



RESEARCH PROJECT
(BMBR5103)

**FACTORS IMPACTING ON
CUSTOMERS' SATISFACTION IN
EXPRESS COURIER SERVICE
A CASE STUDY OF EMS SERVICE IN HCMC**

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Advisor’s assessment

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Advisor’s signature

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ABSTRACT

Service quality has become one of the top priorities in doing business nowadays because it remains customer satisfaction and loyalty, growth and profitability. Factors impacting on customers' satisfaction are extremely important for businesses in finding way to deliver satisfaction to customers thereby gaining success in sales. Customer's satisfaction is only established when the firm fulfils the expectations and needs of customers.

This research examines major factors, including service quality, price and payment, distribution channel, and service diversification, which impact on customers' satisfaction in EMS in HCMC via 150 delivery and collection questionnaire. Almost respondents, who are customers of EMS, are companies. Collected data is analyzed by the methods of SPSS 22 for Window i.e. Cronbach' alpha coefficients, factor analysis, and multiple linear regression analysis. The result indicates that Service quality, Price and Distribution channel are good predictors for customers' satisfaction, in which Distribution channel is the most significant contribution, while the factor of Service diversification does not satisfy the proposed standards of analysis.

However, all of chosen factors only meet customers' satisfaction in medium level. In the light of findings suggest that managers should think over to improve the quality of service, and then lead to satisfy customers in higher level if the firm wants to exist in today rapid fluctuating market.

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ABBREVIATION

BSO:	Breadth of service offering
CCI:	Call center for handling of interrogation
CS:	Customers' satisfaction
DC:	Distribution channel
DHL:	DHL Express Corporation
ECS:	Express courier service
EMS:	Express Mail Service
FedEx:	Federal Express Corporation
IIA:	Investment in asset
INC:	International and national coverage
IOS:	Integration of service
OTD:	On-time delivery
PAQ:	Price appropriating with quality
PBE:	Pricing attaching to the brand and experience
PP:	Price and Payment
SD:	Service diversification
SSS:	Safety and security of shipment
SQ:	Service quality
TNT:	TNT Express Corporation
ROS:	Reliability of service
UPS:	United Parcel Service

CHAPTER 1 – INTRODUCTION

1.1 COMPANY BRIEF INTRODUCTION

Express Mail Service (EMS) is an international express postal service developed and offered by postal-administration members of the Universal Postal Union (UPU). In Vietnam, EMS officially launched in 1992 by the Posts and Telecommunications Corporate Vietnam (VNPT). Later in January 2005, VNPost Express Joint Stock Company was established under the management of VNPT to provide EMS service in Vietnam as a member of UPU. Today EMS operates in 63 provinces and cities in Vietnam through 4 hubs in Hanoi, Ho Chi Minh City, Da Nang and Binh Dinh. EMS VN guarantees to delivery from 24 to 48 hours for most of the locations served by it by hundreds trucks and thousand of trucks from agents.

Main services:

- Domestic EMS: cover 63 provinces and cities in Vietnam
- International EMS: deliver to 102 countries and territories
- EMS Application documents for universities
- EMS VISA to the US
- EMS Official Passport



Value-Added Services:

- EMS Urgent service.
- EMS Time certain service

- EMS Next Day Delivery (EMS NDD)

1.2 RESEARCH PROBLEM STATEMENT

Express courier service (ECS) is indispensable in business activities around the world. It helps firms cut operating and inventory costs, and especially, ECS plays an important role in impacting on the capability of almost aspects of companies' operations from sales, production to customer support functions, logistics and storage.

The Vietnamese express industry has developed strongly in recent years thanks to the opening and booming of Vietnam economy. The growth rate of courier express market in Vietnam will stabilize at 25%-30% in coming years (D&T Express, 2011). Moreover, Vietnam has become an official member of the World Trade Organization (WTO) since 2007; thereby leading to the fast pace growth of international business cooperation and the continuous increase of import-export products of the country, that will create a huge business opportunities for Vietnamese express industry in near future (Nguyen and Nguyen, 2011).

Currently, there are about 75 courier express companies operating in Vietnam, in which worldwide corporations like DHL, FedEx, UPS and TNT accounted for 80% market share, whereas market share of EMS operated by VN Express Post was only 8% (D&T Express, 2014). Nicolaus analysts (2008) describe the express market as an orderly oligopoly of "MNCs" (Parcel Landscape an "Orderly Oligopoly", 2008). It is difficult for EMS and small enterprises to compete with "MNCs" in this industry due to the limitation of service quality and added-values service offering. Therefore, by indentifying factors affecting customers' satisfaction in express courier service in HCMC, the research can help EMS VN enhance their service quality and improve their competition position in Vietnamese express market.

1.3 PURPOSE OF THE RESEARCH

The purpose of this research is to discover the factors related to customers' satisfaction in express courier industry in HCMC. Hence, theme set out specific research objectives as follows:

- To have an overview on the attributes of Express Courier Service.
- To examine the relationship between customers' satisfaction and its antecedents in Express Mail Service.
- To identify strongest factors impacting on customers' satisfaction in Express Mail Service.
- To evaluate the level of customers' satisfaction in Express Mail Service.

1.4 SCOPE OF THE RESEARCH

This research was conducted on 150 customers of EMS in HCMC, in which most of them are companies relating to international business. All 150 copies of questionnaire are delivered by hand to 150 respondents. Courier staffs collect them in a week after delivery, of course, there are preparations in advance. SPSS 22 for Window (or PASW) is used to analyze data collected from survey respondents. Sampling objects are loyal customers of EMS in HCMC who may understand some attributes of courier express service, and most of them are organizations and business companies.

1.5 SIGNIFICANCE OF RESEARCH

In the current context of fierce competitiveness, customers' satisfaction is a critical factor for businesses to succeed. Customers' satisfaction has become a particularly significant issue in competitive environments for marketers as well as service firms, including ECS, because of its competitive advantages and impact on customers' loyalty.

Given the important contribution of CS to the success and growth for EMS VN, there is a need to address and evaluate the factors impacting on their customers' satisfaction; thereby suggest some ideas in attempt to help EMS VN improve their service quality and able to satisfy customers in higher level. This also enables EMS VN to overcome the current biggest issue and challenge - quality of service - facing in Vietnam's express service market in order to exist and grow in today rapidly fluctuating market.

1.6 LIMITATION OF THE RESEARCH

Like other academic researches, there are a number of unavoidable limitations facing by the researcher.

First, during data collection phase, the author can only conduct the questionnaires instead of the interviews, which is not enough large sources of evidence for constructive validity (Yin, 2003).

Second, due to limitations in geography, time and material ability, the survey questionnaires are not verified carefully before conducting the survey. This may have a bit subjectivity in proposing questions.

Third, the use of the non-probability sampling technique does not generalize the overall result (Bryman and Bell, 2007), therefore the evidences can't be established into a chain and reviewed by key information. So in this research, the in-depth exploration of the issues is not absolutely fulfilled.

CHAPTER 2 – LITERATURE REVIEW

Literatures and survey papers on global express delivery industry are rather limited and difficult to find in academic journals (Subrata et al, 2010). In this chapter, the researcher will go through theories related to the research objectives thereby propose hypothesis to capture and fulfill the research purpose.

2.1 DEFINITION OF CONSTRUCT - THE ATTRIBUTES OF ECS

According to Oxford Economic (2009), “the core business of the express industry is the provision of value-added, door-to-door transport and deliveries of next-day or time definite shipments, including documents, parcels and merchandise goods”. Subrata et al (2010) state that ECS handle both documents (business communications, tenders, bills, correspondence, brochures, manuals, annual reports, certificates, etc) and non-documents (spare parts, electronic items, garments, samples, merchandise, ATM cards, etc).

In higher-level, ECS is a fast transport service of products which are high-valued products such as medicines, electronics and medical equipment, goods with news value such as legal documents, newspapers, and perishable goods (Ohnell and Woxenius, 2003).

Along with transporting, ECS provides the value-added such as door-to-door service, handy time of picking-up and delivering, ensured on-time delivery, reliability of service, safety and security of shipments, tracking system of visibility of goods during shipping, proof of delivery, and call centres for handling of interrogations.

To meet the effective demands of business, ECS take advantage of overnight transport which is called “dead time” to hand over its shipments from sender on the working day for delivering to receiver on early following day (next day delivery). By using all different transport modes such as van, lorry, train, cargo aircraft, and passenger aircraft to meet the emergency requirements of business;

ECS has recorded great achievements, and contributed an important part to global economy (Oxford Economic, 2009).

In many countries, EMS is provided by postal departments. The service quality of EMS cannot compare to MNCs such as FedEx, UPS, , DHL and TNT which are the leading worldwide companies in express delivery industry, because EMS is not able to offer adequately added-values service as mentioned previously. Hence, MNCs in express delivery industry often account the biggest pieces in market share.

2.2 FACTORS INFLUENCING ON CUSTOMERS' SATISFACTION

2.2.1 CUSTOMER SATISFACTION

Today CS is considered as the main factor to bring success to any business. Customer's satisfaction can be understood by a definition of Kathleen (2005), "A customer's perception that his or her needs, wishes, expectations, or desires with regard to products and service have been fulfilled".

Consequently, if customers satisfy with products/services they might repeat their purchase of those goods, and also have a good impression about the image of those goods. In contrary, the dissatisfaction of customers may lead to negative image about those goods, and as a result that goods could not be consumed.

Kotler (2004) who is considered as a father of modern marketing theories asserts that benefits of satisfaction customers may lead to spread positive word-of-mouth which reduces the cost of promotion for attracting new customers. Indeed, CS is seen as a key source of benefits such as customer retention, reputation of organization, reliability of services which can lead more profitability. Once gained high profitability, it is really easy for ECS companies to conduct successful value-added in ESC such as supporting breadth of service, extension of service facilities, quality of human resources, investment in assets and in information system, and integration of services etc. And in fact, these

above value-added are indispensable in ECS, Sheth (2001) has concluded that “CS can provide you crucial competitive advantages, which may directly lead to increase in profitability and growth”.

Overall CS can be considered as a tool of achieving business aims as well as gaining a source of sustainable competitive advantage (Renart, 2001).

2.2.2 CUSTOMER SATISFACTION AND ITS ANTECEDENTS

Ladhari (2008) shows that customer’s satisfaction is impacted by a chain of psychological signals and the perceived quality of service such as **product/service quality, price and payment, distribution channel, and service diversification.**

2.2.2.1 The relationship between service quality and customers’ satisfaction

Zeithaml and Bitner (2003) assert that service quality is considered as a positive or negative attitude of customer relating to the outstanding of a service.

Today, service quality is accepted as a multidimensional concept. Variety of service quality models are developed and used in literature such as GLOVAL scale established by Sanchez et al. (2006), Perceived SQ Model developed by Gronroos (1984), SITEQUAL of Yoo and Donthu (2001), and BANKZOT proposed by Nadiri et al, (2009).

Although a number of models are being used in different industries, the SERVQUAL model which is developed and subsequently refined by Parasuraman et al. (1991) has received the most recognition. And it has been considered as a driving force in research activities with five dimensions in the service relationship (Srinivas et al, 1999). SERVQUAL scale consists of measurements as follows.

- **Reliability** is the ability to provide services as promised. Firms must provide service quality in consistent with advertising and commitment.
- **Responsiveness** is the ability to meet legal requirements of customer, and willing to provide service quickly.
- **Assurance** is courteous attitude, professional style and understanding of employees; especially the ability creates peace of mind, trust for customers.
- **Empathy** is the attentive service, special attention to customers, and the ability to understand the unique needs of customers.
- **Tangible** is the physical facilities, equipment, uniform, slogans, appearance of staffs, and image.

He and Li (2011) state that “One of the most important investments in the service sectors is the investment in service quality”, and add that service quality is not only a key factor for customer satisfaction but also plays a crucial role in building brand name for organization. Leverin and Liljander (2006) conclude that construct of service quality and CS is inseparable, and they influence each other via service features. Thus based on the features of ECS described by Subrata et al (2010), elements may influence service quality of EMS will be considered as follows.

- **On-time pickup:** is the period of time which have been planned in advance and public to customers. The delay of pick-up time will affect badly to psychology and satisfaction of customers.
- **On-time delivery:** is one of measurements in service quality of ECS which measures the volume of services delivered to customers on time and in full.
- **Reliability of service:** relates to business aspects of service industry which reflects the service quality during the consumption stage (Galetzka et al, 2006).
- **Safety and security of shipment:** is the convenience provided by ECS to ensure that shipments are not lost and damaged in transport process.
- **Call center:** is customer care center to receive information, requirements via phone call, e-mail, web, fax, etc. to solve the queries of customers.

- **Willingness to serve:** is one of the factors to measure the service quality during consumption
- **Reliable courier:** due to characteristics of ECS, courier staffs are considered as the face of service, and directly deal with customers everyday. Hence, the reliability of courier staffs will affect strongly to the image of service.
- **Friendly courier:** a friendly staff will create a good relationship to customers, and then lead to CS.

From the above discussions, whether service quality affects to CS in EMS, the hypothesis (H1) is proposed.

H1: Service quality has a significant relationship with customers' satisfaction in Express Mail Service.

2.2.2.2 The relationship between Price and Payment and customers' satisfaction

Kotler and Armstrong (2010) define **price** as the amount of money charged for product or service, or the total of the values the consumers exchange to have or use the product or service instead of customers' benefits. According to Hanif et al (2010), price is a crucial issue that may leads toward satisfaction, and payment aids to develop CS. Martin-Consuegra et al (2007) assert that decision of customers to accept particular price relate directly to satisfaction level.

Hence, price and payment need to be put in reasonable, acceptable and justifiable level if a firm want to be survival in the market. Herrmann et al (2007) conclude that CS is directly impacted by the factor of price and payment, whereas indirectly through the perception of price fairness. Moreover; Iglesias and Guillén (2004) assert that price and payment, together with other factors such as service quality, **are antecedents of CS.**

Indeed, EMS is not different with other services, and price of this service is often in premium level and a sensitive issue. This means that price and payment play an important role in ECS industry. Price can be discounted off from 5% to 55%

depending on the volume of using ESC, hence, a policy of flexible price will influence strongly to CS in particular ECS. Some attributes of pricing and payment are summarized below.

- Flexible price by volume in using EMS service
- Price appropriate with quality
- Price attaching with the brand and level of customer experience
- Term of late payment
- Third-party payment
- Online payment

Based on the above discussions, the second hypothesis (H2) is formulated.

H2: Price and payment have a significant relationship with customers' satisfaction in Express Mail Service.

2.2.2.3 The relationship between distribution channel and customers' satisfaction

In ECS industry, distribution channel plays a crucial role to make differentiation and great success in providing the services (Learning Objectives, 2012). Each courier staff, each pick-up truck and each store are physical factors, and also are the image and the face of ECS. The necessity of the distribution is to reduce the gap between the production of products/services and consumption in place, in time, in quantity, and in service quality, especially in ECS (Pranulis et al, 2008). Further, Neslin and Shankar (2009) assert that CS is a vital issue for distribution channel management.

It is not simple that the distribution channel of FedEx, UPS, DHL and TNT cover over 200 countries and territories throughout the world (FedEx profile, 2015; UPS history, 2015; DHL profile, 2015; TNT profile, 2015). Such large distribution channel helps them expand their business in new market and meet CS, and simultaneously gain great achievements as today.

Banyte et al (2011) conclude that distribution channel is an indispensable factor in business activity of the organization to meet CS. From the features described by Subrata et al (2010), some elements under distribution channel may affect to CS as below.

- Investment on assets and facilities of distribution channel
- Investment on information and technology system
- International and national coverage
- Breadth of service offering
- Extension of service facilities
- Integration of service

Based on the above discussions, the third hypothesis (H3) is proposed.

H3: Distribution channel has a significant relationship with customers' satisfaction in Express Mail Service.

2.2.2.4 The relationship between service diversification and customers' satisfaction

In ECS industry, diversification enables firms to utilize their expert capacity and special skills to enhance and develop competence in order to both gain profits and meet CS. Especially, as ECS is considered as a professional service type, service diversification enables the firm to improve their service quality toward CS such as door-to-door service, combination of services or consolidation of shipments to shorten the routine time and save cost for customer, which require professional skills and experiences of responsible staffs in an organization.

Some services of EMS may affect to CS which are listed as follows.

- **Door-to-door service:** pick-up and delivery shipments or documents at customers' home.
- **Door to airport/port service:** pick-up at customers' home and delivery shipments at airport or port.

- **Airport/port to airport/port service:** pick-up and delivery shipments at airport or port.
- **Airport/port to door service:** pick-up at airport or port and delivery at customers' home.

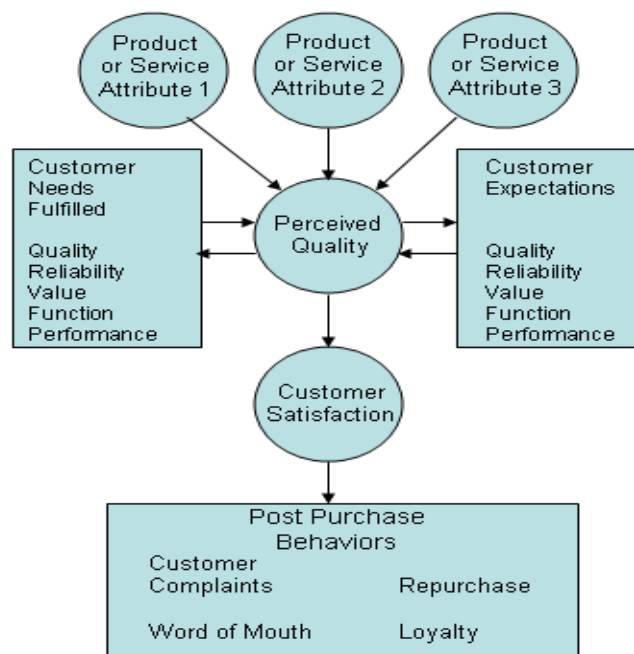
With the above discussions, the fourth hypothesis (H4) is suggested.

H4: Service diversification has a significant relationship with customers' satisfaction in Express Mail Service.

2.3 HOW TO MEASURE CUSTOMERS' SATISFACTION

By tradition, the extent of customers' satisfaction is measured by the service quality, price, and buying process (Kumbhar, 2011). However, Smith (2007) shows that CS relates to three psychological factors in evaluating customer experience about the product or service, including “cognitive (or evaluation), affective (emotional-feeling/like-dislike) and behavioral (current/future actions)”, as described in Figure 5.

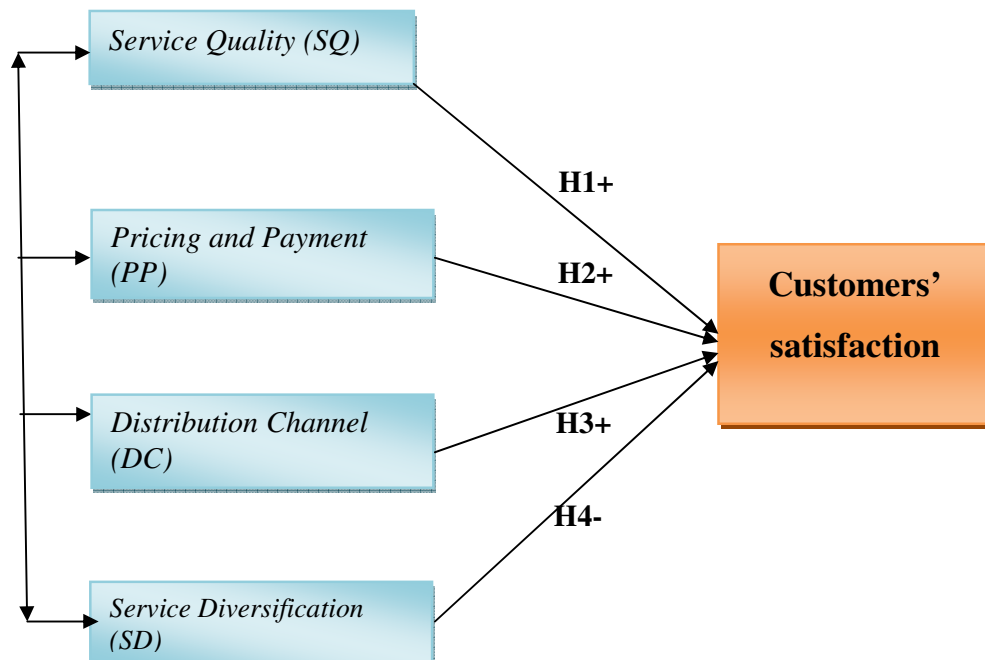
Figure 1 - Measuring model for customers' satisfaction (Source: Smith, 2007)



As shown in Figure 5, Smith (2007) states that “customer satisfaction is influenced by perceived quality of product and service attributes, features and benefits, and is moderated by customer expectations regarding the product or service. Each of these constructs that influence customer satisfaction need to be defined by the researcher”.

Most of studies on marketing issues also suggest the same outcome about the relationship between CS and service quality, price, buying process, and others etc, and this relationship is an intangible connection (Jamal and Naser, 2003). Thus; based on the mentioned theories and the features of express courier service; the theoretical framework is built as Figure 6 to conduct the survey in this research. It consists of four independent variables (or hypotheses) and a dependent variable (a concept of CS), which includes (1) Service quality, (2) Price and payment, (3) Distribution channel, and (4) Service diversification.

Figure 2 - Theoretical framework of this research



Chapter summary

Chapter 2 presents a summary of the theories related to CS and its antecedents, and supported the service features affecting to CS. Besides, attributes and features of ECS are considered carefully, thereby the model to measure the factors impacting on CS in EMS is proposed, including five hypotheses as follows:

H1: Service quality has a significant relationship with customers' satisfaction in Express Mail Service.

H2: Price and payment have a significant relationship with customers' satisfaction in Express Mail Service.

H3: Distribution channel has a significant relationship with customers' satisfaction in Express Mail Service.

H4: Service diversification has a significant relationship with customers' satisfaction in Express Mail Service.

CHAPTER 3 – RESEARCH METHODOLOGY

“Methodology is a form of standardization or framework that allows things to be compared on a like-for-like basis, and allows findings to be replicated so as to validate them” (UKdissertation, 2012).

3.1 DATA COLLECTION

Collecting data is an important step of any research, hence, it must be well planned. Srivastava and Rego (2011) define that primary data is the directly collection of the researcher. Specifically, questionnaires are used in this research with the type of delivery and collection questionnaires which means that the questionnaires will be delivered directly by hand to each respondent and collected later (Saunders et al, 2009, p. 362).

There are two kinds of questionnaire which are self-administered and interviewer-administered questionnaire. In this research, self-administered questionnaire is used with almost closed-question in the way of delivery and collection questionnaire (Saunders et al, 2009).

The questionnaire is divided into three sections of 32 questions in detail at Figure 6. Section **A**: company information includes 3 questions, section **B**: the factors influencing satisfaction consists of 28 questions, section **C**: Customers' satisfaction. Most questions are described by the 5-point Linkert scale (Likert, 1932) of strongly disagree, disagree, neutral, agree and strongly agree.

Figure 3 - Distribution of questionnaire items

Section	Hypothesis	Label	Number of question
A		Company information	1-3
B	H1	Service quality	4-12
	H2	Price and payment	13-19
	H3	Distribution channel	20-26
	H4	Service diversification	27-31
C		Customers' satisfaction	32

In this research, 150 copies of questionnaire are delivered by hand to 150 respondents who are the customers of EMS in HCMC, and most of them are companies relating to international business. Courier staffs collect them in a week after delivery. SPSS 22 for Window (or PASW) is used to analysis collecting data in this research. Sampling objects are our loyal customers who may understand some attributes of courier express service, and most of them are organizations and companies.

3.2 RESEARCH METHOD

The approaches of induction and deduction have existed for many years, and have been developed by the influence of different movements and theories (Vogel et al, 2011). Inductive approach is likely to establish the theory from the findings of the researcher through particular events (Bryman and Bell, 2007). In contrast, deductive approach is used to test theory, then inductive approach relates with building theory (Saunders et al, 2009). **The deductive approach is a major approach of this study.**

Alwood (2012) states that “the distinction between qualitative and quantitative research is abstract” and unclear, therefore, its popularity risks may lead to unfortunate outcomes. In general, qualitative and quantitative research will be used in this study as an alternative application, and they support each other.

This qualitative approach will be applied in this study via closed questions in questionnaires to obtain information with its aim to explain how the factors impacting on CS in current context of EMS service.

3.3 DATA ANALYSIS

The researcher uses non-probability technique to identify the most vital characteristic of the service with 150 questionnaire of delivery and collection by hand. Collecting data is analyzed by SPSS 22 software.

SPSS (Statistical Package for the Social Sciences) is the software of a computer application which enables the users or researchers to analyze data from questionnaire survey and other sources (FlinderUniversity, 2009). Specifically, Bronbach's alpha is used for reliability test, factor analysis is used to eliminate non-correlative variables, multiple regressions is a tool to examine the hypotheses (Dale, 2003)

CHAPTER 4 – RESEARCH FINDINGS AND ANALYSIS

4.1 INFORMATION OF CUSTOMERS (COMPANIES)

❖ Type of customer (or company)

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Vietnamese company	32	21.3	21.3	21.3
	Foreign company	67	44.7	44.7	66.0
	Bank	9	6.0	6.0	72.0
	Representative office	19	12.7	12.7	84.7
	Law office	8	5.3	5.3	90.0
	Shipping agency	7	4.7	4.7	94.7
	Consulate	6	4.0	4.0	98.7
	Others	2	1.3	1.3	100.0
	Total	150	100.0	100.0	

Table 4.1 - Type of Company

Table 4.1 shows that group of foreign company account for a large proportion of EMS's customer structure (44.7%), the second is Vietnamese company with 21.3%, representative offices are ranked in the third with 12.7%. Total of them account for 78.7% of customer structure which means that almost EMS's customers are companies relating to foreign elements, and business activities of them is in international scale. This result asserts that volume and revenue of EMS are much depending on companies which relate to international activities.

❖ Size of customer (or company)

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	from 1 to 10 staffs	11	7.3	7.3	7.3
	from 11 to 30 staffs	57	38.0	38.0	45.3
	from 31 to 100 staffs	65	43.3	43.3	88.7
	over 100 staffs	17	11.3	11.3	100.0
	Total	150	100.0	100.0	

Table 4.2 - Size of Company

Table 4.2 asserts that most of companies in Vietnam are SMEs. The size of companies, which has scale under 100 staffs, accounts for 88.7%. Representative offices account 12.7% of the research scope. This means that although Vietnam is examined as a developing and potential economy but not a big market to attract strongly FDI.

4.2 RELIABILITY TEST

According to Sekaran (2006), measuring the reliability test is to ensure the consistency and stability of the variables or items, whether the items relating to each dimension are internally consistent.

According to George and Mallery (2003), Cronbach's Alpha from 0.7 and above show the variables reliable and good for further research. However, some studies state that Cronbach's alpha at 0.60 is acceptable (Gerrard et al, 2006; Kenova and Jonasson, 2006; Malhotra et al, 2005), and simultaneously the coefficients of 'Corrected item-total correlation' should be greater than **0.30**, or the 'Alpha if item deleted' should be not greater 'reliability alpha'.

In fact, ECS industry is not really popular and most of respondents do not understand deeply this industry, hence, the standards of this test as follows.

- Reliability coefficient of alpha > **0.60**
- The corrected item-total correlation > **0.30**
- 'Alpha if item deleted' should be not greater than 'reliability coefficient of alpha'.

Cronbach's alpha	Reliability level
$0.00 \leq \alpha < 0.20$	Very low
$0.20 \leq \alpha < 0.40$	Low
$0.40 \leq \alpha < 0.60$	Sufficient
$0.60 \leq \alpha < 0.80$	High
$0.80 \leq \alpha \leq 1.00$	Very high

Source: Malhotra et al (2005)

The variables which satisfy the above standards are used for next analysis. In contrast the variables which do not satisfy the above standards are eliminated.

❖ Reliability Test of Service quality (H1)

Table 4.3 - Results of reliability of Service quality

Variable	Dimension name	Total correlation	Deleted alpha
OTP	On-time pick up	.3181	.7743
OTD	On-time delivery	.6041	.7264
ROS	Reliability of service	.6147	.7245
SSS	Safety and security of shipment	.6049	.7259
CCI	Call center for interrogation	.3867	.7592
WNS	Willingness to serve	.2801	.7718
REC	Reliable courier	.3067	.7700
FRC	Friendly courier	.3020	.7704
SQ	Service quality	.6768	.7131

Alpha Reliability Coefficients = 0.7714

Cronbach's alpha coefficient of 'Service quality' is **0.7714**, and almost corrected item-total correlations are over 0.300. It means that the present data is suitable for factor analysis, ensure the required reliability.

However, coefficients of 'alpha if item deleted' of '**On-time pick up**' and '**Willingness to serve**' are 0.7743 and 0.7718 which are greater than 0.7714, and the corrected item total correlations are lower than 0.300. This means that '**On-time pick up**' and '**Willingness to serve**' are not significant reliability and validity for service quality in EMS, thus, these variables are eliminated from the factor analysis.

Discussion: The variable of 'On-time pick up' is not correlated to other variables, and is not highly evaluated by customers which is a pity because the delay of it will last the waiting of customer which affect directly to CS. It shows that the answers are not exact or the question mentioned in questionnaire is not clear or confusing. Besides 'Willing to serve' does not also meet the test, it

means that the responsibility of EMS' staffs is inadequately, and it is the common disease of state enterprises in Vietnam which needs to be changed and treated radically.

❖ Reliability Test of Price and Payment (H2)

Table 4.4 - Results of Reliability Test of Pricing and payment

Variable	Dimension name	Total correlation	Deleted alpha
FPS	Flexible pricing by volume of using service	0.3775	0.5967
PAQ	Pricing appropriating with quality	0.3749	0.5982
PBE	Pricing attaching to the brand and experience	0.4041	0.5890
TPP	Third-party payment	0.1348	0.6657
TLP	Term of late payment	0.3991	0.5890
OLP	Online payment	0.4058	0.5873
PP	Price and payment	0.3784	0.5993

Alpha Reliability Coefficient = 0.6412

The alpha value of 'Price and payment' is **0.6412**. Thus, the present data of '**Price and payment**' is suitable for factor analysis, and ensures the correlation, the required reliability and validity.

However, the 'correlated item-total correlation' of 'Third party payment' is 0.1348. It means that the factor of 'Third party payment' is not correlated to other variables, and eliminated from factor analysis. Thus, the component of price and payment has just 6 variables which are suitable for factor analysis.

Discussion: The result means that third-party is not popular in HCMC, and simultaneously is not reliable and rather complex. Although this term of payment is rather popular in developed countries, but in Vietnam this term is not available. Perhaps Vietnam is a small market, and transport cost is not large enough for customers paying attention in this term of payment.

❖ Reliability Test of Distribution channel (H3)

Table 4.5 - Results of Reliability Test of Distribution channel

Variable	Dimension name	Total correlation	Deleted alpha
IIA	Investment in asset	.3946	.7173
IIS	Investment in information system	.1924	.7627
INC	International and national coverage	.5570	.6765
BSO	Breadth of service offering	.6426	.6562
ESF	Extension of service facilities	.2729	.7412
IOS	Integration of service	.5656	.6790
DC	Distribution channel	.5606	.6794

Alpha Reliability Coefficients = 0.7356

In this test, the correlations of 'IIS' and 'ESF' are 0.1924 and 0.2729 in order which don't correct to total correlation. Hence, the factors of 'Investment in information system' and 'Extension of service facilities' are eliminated from the next factor analysis.

Yet, the alpha value of 'Distribution channel' is **0.7356** (Table 4.5) which meets the proposed standards. It means that this present data of '**Distribution channel**' is **suitable for factor analysis**, and ensures the correlation, the required reliability and validity. Hence, 'Distribution channel' just maintains 5 independent variables.

Discussion: The variable of investment on information and technology system eliminated is an unfortunate result, because information system is very important in tracking shipments during their process. The purpose of this system is to locate and find shipment in the case of loss or missing shipment, or having solutions for meeting CS when delayed delivering. However, the elimination of these two variables is objectively necessary.

This result shows that respondents really do not consider carefully when answer the questions or not enough knowledge about the information system in this industry. In developed countries, customers will interest more in information and technology system of the ECS firms.

❖ **Reliability Test of Service diversification (H4)**

Table 4.6 - Reliability Test of Service diversification

Variable	Dimension name	Total correlation	Deleted alpha
DDS	Door-to-door service	0.4496	0.5624
DPS	Door to airport/port service	0.1822	0.6910
PPS	Airport/port to airport/port service	0.5213	0.5236
PDS	Airport/port to door service	0.2923	0.6356
SD	Service diversification	0.5769	0.5055

Alpha Reliability Coefficient = 0.6428

The result shows that alpha value of ‘Service diversification’ is **0.6428**. Thus, this present data of ‘**Service diversification**’ is suitable for next factor analysis, and ensures the required reliability and validity.

However the total correlation of ‘**Door to airport/port service**’ is 0.1822 which does not satisfy the proposed standards. The elimination of this variable is objectively consistent. Therefore, the ‘Service diversification’ just remains 4 independent variables.

Discussion: This result reflects the fact that the quality of Door to airport/port service is not good, and consistent with realistic situation in offering these two services. There are two causes for this issue. (1) The system of transportation in HCMC is very bad, and traffic jams occur anytime and anywhere in mass range, thus the transportation of EMS is also affected seriously. (2) The EMS’s investment in transport fleet is inadequately and asynchronously. In many case, the transport fleet of EMS does not meet the big shipments which require a special transport method.

In conclusion, after reliability test, the proposed hypotheses are accepted and significant statistic, but some independent variables have been changed significantly. Specifically, the structure of the hypotheses is described as below Table 4.7

Hypothesis	Independent variables before reliability test	Independent variables after reliability test	Cronbach's Alpha
H1	OTP, OTD, ROS, SSS, CCI, WNS, REC, FEC, SQ (9 variables)	OTD, ROS, SSS, CCI, REC, FEC, SQ (7 variables)	0.7714
H2	FPS, PAQ, PBE, TPP, TLP, OLP, PP (7 variables)	FPS, PAQ, PBE, TLP, OLP, PP (6 variables)	0.6412
H3	IIA, IIS, INC, BSO, ESF, IOS, DC (7 variables)	IIA, INC, BSO, IOS, DC (5 variables)	0.7356
H4	DDS, DPS, PPS, PDS, SD (5 variables)	DDS, PPS, PDS, SD (4 variables)	0.6428
Total	28 items	22 items	

Table 4.7 - The structure of hypotheses after reliability test

Table 4.7 shows that all alpha point of dependent variables are greater than 0.60, thus it can conclude that the remaining variables ensure the required reliability and validity. Therefore, 22 items after reliability test will be used for factor analysis in next content.

4.3 FACTOR ANALYSIS

According to Hair et al (1998), factor analysis is a method of statistical analysis used to reduce interdependent multi-variables into a set of variable with more sense, and simultaneously determine the crucial features influencing psychology of customers as well as CS in consumption. Besides, factor loading should be greater 0.5 as an important standard in factor analysis, and the eigenvalues of the correlation matrix greater than 1 or the cumulative eigenvalues greater than 50% (DeCoster, 1998)

In addition, in factor analysis, Kaiser-Meyer-Olkin measure (KMO) of sampling and Bartlett's test should be considered as a necessary condition. Whereby, KMO should be between 0.5 and 1.0 and Bartlett Sig. should be lower than 0.05. Thus, some standards for factor analysis are summarized as follows:

- KMO is between 0.5 and 1.0
- Barlett sig. is lower than 0.05 (or 5%)
- The cumulative eigenvalues are greater than 50%
- Factor loading is greater than 0.50

4.3.1 Factor analysis of Service Quality

After the first factor analysis of service quality is conducted to determine the correlation of the variables in service quality, the outcome of factor analysis shows that the factor loading of variables of ‘Reliable courier’ and ‘Friendly courier’ are lower than 0.5. In addition, the initial cumulative eigenvalue is $46.426\% < 50\%$. This means that these two variables should be eliminated from next factor analysis. Therefore, the second factor analysis should be conducted without ‘Reliable courier’ and ‘Friendly courier’. The output is presented in Table 4.8

Independent variable	Dimension name	Factor loading
OTD	On-time delivery	0.722
ROS	Reliability of service	0.887
SSS	Safety and security of shipment	0.856
CCI	Call center for handling of interrogation	0.555
SQ	Service quality	0.937

Table 4.8 - Final Component Matrix of Factor Analysis of Service Quality

Table 4.8 shows that the factor loadings of all variables are greater than 0.5, and the initial cumulative eigenvalue is $64.503 > 50\%$. This means that the variables of ‘On-time delivery’, ‘Reliability of service’, ‘Safety and security of shipment’, ‘Call center’ and ‘Service quality’ explain 65% of variances. Simultaneously, KMO is 0.717 with sig. =0.00 which supports this test. Thus, with this analysis, the result of this analysis is accepted.

Discussion: As a result, the value variables are chosen from service quality to meet CS, which are ‘On-time delivery’, ‘Reliability of service’, ‘Safety and

security of shipment’, ‘Call center’, ‘Service quality’. **Service Quality** factor (0.937) is ranked in the highest point; **therefore, service quality positively impact on customer’s satisfaction.** This recommends that EMS VN should consider carefully all factors of EMS service with its aim to find out the solution for improving the quality of services.

4.3.2 Factor analysis of Price and Payment

Similarly, after the first factor analysis of ‘Price and Payment’, the outcome does not satisfy the mentioned standard. There are three factor loadings which are lower than 0.5, including the variables of ‘Flexible pricing by using volume’ (0.496), ‘Term of late payment’ (0.462) and ‘Online payment’ (0.493), and also the initial cumulative eigenvalue is 38.461% less than 50% (see Appendix 4). This means that the first factor analysis is not accepted, and the second factor analysis should be done continuously. The outcome is presented in below tables.

Variable	Dimension name	Factor loading
PAQ	Pricing appropriating with quality	0.782
PBE	Pricing attaching to the brand and experience	0.859
PP	Price and payment	0.859

Table 4.9 – Final Component Matrix of factor analysis of Price and Payment

With this factor analysis, all factor loadings of independent variables are greater than 0.50, including ‘Pricing appropriating with quality’, ‘Pricing attaching to the brand and experience’ and ‘Price and payment’. And also, the initial cumulative eigenvalue is 69.547% which is higher than the standard of 50%. That also means that **PAQ, PBE and PP** explain 69.54% of variances. In addition, KMO is 0.684 with sig. = 0.00 which is appropriate with the proposed standards. Thus, the result of second factor analysis is accepted.

Discussion: The items of payment do not exist in Table 4.6. This means that the terms of payment don’t receive the attention of customers. As **price and payment factor positively affect to customer’s satisfaction**, EMS VN should pay more attention on payment term for improving the features of EMS service

to meet the satisfaction of customers. Moreover, online payment is the current trend of payment in many fields of business, yet it is not ranked in significant standard of EMS, it means that EMS does not capture the new technologies and the trend of society to improve the quality of service.

4.3.3 Factor analysis of Distribution Channel

Unlike factor analysis of ‘Service quality’, this factor analysis satisfies the proposed standards at the first time. The outcome is presented in below tables.

variable	Dimension name	Factor loading
IIA	Investment in asset	0.550
INC	International and national coverage	0.814
BSO	Breadth of service offering	0.869
IOS	Integration of service	0.641
DC	Distribution channel	0.753

Table 4.10 - Component Matrix of factor analysis of Distribution channel

Under Table 4.10, the factor loadings of all independent variables are greater 0.50, and the initial cumulative eigenvalues is 53.969% of variances > 50% which is explained by the variables of ‘IIA’, ‘INC’, ‘BSO’, ‘IOS’, and ‘DC’. Similarly, KMO is 0.558 with sig. = 0.00 which also supports this analysis. Thus, the result of Table 4.10 is accepted.

Discussion: The result shows that distribution channel plays a vital role in the success of EMS. A narrow distribution channel of ECS will lead to a bad business, EMS service does not except. Furthermore, ‘Breadth of service offering’ is ranked in highest point (**0.869**), which concludes that the more ‘breadth of distribution channel’ is offered, the higher competitive advantage is received from CS. In conclusion, distribution channel affects strongly to CS of EMS in HCMC or in another word, **distribution channel is positively related to customer’s satisfaction.**

4.3.4 Factor analysis of Service Diversification

This factor analysis is satisfied the proposed standards at the first time. The outcome is presented as follows.

Variable	Dimension name	Factor loading
DDS	Door-to-door service	0.718
PPS	Airport/port to airport/port service	0.763
PDS	Airport/port to door service	0.586
SD	Service diversification	0.811

Table 4.11 - Component Matrix of factor analysis of Service Diversification

Table 4.11 indicates that all factor loadings of independent variables are greater than 0.50, including ‘DDS’, ‘PPS’, ‘PDS’, and ‘SD’. Besides the initial cumulative eigenvalue is 52.475% which is greater than 50%, and KMO is 0.602 with sig. = 0.00 < p value = 0.05 which is consistent with the proposed standards and supports to this test. Thus, this factor analysis is accepted.

Discussion: The service of ‘Airport/port to airport/port service’ is produced together with other services, and customers may receive their shipments within one or two hours after airport/port arrival, especially the shipments require fast transit time such as live animals, perishable and high value goods. However, the variable of ‘Service Diversification’ gain highest point, this may show that customers have really satisfied with the services provided by EMS. To clarify, it should be considered in multiple regression analysis.

In conclusion, after reliability test and factor analysis, the non-correlated and unsuitable variables have been gradually eliminated, and the important variables affecting on CS are occurred more clearly. The author summarizes the important remaining variables in Table 4.13 at next page.

Initially, 28 variables are used for analyzing, 11 non-correlated variables are eliminated, and the 17 remaining variables are used for multiple regression

analysis in next part. This may conclude that the remaining variables are the important elements which may influence strongly to CS of EMS in HCMC. This result is the basis of descriptive statistic becoming lean and understandable in next work.

	Dependent variable	Independent variable	Item	Factor loading
1	H1	OTD	On-time delivery	0.722
2		ROS	Reliability of service	0.887
3		SSS	Safety and security of shipment	0.856
4		CCI	Call center for handling of interrogation	0.555
5		SQ	Service quality	0.937
6	H2	PAQ	Pricing appropriating with quality	0.782
7		PBE	Pricing attaching to the brand and experience	0.859
8		PP	Price and payment	0.859
9	H3	IIA	Investment on assets and facilities	0.550
10		INC	International and national coverage	0.814
11		BSO	Breadth of service offering	0.869
12		IOS	Integration of service	0.641
13		DC	Distribution channel	0.753
14	H4	DDS	Door-to-door service	0.718
15		PPS	Airport/port to airport/port service	0.763
16		PDS	Airport/port to door service	0.586
17		SD	Service diversification	0.811
	Total	17		

Table 4.12 - Summary of factor analysis

4.4 RESULT OF STUDY

In this part, the researcher will use multiple-regression for statistic analyzing. Multiple-regression is a statistical technique which enables the statisticians to predict the score of independent impacting on dependent variable to consider the relationship between independent variables and dependent variable. A multiple regression equation can be expressed as follows (Berger, 2003).

$$\text{Equation 1: } Y = A + B_1X_1 + B_2X_2 + \dots + B_nX_n$$

With Y: dependent variable

X: predictor variable

B: Partial regression coefficient (or Beta)

All hypotheses are tested by multiple regression analysis with the default method which request the same time (Enter) to enter all variables and outliers outside is one standard deviation with confidence interval = 95% (or p-value = 5%).

On the other hand, to explain the contribution of independent variables on dependent variables, the researcher conducts multiple regression analysis for all hypotheses as a close correlation. For example, B is dependent variable of A, and simultaneously B is independent variable of C.

4.4.1 Relationship between Customers' Satisfaction and its antecedents

As mentioned theoretical model in Chapter 2, four hypotheses are proposed including H1: Service quality, H2: Price and payment, H3: Distribution channel, H4: Service diversification, and a concept of CS. Whereby; H1, H2, H3, H4 are independent variables which are considered as the factors influencing to CS of EMS, and CS is dependent variable. This regression analysis is used to determine the dependence of CS on independent variables of H1, H2, H3 and H4.

Model	R	R Square	Adjusted R Square	F	Sig.
1	.563(a)	.317	.299	16.851	.000(a)

Table 4.13 - Model Summary of Customers' Satisfaction

Model	Variables	Un-standardized Coefficients		Standardized Coefficients	t	Sig.	Null Hypothesis
		B	Std. Error	Beta			
1	(Constant)	.622	.354		1.757	.081	
H1	Service quality	.174	.061	.200	2.845	.005	Reject
H2	Price and Payment	.188	.077	.170	2.432	.016	Reject
H3	Distribution channel	.343	.061	.407	5.640	.000	Reject
H4	Service diversification	.109	.060	.133	1.829	.070	Accept

Table 4.14 - Coefficients of Customers' Satisfaction (CS)

Table 4.14 shows R square = 31.7% of variance explained by four variables of 'H1', 'H2', 'H3' and 'H4'. The rest of 68% depends on other variables or

factors which are not taken account into this study. The result also indicates that $F = 16.851$, and $\text{sig.} = 0.000$, **that explains that this test is accepted and significant.**

Besides, Table 4.15 shows that the $\text{sig. of } H1 = 0.005 < 0.05$ and $t = 2.845$, which support the hypothesis of $H1$. It asserts that:

- **H1 is accepted:** Service quality has a significant relationship with customers' satisfaction in Express Mail Service.

Similarly, the $\text{sig. of } H2 = 0.016 < 0.05$ with $t = 2.432$, this supports the hypothesis of $H2$. It explains that:

- **H2 is accepted:** Price and payment have a significant relationship with customers' satisfaction in Express Mail Service.

Next, the $\text{sig. of } H3 = 0.000 < 0.05$ with $t = 5.640$, they support the hypotheses of $H3$. Thus, it concludes that:

- **H3 is accepted:** Distribution channel has a significant relationship with customers' satisfaction in Express Mail Service.

In contrast, the $\text{sig. of 'Service diversification'}$ is 0.070 which is greater than 5% , **it does not support the hypothesis of $H4$.** Thus, the test demonstrates that:

- **H4 is rejected:** Service Diversification does not have a significant relationship with 'Customers' satisfaction' in Express Mail Service.

It is difficult to think that a service firm would be successful without service diversification. For many firms, service diversification enables them to create new customer value, and also reduce risks in recession (Deal, 2008). Indeed, with service diversification, ECS will offer convenient services to meet the expectation of customer such as door-to-door service, next day delivery service or logistic etc.

However, for objectively significant, the hypothesis of H4 should be also eliminated. The elimination of service diversification is consistent with literature review because the academic journals relating to this issue is very difficult to find out.

4.4.2 Strongest factor impacting on customers' satisfaction

To deeply understand customers' evaluation on the quality of EMS, the strongest factor impacting on CS is inadequately, the exploration about the strongest factors influencing on antecedents of CS is also crucially necessary. Thus, besides CS, the author will explore the strongest factors impacting on antecedents of CS tested by above multiple regression analysis.

The hypothesis of H4 is eliminated in this theoretical model. Based on the B unstandardized coefficients in Table 4.15, the author formulates the equation of 'Customers' satisfaction' with three components as follows.

$$\text{Equation 2: } Y_{CS} = 0.622 + 0.174(H1) + 0.188(H2) + 0.343(H3)$$

Discussion: Equation 2 indicates that the hypothesis of 'Distribution channel' with B coefficient = 0.343 is the largest coefficient. It means that, in three antecedents of customers' satisfaction, **'Distribution channel' is the most important factor affecting on CS of EMS.**

The hypothesis of 'Price and payment' (0.174) which gain low point is also understandable because the price offered by the rivals in this industry is not much differentiated due to fierce competition between them. In fact, national distribution channel is the strong point of EMS in Vietnam relying on the network system of Vietnam Post, which is a difficult thing for the rivals to establish such system because of expensive cost and ineffective.

Chapter summary

Chapter 4 presents the result of findings, analyses, and fulfill theoretical framework. Via tests, the author may determine the factors which may affect strongly to CS in using EMS service in HCMC. The research shows that the measurements have necessary reliability, and the proposed theoretical framework is tested by the method of multiple linear regression analysis. As a result, the hypotheses of H1, H2 and H3 are accepted, and have significant relationship with CS in EMS. In contrast, H4 does not satisfy the regression analysis, and is eliminated from the theoretical framework.

CHAPTER 5 – DISCUSSION AND RECOMMENDATIONS

5.1 DISCUSSION

The main aim of this research is to identify the factors impact on CS of EMS services in HCMC.

Besides research methodologies are used to build, measure and test theoretical framework through the delivery and collection questionnaire by hand with sampling size $n = 150$ respondents. Respondents are almost companies who are existing customers of the EMS in HCMC. Survey results are used for findings and analysis with its aim to determine the factors that impact on CS of EMS through the reliability test of Cronbach's alpha, factor analysis and multiple regression (as presented in Chapter 4).

First, the attributes of ECS are considered carefully in Chapter 2, whereby the predictor variables are selected to conduct this study, including 28 items close relevant to EMS service as well as correlating to the theory of CS to solve the **first objective**. It also shows that ECS plays a vital role in significantly contributing on the international and global economy in general and Vietnamese economy in particular.

Second, through findings, analyses, evaluations and testing, the results point that CS and its antecedents in EMS have a significant relationship as the result of the **second and third objective**. Specifically; service quality, price, and distribution channel are the main components influencing satisfaction, whereas distribution channel is the most powerful catalyst in contribution on CS. Moreover, the results also show that reliability of service is the most factor impacting on Service quality, brand and experience are very sensitive with price and payment of service, while integration of service is close relevant to distribution channel. In contrast, service diversification is eliminated from the theoretical framework

because it does not satisfy the regression analysis. It means that the independent variables of service diversification are also eliminated.

Third, the 13 remaining variables after tests are considered as the most factors which may affect strongly to CS in EMS, and these variables correlate closely each other in this study. Thereby, only typical variables are used for descriptive statistic i.e. Service quality, price and payment, distribution channel, and CS. The results of descriptive statistic, which solve the **fourth objective**, indicate that CS is in medium level as an alarm bell to recommend that the quality of EMS service is not good enough in current fierce competitive context.

Relating to four objectives, five hypotheses have been proposed and solved in chapter 4. In which the result of regression analysis has eliminated the dependent variable of service diversification which may be not absolutely correct. It notes that the factors mentioned in this study, which may affect on CS, are only the perception of customers rather than realistic capability of EMS service. The fact shows that different evaluations are for one product depending on situation, environment, geography etc. Thus, this study only has a relative value rather than a guide to apply rigidly and machinery in real business. However, a part of the study may be considered as the light of findings for managers and marketers of EMS to observe and control the service with its aim to enhance CS in future.

5.2 RECOMMENDATIONS

As mentioned, CS has been taken into account as a very vital factor for the success of any business. The outcome of this study is not only useful for EMS service but also may be used for other companies in express courier industry in HCMC.

Based on the result of Chapter 4, the 13 independent variables are found significantly and are good predictors of CS. This is really useful for business activities of express companies because via the result they can monitor, control

and adjust the factors that may impact on CS. At the same time, express companies can consider their performance, and compare with the rivals.

In addition, Chapter 4 has mentioned to the coefficients of Beta (or B) in multiple regression analysis as the coefficient to evaluate the contributing level of the factors on CS. Therefore, some recommendations are offered as follows:

Firstly, EMS' distribution channel only covers over 50 countries and territories while the coverage of the rivals such as UPS, DHL, and FedEx is over 200 countries and territories. This explains the reason why EMS's distribution channel is the most factor contributing on CS but in medium level. Thus, the managers of EMS continue to develop distribution channel by cooperate with the rivals in worldwide delivering, specifically in countries which have no represent of EMS.

In contrast, EMS will support the rivals in nationwide delivering in Vietnam. In fact, EMS has supported the partners effectively in distributing shipments in Vietnam. However, EMS has not utilized this strength to improve the quality of service. For example, EMS may cooperate with UPS in delivering in United State and Americas, with DHL in Asia Pacific, or with FedEx in Europe etc.

Secondly, brand and experience will support price in satisfying customers. In fact, brand and price of EMS are not competitive to the rivals. While price of the rivals is flexible, and the level of discount may fluctuate from 10% to 55% depending on the volume of using service, price of EMS is rigidly and depend on pricing policies of Vietnam Post which is state company. This leads that price of EMS is higher than price of the rivals in many cases. It would reduce the competitive competence of EMS as the result of medium level of satisfaction.

Thus, EMS' designers should think over the dimensions of price and make possible changes to meet customers' expectations and needs. It will help enhance quality of EMS' service and increase the level of CS in EMS. For example, EMS can use freight consolidation which provides a transportation option in an effort

to combine small shipments for a same geographical region into a single large shipment for the same geographical region to reduce shipping cost per unit for customers (Min, 1996). This will support EMS to improve service quality, enhance competitive competence, and satisfy customers' expectations.

Thirdly, service quality of EMS is questionable. Reliability of service is the most contribution on service quality, and relevant to human resources. Each courier staff should be seen as the face of service because they directly deal with, take care of and generate good relationship with customers everyday rather than sale man, therefore, they are worthy to be respected and paid higher wages. It is not surprise that a policy; which encourages courier staffs about the spirit, material and responsibility; will lead to CS, and gain more benefits in long-term.

Fourthly, although service diversification does not satisfy the standards of multiple regression analysis but not means that it is not important in business activities of the firm. In fact, the services of EMS are not really diversified, so service diversification eliminated from regression analysis is understandable. Therefore, in near future, the managers should design more value-added services, one side to reduce risks and another side to meet needs and expectations of customers, and simultaneously enhance CS which leads to retention of loyal customers.

In conclusion, the services of EMS just satisfy customers in medium level comparing to the rivals, the market share of EMS is declining over the time, and competitive capability of EMS is far inferior comparing to the rivals such as UPS, DHL and FedEx. Hence, managers of EMS need many efforts to change significantly the quality of service in the context of current economic integration. Cooperation or alliance with the rivals which are the necessary elements should be considered in terms of mutual benefits, and it is the trend in economic development in the current globalization, and EMS does not except.

5.3 LIMITATIONS OF STUDY AND FURTHER RESEARCH

As any research, because of the deadline and limited knowledge of the author, this research can't avoid its limitations that may be considered as antecedent for further research. So, some limitations can be recognized by the author as follows:

First, this study only focuses on narrow region in HCMC, specifically in some central districts which is not adequately represent for overall customers of EMS. Moreover, in allowing conditions, the sampling size is 150 respondents with non-probability technique which is not large and absolutely reliable enough for empirical study. In addition, delivery and collection questionnaire by hand leads to answer the questions carelessly. Therefore, for more overall view, the study should be conducted in a larger nationwide region, and it is also orientation for further research in future.

Second, the study is only established in the framework of some criteria i.e. service quality, price, distribution channel and service diversification. While other criteria, which may affect to the CS, are not taken into account in this study i.e. promotion, human resource, technology etc. Thus, the reflection of this study's result is absolutely inadequate and rather subjective. This is also issues which should be mentioned in further research.

Third, this study uses Cronbach's alpha coefficient to evaluate the measurements, factor analysis to explore, and multiple regression analysis to test hypotheses. Whereas, other modern tools which are mentioned in Chapter 2 such as GLOVAL scale, SITEQUAL, BANKZOT or PERCEIVED SQ are not considered by the author. Whether one of them would be more suitable, and it is a limitation of this study.

Fourth, the result of multiple-regression has eliminated the hypothesis of H4. This reflects that either the respondents are not enough knowledge about ECS industry or the questions proposed by the author are not clear and confusing. This is questionable, and need to overcome in further research.

Chapter summary

Some conclusions are mentioned relevant to four objective and five hypotheses to clarify the issues of current EMS. In addition, some recommendations are also offered with its aim to develop the strengths and overcome the weaknesses in business activities of EMS. Besides the author notes that the factors affecting to CS always change over the time depending on the expectations and needs of customers, especially in the current context of rapidly changing world. Therefore, a further research for the same issue of this study is truly necessary.

REFERENCES

1. Altinay, L. and Paraskevas, A. (2008). Planning research in hospitality and tourism. 1st ed. . Elsevier, Ltd.
2. Alwood, C. (2012). The distinction between qualitative and quantitative research methods is problematic. *Quality And Quantity* , 1-13.
3. Banyte, J., Rasa Gudonaviciene, and Darius Grubys. (2011). Changes in Marketing Channels Formation. *Inzinerine Ekonomika-Engineering Economics*, 22(3) , 319-329.
4. Berger, J., & Schwartz, E. (2011). What Drives Immediate and Ongoing Word of Mouth? *Journal Of Marketing Research (JMR)*, 48(5) , 869-880.
5. EMS VN (2015). Retrieved Jul 24, 2015, from <http://www.ems.com.vn/products/48-gii-thiu-chung.aspx>
6. Buttle, F. (2004). Customer Relationship Management: Concepts and Tools. Elsevier, Oxford.
7. D&T Express. (2015). *Acceleration of Courier service*. Retrieved April 03, 2015, from <http://dtexpress.com.vn/tin-tuc/137-chuyen-phat-nhanh-quoc-tedhlfedextnt.html>.
8. Dani-Elkebir, M. M. (2011). . Situational Factors Influencing Impulse Buying Behavior of Algerian Consumer. *Romanian Journal Of Marketing*, 6(2) , 52-59.
9. DHL profile. (2015). *About Us*. Retrieved May 14, 2012, from http://www.dhl.com.vn/en/about_us.html.
10. FedEx profile. (2015). *FedEx History in APAC*. Retrieved May 14, 2012, from <http://www.fedex.com/vn/about/history.html>.
11. Galetzka, M., Joost W.M. Verhoeven, Ad Th.H. Pruyn. (2006). Service validity and service reliability of search, experience and credence services: A scenario study. *International Journal of Service Industry Management*, Vol. 17 Iss: 3 , 271-283.
12. Geon Lee, Jennifer Benoit-Bryan, and Timothy P. Johnson. (2012). Survey Research in Public Administration: Assessing Mainstream Journals with a Total Survey Error Framework. *Public Administration Review* , 87.
13. Ha, H., and Janda, S. (2008). An empirical test of a proposed customer satisfaction model in e-services. *Journal of Services Marketing*, 22/5 , 399-408.

14. Hanif M., Sehrish Hafeez, and Adnan Riaz. (2010). Factors Affecting Customer Satisfaction. *International Research Journal of Finance and Economics*. (60), 44-52.
15. He, H., & Li, Y. (2011). Key service drivers for high-tech service brand equity: The mediating role of overall service quality and perceived value. *Journal Of*
16. Journeys in Survey Research. (2011, Nov 4). *What is SPSS?* Retrieved May 31, 2012, from <http://surveyresearch.weebly.com/what-is-spss.html>.
17. Kathleen, K. (2005). Customer Loyalty in Retail banks: time to move beyond simple programs or a product orientation. *View point Issue 127.Tower Group*.
18. Khraim, H. (2011). The Willingness to Generate Positive Word of Mouth Marketing: The Case of Students in Private Universities in Jordan. *Pertanika Journal Of Social Sciences & Humanities*, 19(2) , 273-289.
19. Kotler, P. & Armstrong, G. . (2010). Principles of Marketing, 13th ed. *New Jersey: Prentice .*
20. Kumbhar V. M. (2011). Factors Affecting The Customer Satisfaction In E-Banking: Some Evidences Form Indian Banks. *Management Research And Practice Vol. 3 Issue 4 , 1-14*.
21. Lam, R., and Burton, S. (2006). SME banking loyalty (and disloyalty): a qualitative study in Hong Kong. *International Journal of Bank Marketing*, 24 (1) , 37-52.
22. Leverin, A. and Liljander, V. (2006). Does relationship marketing improve customer relationship satisfaction and loyalty? . *International Journal of Bank Marketing*, Vol. 24 No. 4 , 232-51.
23. Mack, N., Woodsong, C., Macqueen, K., Guest, G. & Namey, E. . (2005). Qualitative research methods: a data collector's field guide. *Family Health International .*
24. Martin-Consuegra, D., Molina, A. and Esteban, A. (2007). An Integrated Model of Price, Satisfaction and Loyalty: an Empirical Analysis in the Service Sector. *Journal of Product & Brand Management*, Volume. 16, Issue.7 , 459–468.
25. Nelson Oly Ndubisi, Naresh K. Malhotra, and Chan Kok Wah. (2009). Relationship Marketing, Customer Satisfaction and Loyalty: A Theoretical and Empirical Analysis From an Asian Perspective. *Journal of International Consumer Marketing*, 21 , 5-16.

26. Oxford Economic Forecasting. (2009, September). *The impact of the express delivery industry on the global economy*. Retrieved April 01, 2012, from <http://www.oef.com/search.asp>.
27. Parcel Landscape an "Orderly Oligopoly". (2008). *Logistics Today*, 49(4) , 4.
28. Pranulis, V., Pajuodis, A., Urbonavicius, S., Virvilaite, R. (2008). Marketingas, Vadovelis, Vilnius,. *The Baltic Press*, 469 .
29. Reilly, T. (2012). Help Buyers Make Better Decisions. *Official Board Markets*, 88(5) , 18.
30. Sanchez, Javier, Callarisa, Luis, J., Rodriguez, Rosa, M. and Moliner, Miguel, A. (2006). Perceived Value of the Purchase of a Tourism Product. *Tourism Management, Volume 27, Number 4* , 394-409.
31. Saunders M., Phillip Lewis, and Adrian Thornhill. (2009). *Research Methods for Business Students* (fifth ed.). Pearson Education Limited.
32. Saunders M., Phillip Lewis, and Adrian Thornhill. (2009). *Research Methods for Business Students* (fifth ed.). Essex: Pearson Education Limited.
33. Slattery, E., Voelker, C., Nussenbaum, B., Rich, J., Paniello, R., & Neely, J. J. (2011). A Practical Guide to Surveys and Questionnaires. *Otolaryngology - Head And Neck Surgery*, 144 , 831-837.
34. Subrata Mitra, Parthapratim Pal, Arpita Mukherjee, and Souvik Dutta. (2010). Exploring Relationships between Key Success Factors and Performance Metrics for Indian Express Delivery Service Providers. *Supply Chain Forum: An international Journal*, 11 (2).
35. TNT profile. (2012). *Giới thiệu về TNT Express*. Retrieved May 14, 2012, from http://www.tnt.com/express/vi_vn/site/home/about_us/about_tnt_express.html.
36. UKdissertation. (2012). *What is a methodology?* Retrieved March 16, 2012, from <http://www.ukdissertations.com/study-aids/dissertation-help/dissertation-methodology.php>.
37. UPS history. (2011). *Company history*. Retrieved 12 19, 2011, from <http://www.ups.com/content/us/en/about/history/index.html>.
38. UPU. (2012). *Member Countries*. Retrieved May 30, 2012, from <http://www.upu.int/en/the-upu/member-countries.html>.

39. Vogel S., Carol Herron, Steven P. Cole, and Holly York. (2011). Effectiveness of a Guided Inductive Versus a Deductive Approach on the Learning of Grammar in the Intermediate-Level College French Classroom. *Foreign Language Annals* vol. 44, No. 2 , 353-79.
40. wiseGeek. (2012). *What is Customer Loyalty?* Retrieved April 7, 2012, from <http://www.wisegeek.com/what-is-customer-loyalty.htm>.
41. Yin, R.K. (2003). *Case Study Research: Design and Methods* (3rd). London: Sage.
42. Yoo, B. and Donthu, N. (2001). Developing a Scale to Measure the Perceived Quality of an Internet Shopping Site (Sitequal). *Quarterly Journal of Electronic Commerce*, 2 (1) , 31-46.
43. Zeithaml, V. A., & Bitner, M. J. (2003). *Services Marketing: Integrating Customer Focus Across the Firm*. New York: McGraw-Hill .

APPENDIX 1: QUESTIONNAIRE

Dear Sir/Madam,

As part of the requirement for the award of Master of Business Administration Degree at Open University Malaysia and Hutech University, the purpose of this research is “to determine the factors impacting on the customer satisfaction and loyalty in Vietnamese express courier industry” with expectations to serve customers increasingly better. Please help me complete this study.

Any information you provided will be treated in STRICT CONFIDENCE. I truly appreciate your time and effort.

Best regards,

Saw Than Htay Aung
Mobilephone: 0906607006
E-mail: mynameisvietnam@yahoo.com

Section A: Company information

1 – What is the type of your company? (Only one stick (✓) on the available boxes)

1	Vietnamese company	
2	Foreign company	
3	Bank	
4	Representative office	
5	Law office	
6	Shipping agency	
7	Consulate	
8	Others	

2- What is the size of your company? (Only one stick (✓) on the available boxes)

1	From 1 to 10 staffs	
2	From 11 to 30 staffs	
3	From 31 to 100 staffs	
4	Over 100 staffs	

Section B: The factors impacting on satisfaction and loyalty

Do you agree with below statements impacting on customer satisfaction and loyalty in Express courier service?

Please stick (✓) on the available boxes in each question with the meaning as follows:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree

No.	Encode	Content	1	2	3	4	5
		Service quality					
4	OTP	On-time pick up	1	2	3	4	5
5	OTD	On-time delivery	1	2	3	4	5
6	ROS	Reliability of service	1	2	3	4	5
7	SSS	Safety and security of shipment	1	2	3	4	5
8	CCI	Call center for handling of interrogation and proof of delivery	1	2	3	4	5
9	WNS	Willingness to serve	1	2	3	4	5
10	REC	Reliable courier	1	2	3	4	5
11	FRC	Friendly courier	1	2	3	4	5
12	SQ	Service quality	1	2	3	4	5
		Price and payment					
13	FPS	Flexible pricing by volume of using service	1	2	3	4	5
14	PAQ	Pricing appropriating with quality	1	2	3	4	5
15	PBE	Pricing attaching to the brand and experience of service providers	1	2	3	4	5
16	TPP	Third-party payment	1	2	3	4	5
17	TLP	Term of late payment	1	2	3	4	5
18	OLP	Online payment	1	2	3	4	5
19	PP	Price and payment	1	2	3	4	5

		Distribution channels					
20	IIA	Investment in asset	1	2	3	4	5
21	IIS	Investment in information system	1	2	3	4	5
22	INC	International and national coverage	1	2	3	4	5
23	BSO	Breadth of service offering	1	2	3	4	5
24	ESF	Extension of service facilities	1	2	3	4	5
25	IOS	Integration of service	1	2	3	4	5
26	DC	Distribution channel	1	2	3	4	5
		Service diversification					
27	DDS	Door-to-door service	1	2	3	4	5
28	DPS	Door to airport/port service	1	2	3	4	5
29	PPS	Airport/port to airport/port service	1	2	3	4	5
30	PDS	Airport/port to door service	1	2	3	4	5
31	SD	Service diversification	1	2	3	4	5
32	CS	Customers' satisfaction	1	2	3	4	5

APPENDIX 2: PRESENTATION OF BUSINESS RESEARCH

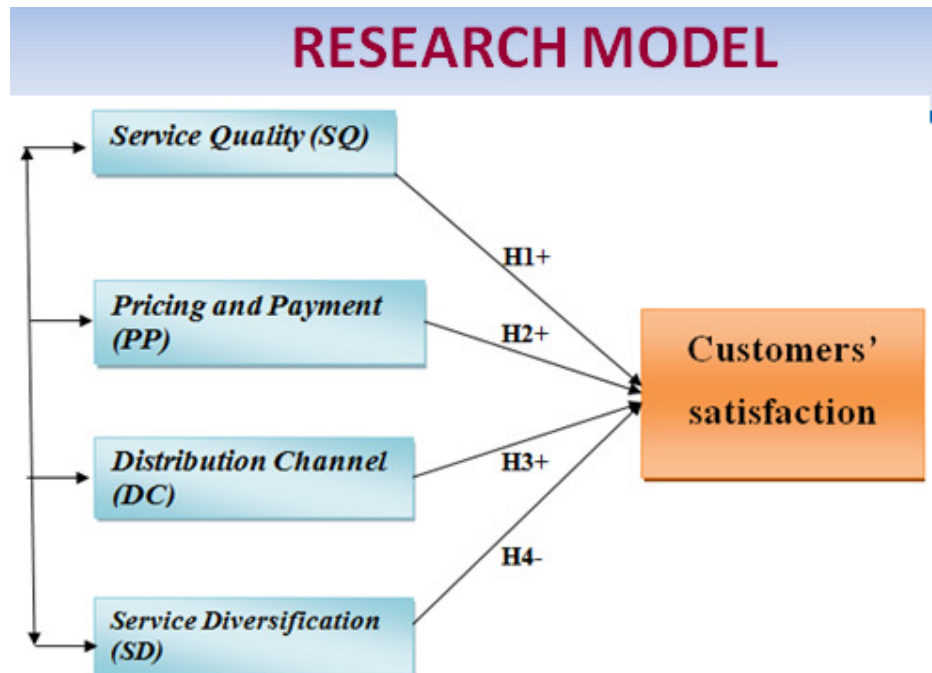
FACTORS IMPACTING ON CUSTOMERS' SATISFACTION IN EXPRESS COURIER SERVICE A CASE STUDY OF EMS SERVICE IN HCMC



Present by: SAW THAN HTAY AUNG
Course: Research Project (BMBR5103)
Student ID: CGS00018243

COMPANY OVERVIEW

- EMS is an international express postal service offered by Universal Postal Union (UPU)
- In Vietnam, EMS officially launched in 1992 by VNPT
- In Jan 2005, VN Post Express JSC was established under VNPT to provide EMS. Head office: 01 Tan Xuan, Xuan Dinh, Tu Liem, Ha Noi
- Today EMS available in 63 provinces and cities in Vietnam through 4 hubs in Hanoi, HCMC, Da Nang and Binh Dinh



Research of Cronbach's Alpha

Reliability Statistics

Construct / Variable	Number of Questions	Cronbach's Alpha	Result (Reliability level)
CS	5	0.8100	High
SQ	9	0.7714	High
PP	7	0.6412	High
DC	7	0.7356	High
SD	5	0.6428	High

HYPOTHESIS TESTING RESULTS

Construct / Variable	R2	Beta	Sig	Hypothesis
SQ - CS (H1)	0.174 (>0)	0.200 (+)	0.005 (<0.05)	H1 is accepted
PP - CS (H1)	0.188 (>0)	0.170 (+)	0.016 (<0.05)	H2 is accepted
DC - CS (H3)	0.343 (>0)	0.407 (+)	0.000 (<0.05)	H3 is accepted
SD - CS (H4)	0.0049 (>0)	0.033 (-)	0.070 (>0.05)	H4 is rejected

Note: Dependent variable is CS

Independent variables are SQ, PP, DC, SD (H1, H2, H3, H4)

Discussion

- ECS significantly contribute to the international economy in general and Vietnam economy in particular.
- CS and its antecedents in EMS have a significant relationship
- Specifically; service quality, price & payment, and distribution channel are the main components influencing CS in which distribution channel is the most powerful catalyst in contribution on CS
- CS is in medium level as an alarm bell to recommend that the quality of EMS service is not good enough in current fierce competitive context

