

E-Commerce Support and Services: Payment and Logistics For The Highly Valuable Traditional Products in Thai Northern Region

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Abstract

The objectives of this study are to design a payment system and logistics to support and services North-Chiang Mai University e-Commerce website (NCU Shopping Mall (NCU SM)) and to be a center of high value handicrafts with the local wisdom and long folklores behind each products. The website is designed responding to the customers' needs and entrepreneurs both domestic and abroad. The producers/manufacturers do not possess the knowledge of conducting business either by conventional method or technology base. This study will be the medium by Third Party Logistics (3PL) and payment system including creating payment gateway to support some entrepreneurs.

Key Words: Payment, Logistics, Support and Services, 3PL, Payment gateway

1. Introduction

To conduct business either domestic or worldwide needs sound payment system and logistics to provide the convenience to the buyers and sellers. It must be fast, accuracy and punctual. Payment system and logistics on e-Commerce website are one of the important factors that stimulate customers' decision to buy. In Thailand, there are many providers of support and services in payment and logistics (P&L) for example, DHL, FEDEX, PaySBuy, K-Payment Gateway, Thaipay.

Being medium of 3PL and Payment Gateway created by NCU SM, can response Third Party Logistics (3PL) and Payment Gateway of NCU SM are created to response and support P&L of entrepreneurs, who lack knowledge both business and technology and to create an e-Commerce website for products from local wisdom, become successful and finally expand market to get more convenient to customers and better sales.

Due to the lack of knowledge of entrepreneurs, NCU SM has a decide to provide Payment Gateway and service as being a medium of cooperating between entrepreneurs and Logistics Company. Consequently, entrepreneurs can delivery faster and build up value chain in demand and supply.

2. Theoretical Framework

Vanichvisuttikul Sakuna, e-Commerce website simulation of the Highly Valuable Traditional Products in Thailand, described the successful e-Commerce components of communities to create an e-Commerce model which developed under the government project of One Tumbon One Product (OTOP).

The result of this research can be used with all the OTOP products in all regions of Thailand. It comprises USE and CES (customer e-Commerce satisfaction), which is influenced from 5 components: 1) EC (e-Commerce) system quality 2) content quality, 3) trust, 4) support and services and 5) Human User Interface (HUI). These components could stimulate customers and users to

have needs in visiting website and satisfy with the products and finally buy the products online (Vanichvisuttikul Sakuna, 2004) [12]

William Song, Weidong Kou, C. J. Tan [16] state that variety of payment channels for micro payment from the aspect of technique and marketing. e-Payment is the strength of e-Commerce system.

V. Auletta, C. Blundo, S. Cimato, and G. Raimato [13] study the design and implementation of payment system with micro payment. They also study the different mean of payment to response to the customers' needs in doing transaction on e-Commerce which grows up constantly.

2.1 Logistics

Third Party Logistics (3PL): nowadays, logistics is very popular worldwide among experts of other fields. They also have different methods of payment due to the development and capabilities and responses in services relate to logistics all of 3PL, 4PL, LLP and LSP with different description and meaning. These are to response to the widespread needs of customers. It is the factors to reduce customers' investment and development time in logistics in order to enhance the efficiency of the production to stay in market. [1]

- 3PL means Third Party Logistics, Logistics services provider.
- 4PL means Network integrator.
- LLP means Lead Logistics Provider Ex. Cementhai Logistics (CTL).
- LSP means Logistics Service Provider LSP Ex. Lieb, R. and Kendrick, S.

Good Management Index of Logistics: David B. Grant (2006) developed the customer service which measurement was created by Bernard J. La Londe and Paul H. Zinszer (1976). There are 3 elements of logistics service:

1. *Pre-transaction element*; quality of sales representatives, regular call sales representatives, communicated target delivery dates.
2. *Transaction element*; ordering convenience, acknowledgement of orders, credit term offered, perform services right the first time, handling of queries, order-cycle time, order-cycle-time reliability, on-time delivery, shipment shortages, shipment delays, ability to handle emergency orders, timely responding to customers' requests, solving customers' problems, ordering tracing capability (product tracking or tracing), order status information.

3. *Post-transaction element*; customer claims, complaints, returns, accuracy of invoices and other documents, damage (concealed & visible).

Company: Logistics Best Practice: The criterion in selecting a good prototype of logistics of global LSP can be distributed into different dimensions such as annual revenue, users' approval, etc.

Due to Containerization International Journal issued in September, 2005, it set the top 10 lists of logistics providers by considering in entrepreneurship and entrepreneurs' income in 2004. They were; 1) Nippon Express, 2) Exel Group, 3) Schenker, 4) Deutsche Post Logistics, 5) Kuehne, and Nagel, 6) UPS SCS, 7) TNT Logistics, 8) Panalpina, 9) CH Robinson, 10) Geodis.

(Containerisation International, September 2005)

Besides the top-5 list of the best logistics which were set up by the quantitative data of annual income index obtaining from the customers satisfaction survey, there was another index that can be used in setting up top-ten excellent LSPs in the Inbound Logistics Journal, the most popular journal in logistics for more than 20 years. Every year the journal surveys opinions from 4,000 readers; mostly are managers in the logistics company. Then, the information from the survey is categorized into top 5 in the group of third-party logistics service providers. The data are collected via facsimiles, letter, and e-mail from December 2005 to June 2006. The top-5 list of third-party logistics service providers 2005 are: 1) UPS Supply Chain Solutions, 2) Ryder, 3) C.H. Robinson, 4) Schneider Logistics, 5) DHL and Exel.

For top ten of air freight forwarder, the International Logistics Quality Institute (ILQI) surveyed the satisfaction of more than 800 air freight shippers. The survey asked them to categorize air freight forwarders in these items: 1) delivery period, 2) service reliability, 3) network coverage, 4) technology and administrative services, 5) customer service and 6) rate.

Logistics Conceptual Model for NCU SM: Good Logistics enables customers' confidence to buy products from the website again. Selecting appropriate logistics services and system is carefully considered. The logistics companies must have standard indexes that indicate the quality management of logistics services said David B. Grant (2006).

Table 1. Summary of Design Factors on Logistics

Good Management Index of Logistics	POST	DHL	TNT
Domestic	X		X
Worldwide	X	X	X
Quality of sales representatives	X	X	X
Regular calls sales representatives		X	X
Communicates target delivery dates		X	X
Ordering convenience		X	X
Acknowledgement of orders	X	X	X
Credit term offered	X	X	X
Perform services right the first time		X	X
Handling of queries	X	X	X
Order cycle time		X	X
Timely response to customers' requests		X	X
Shipment delays	X		
Solve customers' problems		X	X
Order tracing capability	X	X	X
Order status information	X	X	X
Customer claims, complaints, returns	X	X	X
Accuracy of invoices and other documents	X	X	X
Damage (concealed & visible)	X	X	X

Table 1. Summary of Design Factors on Logistics; shows the efficiency of DHL in providing services and good management of global standard logistics company. For domestic logistics, Thailand Post continually services for post and concerning business with good quality, fast, accurate, punctual with appropriate service rate and global standard. It focuses on customers' satisfaction.

2.2 Payment Method and Payment Gateway

Payment Method: Leemuckadej Anut, 2003[9] stated that there are several payment methods: BAHTNET, Media Clearing or Smart Card, Credit Card, Electronic Bill Presentment and Payment (eBPP), Electronic Check Clearing System (ECS), e-Commerce Payment, Internet Banking, Direct Debit/ Direct Credit, Debit Card, Post, SWIFT, Western Union, etc. However credit card is the most popular at 42% of payment medium for retail in Thailand, stated Hataiseree Rungsun, and Boonsiri Jittra. [6]

- *BAHTNET* is the network that enables its members, which are financial institutes, to interact in variable activities to each other. However, the main activity is fund transfer among them that focus in macro-payment transaction Thus, withdrawal money from the account can be done just once for each of transfer.
- *Media Clearing or Smart Card* is an Electronics Purse (e-Purse) used in transferring for retailing.
- *Credit Card* is a plastic card which is used for payment by future cash.
- *Electronic Bill Presentment and Payment (eBPP)* is the call for payment of products or

services via e-mail upon due date and web page of bill of payment or receivable attached as well. This web page will connect to the website of the internet payment service. When the customer receives that e-mail, he/she can make payment through website. (Bank of Thailand, 2006)

- *Electronic Check Clearing System (ECS)* is a payment system by check among banks under the supervision of Electronics Clearing House, Bank of Thailand. The main objective is to faster the check clearing system that can perform either online or manual; however, members of ECS prefer online system.
- *e-Commerce Payment* is an important payment method among banks. Seventy percent of the banks use deduction from banking accounts while 65 % of consumers use credit cards as a payment method. In Thailand, it was found that 40-60% of the internet orders were paid via credit cards, another 40 % deducting from banking accounts which are Direct Debit, Debit Card, and Fund Transfer. To assure the internet payment, there are 2 developments of payment methods: 1) services of either Internet Banking or Payment Gateway via hyperlink of website between shops and banks that enables banks to have fund transfer from their customers' account via bank fund transfer system with high security system, 2) digital money on the smart card or computer will work in micro payment that can assure the security system much better than credit/debit card system. This is an interesting and appropriate trend of technology.[3]
- *Direct Debit/ Direct Credit* are the system that bank clients allow bank to deduct money from their account to pay for the payment services the payment service in the limited cycle. It is the method of many-to-one.
- *Federal Electronics Data Interchange (FEDI)* is a payment system to complete the transaction. It is the completion of business from ordering to payment. In order to transmit data in Thailand, users will contact the data transmission services or VAN (Value Added Network) which open 24 hours a day, 7 days a week.

- *Debit Card* is the mix of ATM and credit card. A user has a bank account in a bank that issues a debit card to enable him/her to withdraw money from ATM and make payment like a credit card.
- *Post* is a money order.
- *SWIFT* is an international fund transfer via international network of SWIFT or Society for Worldwide Inter bank Financial Telecommunication. It is established from the combining of international financial institutions to set up a network for international financial data transmission
- *Western Union* is a bank that gives services on express electronics fund transfer via more than 30,000 Western Union offices in 200 countries worldwide.

Furthermore, there are other popular international payment methods: payment methods in international: PayPal, MoneyGram. These services are the international fund transfer services that allow customer to transfer fund without having any account at the destination country. The customers only show a reference number and identification card to the bank. Thai banks that provide these payment methods are PayPal of Kasikorn Thai Bank and MoneyGram of Siam Commercial Bank.

Payment Gateway; Aidas Vasilis, Grazvydas Jakubaushas (2007)[2] said that the business of One-Stop Solution can make income from adding service of Logistics and payment service via standard payment gateway. Nowadays, there are several banks that perform services of payment gateway. They are Kasikorn Thai Bank under the name of “K-Payment Gateway” and Krungsri Ayuthaya Bank under the name of “Krungsri e-Payment”.

Support and service: Visitor or Customers will return to the Web site after their initial experience, i.e. loyalty. Some factors which influence loyalty have been dealt with the capable of the operator in providing support and service to the customers across the transaction life cycle. The following are support and services designed in the model on this research study: communication through several e-mail accounts, automatic calculation on sales and services including currency converter, updating function on personal identifiable information, tracking order information/status, well-known transportation company and payment methods (Vanichvisuttikul Sakuna, 2004[13])

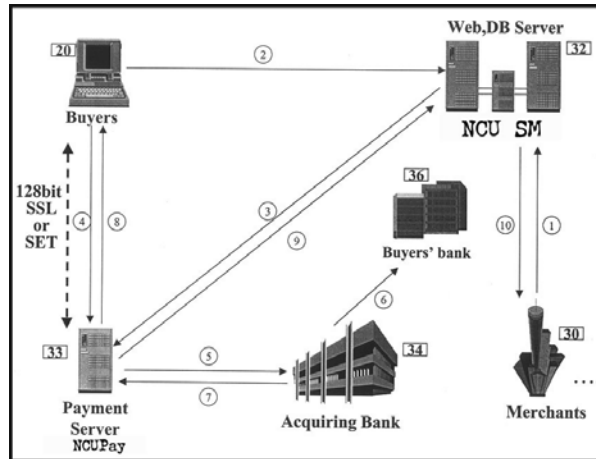


Figure 1. Workflow NCUPay

In order to provide full support and services both logistics, as mentioned above, and payment service, NCU SM offers NCUPay as another payment method.

NCUPay is a payment method developed and designed by North-Chiang Mai University in payment via online credit card to enable the customers to perform an easy e-commerce. The entrepreneurs can collect their money from customers' credit card via NCU Payment Gateway. Generally, the Third Party Payment (3PP) is designed by a private sector. This NCUPay system is at the same standard as any commercial banks. Therefore, customers can be confident to the best system and security NCU has offered.

On NCU SM, customers can use online payment system designed to include the verification by VISA system. The system performance has been illustrated on Figure 1. Workflow NCUPay, operated in conducting business in an e-Commerce network. The steps of the process are indicated by encircled numbers 1 through 10, which for ease of description addressed simply as steps 1 through 10. [13]

Step 1: Merchants 30 provide service of Web, DB Server 32 with a listing of products available for sale.

Step 2: One of the buyers (20) browses through websites of Web, DB server 32 for products available for sale, selects product(s) to purchase and indicates payment by credit card.

Step 3: The buyer (20) is switched from Web, DB Server 32 to payment server 33 for secure encryption transmission of credit card payment information.

Step 4: The buyer (20) transmits credit card payment information under a secure encryption protocol.

Step 5: Payment server (33) transmits encrypted credit card payment information to acquiring bank (34).

Step 6: Acquiring bank (34) processes encrypted credit card payment information and transmits information to buyer's bank (36) which will confirm or reject credit card payment and responds to acquiring bank (34), and if confirmed, internally debit buyer's account and credit merchant's account.

Step 7: Acquiring bank (34) transmits encrypted response from buyer's bank (36) to payment server (33).

Step 8: Payment server (33) provides encrypted response transmitted by the acquiring bank (34) to the buyer (20).

Step 9: If purchase is confirmed to the buyer (22), payment server (33) transmits the purchase information to the Web, DB server (32).

Step 10: Web, DB server (32) provides purchase confirmation to selling merchant (30).

NCUPay has been designed to connect to well known banks that have high technology. It is Kasikorn Thai Bank, which its security system is designed for using in the banking system including SSL 128 bits.

The advantage of installment payment through credit card is that the entrepreneurs do not have to register as a company limited in order to join this program and no need to deposit either. The system will be ready for them in 24 hours after registered.

There are 2 service models:

Payment Conceptual Model for NCU SM: In this study payment methods are studied in macro and micro payment. They are appropriate in each transaction of e-Commerce both B2C and B2B and that can access to the domestic consumers as shown in Figure 2. Mi & Mac in B2C and B2B Support Domestic of NCU SM, and worldwide is shown in Figure 3. Mi & Mac in B2C and B2B Support Worldwide of NCU SM.

		Micro Pay	Macro Pay
Domestics	B2C	Debit Card / Credit Card Media Clearing or SMART Internet Banking K-Payment Gateway, Post FEDI ECS Q1	Internet Banking K-Payment Gateway ECS BAHTNET Q2
	B2B	Credit Card Internet Banking K-Payment Gateway FEDI ECS Q3	Internet Banking K-Payment Gateway ECS BAHTNET Q4

Figure 2. Mi & Mac in B2C and B2B Support Domestic of NCU SM

- **Q1** stands for debit card, credit card, media clearing or SMART, Internet Banking, K-Payment Gateway, Post, FRFT, ECS that are appropriate channels of micro payment for B2C of domestics.
- **Q2** stands for Internet Banking, K-Payment Gateway, ECS, and BAHTNET that are appropriate channels of macro payment for B2C of domestics.
- **Q3** stands for credit card, Internet Banking, K-Payment Gateway, FRFT and ECS that are appropriate channels of micro payment for B2B of domestics.
- **Q4** stands for Internet Banking, K-Payment Gateway, ECS and BAHTNET that are appropriate channels of macro payment for B2B of domestics.

		Micro Pay	Macro Pay
Worldwide	B2C	Credit Card Debit Card Internet Banking, Western Union MoneyGram SWIFT Paypal Q1	Paypal MoneyGram SWIFT Q2
	B2B	Credit Card Internet Banking, MoneyGram Paypal SWIFT Q3	Paypal MoneyGram SWIFT Q4

Figure 3. Mi & Mac in B2C and B2B Support Worldwide of NCU SM

- **Q1** stands for credit card, debit card, Internet Banking, Western Union, MoneyGram, SWIFT and Paypal that are appropriate channels of micro payment for B2C worldwide.
- **Q2** stands for Paypal, MoneyGram and SWIFT that are appropriate channels of payment of macro payment for B2C worldwide.
- **Q3** stands for credit card, Internet Banking MoneyGram, Paypal, SWIFT there are appropriate channels of micro payment for B2B worldwide.
- **Q4** stands for Paypal, MoneyGram and SWIFT that are appropriate channels of macro payment for B2B worldwide.

3. Research Model, Hypothetical Framework and Research Method

3.1 Research Model

Based on the theoretical framework of the prior research step, the research model has been derived from the e-Commerce Support and Services: Payment & Logistics Project. This is as shown on Figure 4. Achievement Factors of P&L-NCU SM Model, where the strategy on features and factors of the P&L-NCU SM had been integrated and designed to arouse the customers to be satisfied to the products and services on the Website and make the purchasing online.

P stands for Payment System

- P1 stands for multiple channels of payment.
- P2 stands for direction of use.
- P3 stands for payment process.
- P4 stands for Understanding in tax calculation Payment.
- P5 stands for Security in payment system policy.
- P6 stands for saving time in each transaction.
- P7 stands for Status display and payment system.
- P8 stands for Payment system of banks and other financial institutions present on website.
- P9 stands for NCU payment system.

L stands for Logistics System

- L1 stands for multiple channels of logistics.
- L2 stands for Direction of use.
- L3 stands for Damage coverage insurance.
- L4 stands for Security in logistics and damage coverage insurance policy.
- L5 stands for Good and economic logistics.
- L6 stands for Simplicity and time saving.
- L7 stands for Status display of logistics system.

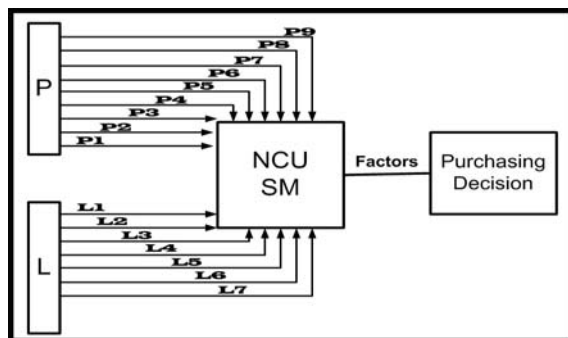


Figure 4. Achievement Factors of P&L-NCU SM Model

3.2 Hypothetical Framework

To assess the achievement factors of P&L-NCU SM Model and to indicate significant factors that influence to this research, the criteria of the hypotheses are set as in table 2 and 3 and they are tested and will state the findings the following item.

Table 2. Hypothetical Framework : Payment system

Hypothetical Framework	
H1.1	P1 factor has significant relationship to buying on website of user.
H1.2	P1 factor has significant relationship to behavior of buying on the Internet.
H1.3	P1 factor has significant relationship to experience of buying on the Internet.
H1.4	P1 factor has significant relationship to behavior in choosing channel of payment.
H1.5	P2 factor has significant relationship to buying on website of user.
H1.6	P2 factor has significant relationship to behavior of buying on the Internet.
H1.7	P2 factor has significant relationship to experience of buying on the Internet.
H1.8	P2 factor has significant relationship to behavior in choosing channel of payment.
H1.9	P3 factor has significant relationship to buying on website of user.
H1.10	P3 factor has significant relationship to behavior of buying on the Internet.
H1.11	P3 factor has significant relationship to experience of buying on the Internet.
H1.12	P3 factor has significant relationship to behavior in choosing channel of payment.
H1.13	P4 factor has significant relationship to buying on website of user.
H1.14	P4 factor has significant relationship to behavior of buying on the Internet.
H1.15	P4 factor has significant relationship to experience of buying on the Internet.
H1.16	P4 factor has significant relationship to behavior in choosing channel of payment.
H1.17	P5 factor has significant relationship to buying on website of user.
H1.18	P5 factor has significant relationship to behavior of buying on the Internet.
H1.19	P5 factor has significant relationship to experience of buying on the Internet.
H1.20	P5 factor has significant relationship to behavior in choosing channel of payment.
H1.21	P6 factor has significant relationship to buying on website of user.
H1.22	P6 factor has significant relationship to behavior of buying on the Internet.
H1.23	P6 factor has significant relationship to experience of buying on the Internet.
H1.24	P6 factor has significant relationship to behavior in choosing channel of payment.
H1.25	P7 factor has significant relationship to buying on website of user.
H1.26	P7 factor has significant relationship to behavior of buying on the Internet.
H1.27	P7 factor has significant relationship to experience of buying on the Internet.
H1.28	P7 factor has significant relationship to behavior in choosing channel of payment.
H1.29	P8 factor has significant relationship to buying on website of user.
H1.30	P8 factor has significant relationship to behavior of buying on the Internet.
H1.31	P8 factor has significant relationship to experience of buying on the Internet.
H1.32	P8 factor has significant relationship to behavior in choosing channel of payment.
H1.33	P9 factor has significant relationship to buying on website of user.
H1.34	P9 factor has significant relationship to behavior of buying on the Internet.
H1.35	P9 factor has significant relationship to experience of buying on the Internet.
H1.36	P9 factor has significant relationship to behavior in choosing channel of payment.

Table 3. Hypothetical Framework : Logistics system

Hypothetical Framework	
H2.1	L1 factor has significant relationship to buying on website of user.
H2.2	L1 factor has significant relationship to behavior of buying on the Internet.
H2.3	L1 factor has significant relationship to experience of buying on the Internet.
H2.4	L1 factor has significant relationship to behavior in choosing channel of Payment.
H2.5	L2 factor has significant relationship to buying on website of user.
H2.6	L2 factor has significant relationship to behavior of buying on the Internet.
H2.7	L2 factor has significant relationship to experience of buying on the Internet.
H2.8	L2 factor has significant relationship to behavior in choosing channel of Payment.
H2.9	L3 factor has significant relationship to buying on website of user.
H2.10	L3 factor has significant relationship to behavior of buying on the Internet.
H2.11	L3 factor has significant relationship to experience of buying on the Internet.
H2.12	L3 factor has significant relationship to behavior in choosing channel of Payment.
H2.13	L4 factor has significant relationship to buying on website of user.
H2.14	L4 factor has significant relationship to behavior of buying on the Internet.
H2.15	L4 factor has significant relationship to experience of buying on the Internet.
H2.16	L4 factor has significant relationship to behavior in choosing channel of Payment.
H2.17	L5 factor has significant relationship to buying on website of user.
H2.18	L5 factor has significant relationship to behavior of buying on the Internet.
H2.19	L5 factor has significant relationship to experience of buying on the Internet.
H2.20	L5 factor has significant relationship to behavior in choosing channel of Payment.
H2.21	L6 factor has significant relationship to buying on website of user.
H2.22	L6 factor has significant relationship to behavior of buying on the Internet.
H2.23	L6 factor has significant relationship to experience of buying on the Internet.
H2.24	L6 factor has significant relationship to behavior in choosing channel of Payment.
H2.25	L7 factor has significant relationship to buying on website of user.
H2.26	L7 factor has significant relationship to behavior of buying on the Internet.
H2.27	L7 factor has significant relationship to experience of buying on the Internet.
H2.28	L7 factor has significant relationship to behavior in choosing channel of Payment.

3.3 Research Method

In this research survey and questionnaires have been decided to be made after the respondents experience on the NCU SM interface. The respondents had been asked to rate from 5 scales (5 – most satisfied, 4 – very satisfied, 3- fairly satisfied, 2-less satisfied, 1-least satisfied).

The target respondents are required to be the Internet users. From the survey, there had been 224 usable questionnaires responded. The number of sample is above 50% of the required sample size using for unknown population (Krejcie & Morgan, 1970) [8]

4. Research Findings

By using SPSS version 14.0 to analyze the data with statistical theory of frequencies, means summary by Basic Table, Cross tabs and Chi-Square test, the result illustrates that percentage of male

respondents who have bought products on the website is more than female (male: female, 27.1%:20.3%). In analyzing payment service factors on NCU SM, most results explore the level of satisfaction in level 4. Moreover, much more experiences of the respondents using the Internet and buying product on the website result in having much more trust on payment service provided. For NCUPay, the value of score rated is at level 3 which is considered low as it is still a new entrant in this e-Commerce service provider. But the values of mean from respondents who have used PayPal service have rated NCUPay at 4.3 as they experienced the use of online payment. Additionally, by using cross tabs and chi-square testing the relationship between factors of payment system and online payment experience of users, the results are as follows. The top 3 significant hypotheses; H1.23, H1.7, and H1.9 explore the results as 0.973, 0.885, and 0.864, respectively. Therefore, there are significant relationship between online payment experience of users and payment system factors: time saving, direction of use, and payment process.

For logistics part, the rating scale from the respondent either having experience or not in using the Internet and buying products on any website result in a score for all factors mostly at level 3 to 4.

The score on delivery channels and instruction in delivery have been rated at higher score (4) due to a variety and clear information provided on the website. The other factors are from the 3PL standards which are of the same for all websites. Moreover, by using cross tabs and chi-square testing the relationship between factors of logistics system and online payment experience of users, the results are as follows. The top 3 significant hypotheses; H2.11, H2.3, and H2.2 explore the results as 0.877, 0.666, 0.453, respectively. Therefore, security in logistics and damage coverage insurance policy factor has significantly related to online payment experience of users. Multiple channels of logistics also has significantly related to both online payment experience of users and frequency of using online payment service.

5. Conclusion

Regarding the design research work of P&L in supporting NCU SM, this website is suitable for the product owners who lack business and technology knowledge. It is to fulfill the e-Commerce support and services that can serve the customers who prefer online shopping and also instant services on the site.

The results of this research illustrate that significant factors on support and services of NCU

SM are to use a famous third party for P&L to create value chain in demand and supply that can response to vary customers' lifestyles both domestic and abroad. These will also enhance the local wisdom to set mark in the international market.

Meanwhile, personnel of North-Chiang Mai University possess excellent knowledge in e-Commerce especially new technology payment, logistics, content management, langue, and business law. In order to enhance the knowledge to entrepreneurs to gain more efficient management skills both front office and back office; therefore, North-Chiang Mai University can contribute to the society by collecting handicrafts which are created from local wisdom to have another chance marketing on an e-commerce. This marketing mix will provide opportunity to the community to develop into the smallest part continually. In fact it will regain the development of the economics to add up in gross domestic products in macro economics.

However, to serve a particular type of product owners in having complete services to serve their customers, NCUPay is required to facilitate the e-Commerce payment system in the northern community.

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