
	Buying, recharging phone card	8	5.3
	Buying plane tickets, train tickets	7	4.7
	Paying at shops, supermarkets, shops, etc.	2	1.3
	Saving	2	1.3
	Others	1	.7
Frequency of using	Regularly (1-3 times/day)	10	6.7
	Occasionally (1-3 times/week)	66	44.0
	Rarely (1-3 times/month)	50	33.3
	Only use when not have cash	23	15.3
Transaction average	<100.000 VND	38	25.3
	100.000 VND – 500.000 VND	65	43.3
	500.000 VND – 2.000.000 VND	12	8.0
	>2.000.000 VND	35	23.3

Source: Statistics of the research sample of the author's group.

The survey results are detailed in Table 2. With the first gender target, the sample studied over 150 subjects, of which 39 subjects were male accounting for 26% and 111 subjects were female accounting for 76%. The difference between female students is nearly 3 times higher than the number of students, showing that female students' access to mobile payment technology is higher than that of male students. The popularity of ViettelPay is reflected in the next survey, in which the number of participants registered to use the Viettelpay application is 137 people accounting for 91.3 shelves and the number of non-users of this application is 13, accounting for 8.7%. Through this survey data, it can be seen that the popularity of ViettelPay is quite high when most students use this

application platform in paying tuition fees in particular and electronic payments in particular.

### 3.2. Check the reliability of the scale

The results of Cronbach's Alpha test show that all Cronbach's Alpha coefficients of the groups of observed variables are greater than 0.6. In general, the research components ensure the reliability to perform the necessary analysis of the study. All correlation coefficients of the total variables are greater than 0.3 and excluding any variable will reduce the reliability of the scale. Thus, the observed variables ensure enough reliability to conduct further analysis.

### 3.3. Exploratory Factor Analysis (EFA)

The results of exploratory factor analysis on SPSS software for the group of independent factors are presented as follows:

**Table 3. KMO coefficient and Bartlett's test for independent factors**

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.924
Bartlett's Test of Sphericity	Approx. Chi-Square
	4546.773
	df
	561
	Sig.
	0.000

(Source: SPSS22.0 data processing results) Factor analysis does not fit the data). KMO index = 0.924 shows that the model's relevance is high.  
 The p-value = 0.000 of Bartlett's test allows us to safely reject the null hypothesis H0 (H0: **Table 4. Result of factor analysis EFA independent variable**)

Rotated Component Matrix <sup>a</sup>						
	Component					
	1	2	3	4	5	6
dotincay_4	.844					
dotincay_3	.834					
mucdosd_3	.805					
dotincay_1	.793					
mucdosd_2	.768					
dotincay_2	.748					
mucdosd_4	.745					
cldv_3	.715					
shl_3	.683					
shl_2	.677					
cldv_1	.672					
cldv_2	.649					
shl_1	.630					
nctl_2	.548					
loiich_1		.863				
loiich_3		.840				
loiich_2		.839				
loiich_5		.827				
loiich_4		.677				
nctl_1		.585				
hanche_2			.746			
hanche_4			.702			
hanche_3			.679			
sbm_1			.654			
sbm_2			.599			
lixh_2				.916		
lixh_1				.893		
lixh_3				.867		
ut/hl_1					.811	
ut_hl_3					.650	
ut/hl_2					.523	
sbm_3						.689
sbm_5						.634
sbm_4						.577
Extraction Method:	Principal Component		Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 7 iterations.						

(Source: The author's results of data analysis through SPSS) input variables (only changing the order of observed variables in each factor). The conditions are to be used when factor rotation is suitable for conducting further analyses.

Thus, after conducting EFA exploratory factor analysis, the number of observed variables did not change compared to the number of initially **3.4. Regression analysis**

The results of the regression analysis are shown in the next table

**Table 5. Results of Regression analysis**

Model		Coefficients						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIEW
1	(Constant)	.214	.367		.584	.560		
	X1	.456	.094	.417	4.847	.000	.298	3.352
	X2	.151	.066	.155	2.286	.024	.479	2.086
	X3	.325	.079	.282	4.114	.000	.468	2.137
	X4	-.016	.047	-.017	-.329	.742	.807	1.238
	X5	.132	.074	.106	1.794	.075	.635	1.575
	X6	-.103	.070	-.072	-1.467	.145	.926	1.080

a. Dependent Variable: 7

(Source: The author's SPSS data processing results)

The normalized regression model is presented as follows:

$$Y = 0.417 * X1 + 0.282 * X3 + 0.155 * X2 + 0.106 * X5 - 0.72 * X6 - 0.17 * X4 + e$$

With:

Y is the dependent variable: Intention to use

X1 is Perceived usefulness

X2 is the benefit that paying tuition fees through ViettelPay brings

X3 is the restriction on payment of tuition fees ViettelPay brings and security

X4 is Social Benefit

X5 is the degree of preference/satisfaction with the ViettelPay brand

X6 is the Role of External Factors

Based on the results of the regression, almost all variables have statistical significance (significant level less than 0.05). However, variable 4 has sig. = 0.742 > 0.05, variable 5 has sig. = 0.075 > 0.05 and variable 6 has sig. = 0.145 > 0.05, so this variable is not significant in the regression model. In other words, at the 5% level of significance, variables 4 and 6 have no significant effect on 7.

#### IV. CONCLUSION

The research team carried out the research based on the inheritance of the theoretical foundation from several domestic and foreign works, combined with the theoretical basis that the group synthesized. The study has built and verified a model of factors affecting "Intent to use" using the ViettelPay application to pay tuition fees with 6 factors

representing the degree of influence from strong to weak: Perceived usefulness" (X1), "Restrictions on ViettelPay's tuition payment and security" (X3), "Benefits of ViettelPay tuition payment" (X2), "Level of perceived usefulness" (X1) preference/satisfaction with ViettelPay brand" (X5), "Role of external factors" (X6) and "Social benefits" (X4). Accordingly, the research model of the authors explains 67.2% of the research problem, and at the same time, shows a positive relationship between the four factors and a negative relationship between the two factors mentioned above to the intention to use the application. Use ViettelPay to pay tuition fees. Accordingly, the higher students feel the reliability when making online transactions on ViettelPay and the easier it is to use the application to understand and learn, the greater the intention to use ViettelPay to pay tuition fees.

#### The solution to increasing the reliability of the application

Viettel is a highly recognizable business, so Viettel Pay is also widely known. However, the use of the application is also limited when the mobile device does not have an internet connection. In addition, there is also the risk or difficulty that the consumer cannot remember the security code to make a transaction. In addition, there are still cases of fraud and theft of consumer information. Therefore, users will feel unsafe when providing personal information when using Viettel Pay.

In particular, the reliability factor of the application has a great and direct impact on the intention to use the application of consumers.

Therefore, there should be solutions to increase the reliability of the application

+ Improve and maintain the information quality of the application: strictly control user information, do not reveal customer information, passwords and other identities to avoid fraud cases, Impersonation...

+When performing transactions, in addition to entering the security code, users can use fingerprints and faces to be more flexible in the transaction process.

+ Adjust the way to transfer money through the application: in addition to transferring money with an internet connection, users can transfer money via the phone number on the application (For example, in case the user is in a place where it is difficult to connect to the network): mountains, islands, etc.)

Solutions to promote the intention to use payment via Viettelpay When improving the trust of customers for the Viettel Pay application, the application will be known and used more widely. Thereby, there should be direct solutions to promote the intention to use payment via Viettel Pay: The school actively disseminates to all students about the benefits and positive influence when using tuition payment with the Viettel Pay application. Currently, the application is trusted by the majority of students. Therefore, it is necessary to maintain the available features of the application, and at the same time improve the quality of transactions: transfer money in a shorter time...

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