

**FACTORS AFFECTING THE QUALITY OF E-LOGISTICS SERVICES IN DANANG CITY****Trinh Le Tan<sup>1\*</sup>, Le Tuan My<sup>2</sup>, Le Thi Bich Phuong<sup>3</sup>, Nguyen Thi Due<sup>4</sup>, Le Man Chau<sup>5</sup>, Pham Hanh<sup>6</sup>**<sup>1</sup>Phd Scholar, Business Department, FPT University, Danang city, Vietnam<sup>2,3,4,5,6</sup>Student, Business Department, FPT University, Danang city, Vietnam<sup>1</sup><https://orcid.org/0000-0001-7729-3241>**ABSTRACT**

*Logistics plays an important role in developing and enhancing the competitiveness of the economy. According to experts, Da Nang Port is a key general, container, and international tourism port in the central region, and at the same time transfers transit goods of some regions of Laos, Thailand or Myanmar along the corridor. East-West Economic (EWEC). Analyzing factors affecting electronic logistics services (E-logistics) in order to propose strategic solutions for E-logistics development in Da Nang city is urgent according to the project on developing the logistics industry in the area of Da Nang city.*

**Keywords:** Da Nang, E-logistics, Services quality, E-commerce.**1. Introduction**

E-commerce is changing the logistics game. E-commerce has introduced a slew of new hazards and issues which logistics service professionals have never seen before.. This shift is critical for competitiveness in the logistics market (Gea Miscevic, 2018). Vietnam's burgeoning e-commerce industry is paving the way for e-logistics to flourish. Electronic logistics is expanding in Vietnam, proving to be a potential industry to invest in, as long as investors can withstand the heat of cost requirements. E-commerce is rapidly expanding in Vietnam, with an annual growth rate of around 25%, providing a great potential for corporate logistics services to secure more orders. The Vietnamese logistics market is likewise modest, although it is growing quickly (20% to 25% each year). Due to the expansion of e-retail in Vietnam and the global trend of e-logistics, this industry is likely to experience rapid changes and growth in the near future.[3]. In 2017 alone, more than 50 domestic and foreign electronic logistics service providers entered the market... Therefore, the Government also issued Decree No. 163/2017/ND-CP with regulations Regulations on logistics service business, effective from February 20, 2017. This decree is expected to open the logistics service market in Vietnam to foreign investors (Giang, 2018). Experts say that Da Nang has many potentials and advantages to develop the logistics industry, in which it aims to become the logistics center of the central region (Hoa, 2019). Da Nang is currently developing and implementing

a Smart City Project, so the support solutions and goals of policies to develop logistics services must be associated with the implementation of the project. This and logistics are the top areas of concern for city leaders to develop. Therefore, Da Nang has been focusing on solving problems and developing the E-logistics industry (Trang).

Nowadays, most domestic and international logistics groups are gradually applying E-Logistic to reduce costs and improve customer service (Liu Yu, 2019). At the beginning of October 2017, UPS Vietnam announced to increase service in 10 provinces in the Central and Southern regions and at the same time improve the transit time of import and export goods in Asia (Advantage logistics). In addition, a number of other logistics companies such as VNPost, Viettel Post, AhaMove, Grap in Vietnam have applied Big Data, AI and Crowdsourcing to the digital transformation process of developing E-logistics. Therefore, Vietnam's e-logistics market is considered to be increasingly vibrant and highly competitive. However, according to a survey conducted in July and just published on September 17, 2020, by IDG, more than 50% of respondents said that they feel the software of logistics units is not really innovative. Along with that, 37% reflected that service providers lacked listening and interaction through social media channels (VnExpress, 2020). In addition to the functions set out to develop the industry, receiving customer reviews through e-commerce channels is also very important, making a significant contribution to the improvement and enhancement of service quality shipping service.

During this time, however, Vietnam's e-logistics service businesses continue to encounter numerous challenges. The reason for this is that most small and medium-sized enterprises rely solely on computerized customs clearance software and basic positioning technology. In the fields of information technology and finance, resources are still scarce.

By 2025, the e-commerce market in Vietnam is anticipated to be worth \$15 billions USD. According to a Google and Temasek economic analysis, Vietnam is the second-fastest-growing e-commerce industry after Indonesia. As a result of this rapid expansion, there is a great need for grasping and understanding e-logistics through scientific research and analysis. However, most of the analytical articles and scientific researches are still limited and only focus on building and improving the general process for the e-logistics system at enterprises. In fact, there are rarely any articles or studies that go into the analysis and explanation of factors affecting the quality of e-logistics services. As a result, the goal of this article is to investigate the elements that influence e-logistics services in Da Nang. Learn about the evolution of e-logistics services in Vietnam, and specifically in Da Nang. Learn how Da Nang businesses have used and benefited from the e-logistics service.

## 2. Theoretical Foundations

### 2.1 E-logistic

E-logistics is an internet-enabled logistics value chain that aims to provide consumers with a one-stop shop for value-added activities, encompassing public warehouses, agreement warehousing, transportation, distribution management, and freight consolidation.

### 2.2 Service quality

Service quality is the result of company performance. Customer expectations of service and perceptions of how services are performed Imran et al. conducted a study on the logistics service network of shopping malls to examine customer satisfaction. The study found that different logistics service attitudes are secondary indicators of e-logistics customer satisfaction. Therefore, the quality of employee service is an important factor in promoting logistics automation. Improve your company's e-logistics performance. Therefore, employee service quality plays a crucial role in e-logistics practice (Gang Wang, 2016). It directly

affects customer satisfaction, which automatically affects performance of various e-logistics companies. Therefore, in order to retain customers, businesses must make their services well appreciated. Only then businesses can survive and develop sustainably.

### 2.3 Customer perception

According to Naomi client perception influences the decision to buy a product and use a service. To produce meaning, perception is a process that chooses, organizes, and evaluates input from the senses, touch, sound, smell, and touch. Perception is influenced by a variety of inputs, including those connected to the surroundings and the subject's health. The stimuli and the individual have a significant impact on how something is perceived. Personal factors are involved not only in passing through the five senses, but also in experiencing the future. Triggers are physical features including such length, mass, color, or form, and as such personal factors are involved not only in passing through the five senses, but also in experiencing the future. Primary objectives and expectations for oneself and one's personal life. Customers' opinions of online buying are influenced by elements such as usability, convenience of use, ego, security, trust, and perceived utility (Tobias Brosch, 2019). Therefore, customer perception is one of the very important things affecting the service quality of E-logistics. Thus, the first hypothesis is the follow:

*H1: Customers' Perception affects the quality of E-logistics in Da Nang city.*

### 2.4 Technology and Security

Technology and security are considered important factors in influencing logistics services (Muhammad Imrana, 2019). According to the article on the development of the logistics system, technology factors facilitate information sharing between partners in the supply chain. Besides, it helps to manage the transportation and warehousing process with the goal of providing the required goods at the right time (A. Gunasekaran, 2014). Research by J. Glob.Bus shows that the information system integrates many different areas of activity, accurate information flow, quick ordering, and many problems (Erendira Yareth Vargas Lopez, 2018). Investing in technology, securely connecting e-logistics and e-commerce to improve operational efficiency, optimize processes, and develop industry analytics and prediction. That is the

opinion given in the research paper on Factors affecting logistics services in Ho Chi Minh City (Dinh Tuan Hai, 2021).

*H2: Technology and Security affects the quality of E-logistics in Da Nang city*

### 2.5 Legal Infrastructure

In e-logistics, legal infrastructure is defined as the totality of physical and technological conditions that exist in society and the environment and are legally used to support all production activities. Infrastructure includes both physical and immaterial elements, and is the result of an investment process that underlies the general development of society. We can see the business and trade situation of a country by examining the logistics infrastructure of that country. Therefore, it is considered as the economic backbone and plays an important role in many other aspects of life (Anh, 2021). Vietnam is currently focusing on developing legal infrastructure in the field of e-logistics.

According to some estimates, there are already almost 1000 businesses in the country that provide logistical services. It is clear that the number of businesses involved in logistics development is growing every day. However, the majority of these logistics firms are small-scale. Many businesses serve as agents for international logistics companies. The stated statistic, when compared to the extent of our country's land, is still insufficient to meet demand. One aspect about the logistics business in Vietnam is that foreign logistics companies have established themselves in the country and have a significant market share. When it comes to operating in the market, Vietnamese logistics companies will undoubtedly confront significant hurdles (Logistics va Quan ly chuoicung ung).

*H3: Legal Infrastructure affects the quality of E-logistics in Da Nang city*

### 2.6 Intellectual Property and Consumer Protection

Along with the rapid development of e-commerce, consumers' habits have been changing, and the buying and selling transaction method has changed from traditional buying to buying online (Thuong, 2021).

From the point of view of protecting the legitimate rights and interests of consumers, it can be seen that in cross-border e-commerce transactions, in case

the transaction gives rise to a dispute or complaint of consumers, the rights and interests of consumers will face major challenges, fundamentally different from the case arising with entities present in Vietnam. With large e-commerce floors allowing foreign individuals and traders to open sales accounts and support logistics, foreign sellers can easily sell goods directly to Vietnamese consumers. South, and goods circulated through this channel are not subject to quality control and are difficult to manage in terms of tax. In the context of e-commerce activities developing on a global scale, these are not small challenges for management agencies, not only in Vietnam (vien, 2021).

Intellectual property and consumer protection through the safety and security of information in this field have received more attention, but still have not met the requirements, it is necessary to supplement the legal system management related to e-commerce and E-logistics (Quyét, 2020).

*H4: Intellectual Property and Consumer Protection affects the quality of E-logistics in Da Nang city*

### 2.7 Electronic payment system

In order to provide the best service quality in the e-logistics industry, businesses must also focus on their payment services. In fact, all payment activities of e-logistics depend on digital technology. Specifically, e-logistics will develop on an e-commerce platform with electronic payments playing a central role (S. Nadeem, 2018).

Therefore, building a complete electronic payment system with preminent features will greatly support and improve service quality and customer satisfaction. Specifically, businesses can save time, optimize procedures and limit the risks of money theft, counterfeit money, confusion, etc. Thereby, it can help businesses operate payments easily and their customers will also feel more secure (Phong, 2010).

However, at present, there is no specific report on the situation of Vietnamese and Da Nang enterprises in the effective application and use of the electronic payment system. But with the trend of modern technology, e-payment will become developed and greatly affect the quality of e-logistics supply activities of each business (Minh, 2021).

*H5: Electronic payment system affects the quality of E-logistics in Da Nang city.*

### 2.8 Human Resources

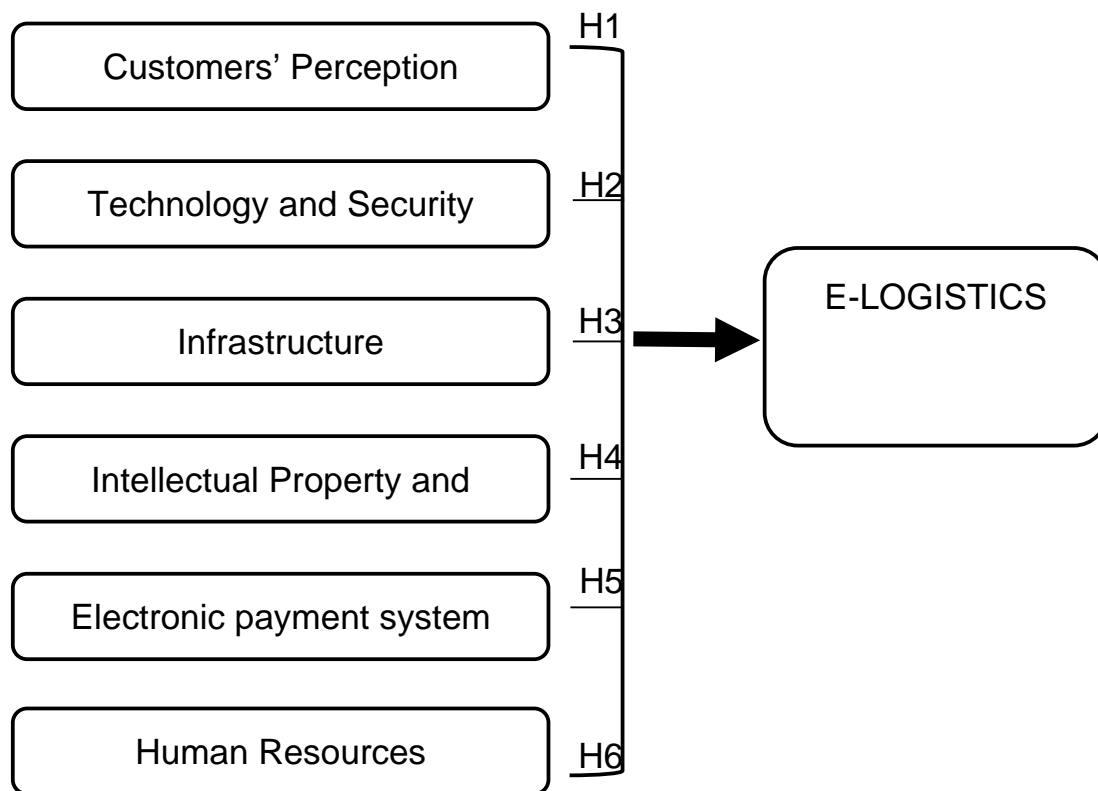
As mentioned, e-logistics is a service industry that evolved from traditional logistics based on information technology and electronics. It is expected that by 2030, the human resource demand of logistics will increase, about 200,000 people (Quynh, 2021). Therefore, it is certain that the demand for E-logistics personnel will also be important, especially as Vietnam is in the process of digital transformation (N.K, 2021). However, if the above needs are not met, it will greatly affect the cost, competitiveness, supply chain and circulation of customers. From there, it will generally affect the quality and satisfaction of business customers (Vien, 2021). Therefore, the issue of personnel becomes urgent and extremely important in e-logistics activities in Da Nang, Vietnam.

However, in Vietnam, logistics has not really developed. The proof is that according to a recent

research paper in 2019, it has been shown that more than 50% of logistics enterprises are short of personnel (Diu). That shows us that human resources for e-logistics are completely unanswerable. Meanwhile, e-logistics is much more demanding on the quality of human resources, especially when there is the integration of high technology in the working process. Therefore, meeting the demand for human resources in e-logistics will be very difficult when the current human resource base in logistics is still limited. This greatly affects the provision of service quality in the e-logistics industry in Da Nang. In the future, it is necessary to have solutions to develop logistics personnel along with additional knowledge of information technology and electronics.

*H6: Human Resources affects the quality of E-logistics in Da Nang city*

**2.1.1 Degradation of land**



*Fig. 1: Proposed research model*

**3. Research Method**

Research methods consist of: Research process, Research method (Qualitative, Quantitative method,

Sampling (Method, Population, Sample Frame, Sample Size).

**3.1. General Research Process**

With any research paper, the research process is very important. It includes many scientific steps to proceed. The steps are interconnected and

sequential. And in this study, we proceed based on 07 steps as follows:

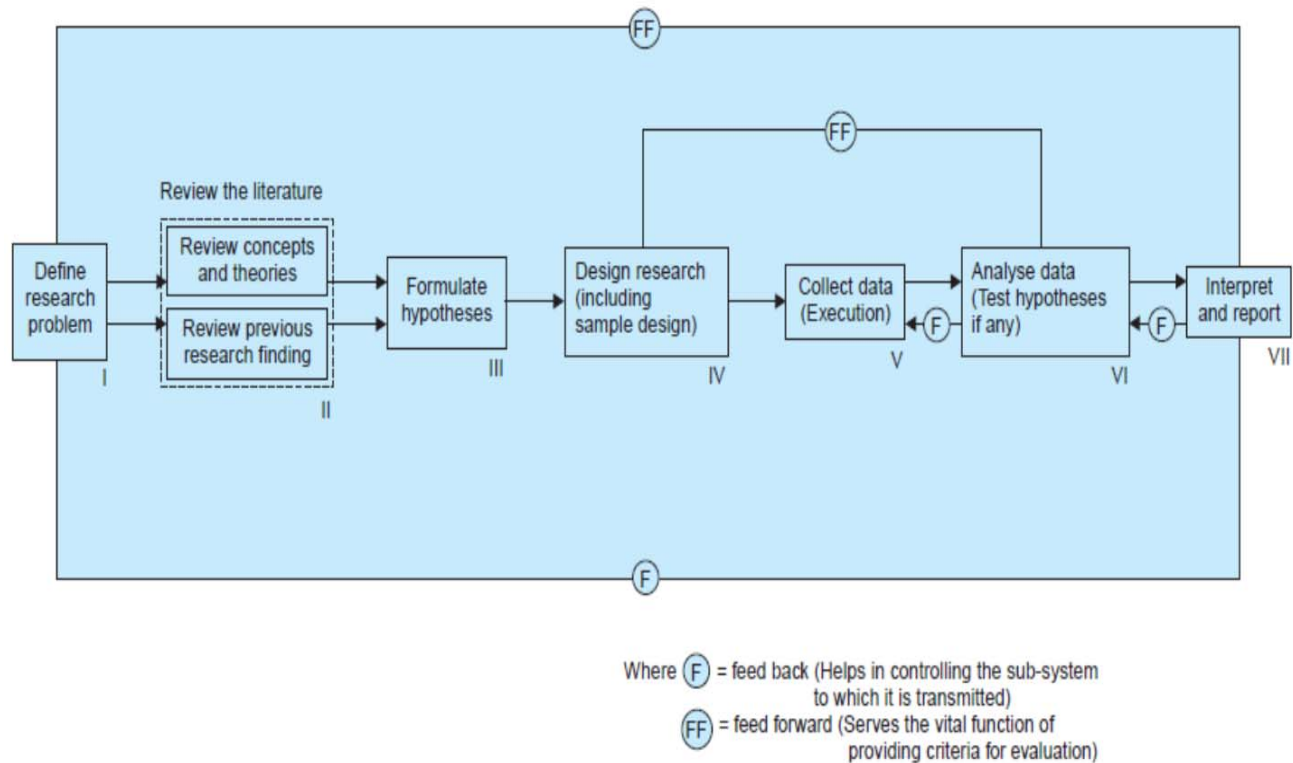


Fig: a research process

Fig 2: Research process

- Step 1: Identify and defining the Research Problem
- Step 2: Review the Literature
- Step 3: Formulating a Hypothesis
- Step 4: Create a research plan
- Step 5: Carry out the Research Process
- Step 6: Preparing Research Results
- Step 7: Reporting Research Findings

### 3.2 Research Objective

Research Objectives As stated in the preface, the main idea of this exploration is to identify the factors that affect the quality-of-logistics services in Da Nang City. The specific purpose of this study is to give companies a better understanding of the factors that impact-logistics services in order to give applicable strategies, support and client service.

The data analysis styles used in this study were Cronbach and EFA styles, correlation and retrogression. The results show that there are 6 factors that affect the quality-of-logistics services in Da Nang.

### 3.3 Qualitative Research

Qualitative research is a holistic approach that involves discovery. Qualitative research has also been described as an evolving model that takes place in a natural environment that allows researchers to develop a level of detail through extensive participation in real-world experience. Develop preliminary questionnaires and interview managers of agencies, departments and companies involved in logistics services, e-commerce, etc. in Da Nang urban area to learn, discover and add observation variables. Qualitative research results are the basis for constructing a formal interview questionnaire to test a scale containing 06 independent variables, ensuring objectivity and justifying the research results.

### 3.4 Quantitative Research

A study based on quantitative data was prepared and a questionnaire was used as a data collection tool. The study used a 5-point Likert scale to assess respondents' level of agreement. According to the survey results, using SPSS data analysis software,

the influence of factors affecting the quality of e- logistics services in Da Nang was evaluated.

**Table 1. Official Scale**

No.	Factor	Core	Item	Source
1.	Customers' Perception	C1	The financial utility derived from e-logistics usage	(Sweeney & Soutar,2001)
		C2	This e-logistics service is convenient to use	Chang et al., 2012 ; Mosavi & Ghaedi, 2012)
		C3	Comfortable to use e-logistics system	Tan, 1999; Sweeney & Soutar, 2001)
2.	Technology and Security	T1	The security system of information technology in E-logistics is important	Muhammad Imran (2019)
		T2	It is necessary to apply AI technology to E-logistics	A. Gunasekaran (2014)
		T3	Applying information technology to E-logistics makes shipping orders faster and more convenient	Muhammad Imran (2019)
3.	Infrastructure	L1	Infrastructure in E-logistics plays an important role	Pham Hong Anh (2021)
		L2	Our country's infrastructure in E-logistics is still underdeveloped	Huỳnh Thị Bảo Yến (2020)
		L3	E-logistics infrastructure will be heavily invested in the future	Trần Trung (2021)
4.	Intellectual Property and Consumer Protection	I1	The level of safety and security of customer information is important	Nguyễn Xuân Quyết (2019)
		I2	Supplier's trademarks and trademarks are required	Nguyễn Xuân Quyết (2019)
		I3	Procedures for dealing with piracy and correct disclosure of information are required	Nguyễn Xuân Quyết (2019)
5.	Electronic payment system	E1	Electronic payment E-logistics in e-commerce is very important for businesses	Waseem Ul Hameed, S. Nadeem, Jawad Iqbal, Abdul Khaliq (2018)
		E2	Electronic payment E-logistics brings many practical and outstanding benefits to businesses	Tien Phong (2010)
		E3	The development potential of E-logistics electronic payment in the future is extremely large	Duc Minh (2021)
6.	Human Resources	H1	Labor demand in the E-logistics industry needs to be ensured and promptly responded to the general development of the business	Nguyen Quynh (2021)
		H2	The shortage of E-logistics labor brings many consequences, slowing down the development of enterprises	GOV news (2021)
		H3	The quality and qualification requirements of E-logistics workers are always high and need assurance	Huong Dieu (2016)
7.	E-logistics service quality	Y1	Satisfied with the quality of E-logistics service	Lassar and partner (2000)
		Y2	Will continue to use E-logistics service	Lassar and partner (2000)
		Y3	Will gladly recommend this quality E-logistics to others	Lassar and partner (2000)

### 3.5 Sample Size

Our target response will be companies in Da Nang that use e-logistics services. Questionnaires were emailed directly to the participants. Data was collected using non-probability sampling methods. A sample calculation method can be used to estimate the minimum sample size in this

investigation. Using the formula proposed by Cochran (1977),(Israel). Results based on a sample of n=196 respondents - the smallest sample size for this study, with a tolerance of  $\pm 7\%$ . There are 196 samples in the results. For most research, Roscoe (1975) recommended a sample size of larger than 30 but less than 500 (Mumtaz Ali Memon, 2020).

**4. Research Method**

**4.1 Assessing the trustability of the Scale (Cronbach’s Alpha )**

After testing the reliability of Cronbach's alpha, the results show that the variables with the new

Cronbach's measure are less than 0.7 and the correlation measure of the total matched variables is less than 0.3. Therefore, the scale is satisfactory and meets the reliability.

**Table 2. Summary table of Cronbach’s Alpha coefficients of the scales**

No.	Items	N of Items	Cronbach’s Alpha
1.	Customers’ Perception	3	0.832
2.	Technology and Security	3	0.844
3.	Infrastructure	3	0.845
4.	Intellectual Property and Consumer Protection	3	0.842
5.	Electronic payment system	3	0.834
6.	Human Resources	3	0.857

**4.2 Exploratory factor analysis EFA**

Results of the first EFA: KMO=0.961>0.5, sig Bartlett’s Test = 0.000 < 0.05, so the EFA exploratory factor analysis is appropriate but after using the one-time elimination method, the variables do not meet the requirements in EFA analysis times. from 18 observed variables, then

remove T2,H2,I2,E1,C1 and put the remaining 12 observed variables into the 2nd EFA analysis After running EFA analysis for the second time, we get KMO = 0.945>0.5, sig Bartlett’s Test = 0.000 < 0.05 So factor analysis is appropriate

**Table 3. Rotation Matrix**

Item	Factor					
H1	0.771					
E3	0.769					
L1		0.768				
T3		0.741				
C3			0.808			
T1			0.718			
I1				0.784		
L3				0.643		
I3					0.751	
L2					0.585	
E2						0.709
H3						0.541
The coefficient satisfy the conditions						
Eigenvalue	8.161	0.651	0.545	0.506	0.395	0.365
Cumulative %	88.5%					
KMO	0.945					
Barlett’s Test	Sig = 0.000					

The results of the gyration matrix show that 12 observed variables are classified into 6 factors X1 (H1, E3); X2 (L1, T3); X3 (C3, T1); X4 (I1, L3);

X5 (I3, L2); X6 (E2, H3), all observed variables have Factor Lading portions lesser than 0.5 and there are no bad variables.

So, exploratory factor analysis EFA for the independent variables was performed twice. The first time, 18 observed variables were included in the analysis, 6 variables were removed because the conditions were not met. The second time, there are

12 observed variables and differentiated into 6 factors

After analysis, the EFA extracted a single factor from the observed variables

**Table 4. Rotation Matrix For dependent variable**

	Factor loading
Y1	0.903
Y2	0.895
Y3	0.894
The coefficients satisfy the conditions	
Eigenvalue	2.415
Cronbach's Alpha	0.878
Cumulative %	80.484
KMO	0.744
Sig	0.000

### 4.3 Correlation Matrix

**Table 5. Correlation between variables**

		Y	X1	X2	X3	X4	X5	X6
Y	Pearson Correlation	1	0.788**	0.763**	0.705**	0.724**	0.793**	0.861**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000
	N	196	196	196	196	196	196	196
X1	Pearson Correlation	0.788**	1	0.712**	0.662**	0.743**	0.744**	0.753**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.000
	N	196	196	196	196	196	196	196
X2	Pearson Correlation	0.763**	0.712**	1	0.692**	0.732**	0.753**	0.744**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000
	N	196	196	196	196	196	196	196
X3	Pearson Correlation	0.705**	0.662**	0.692**	1	0.748**	0.716**	0.720**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000
	N	196	196	196	196	196	196	196

X4	Pearson Correlation	0.724**	0.743**	0.732**	0.748**	1	0.715**	0.742**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000
	N	196	196	196	196	196	196	196
X5	Pearson Correlation	0.793**	0.744**	0.753**	0.716**	0.715**	1	0.801**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000
	N	196	196	196	196	196	196	196
X6	Pearson Correlation	0.861**	0.753**	0.744**	0.720**	0.742**	0.801**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	
	N	196	196	196	196	196	196	196

Because the Sig significance level is less than 0.05, the correlation matrix in the table above shows a linear association between Y dependent variables

and independent variables X1, X2, X3, X4, X5, and X6. As a result, it is suitable to apply the linear regression analysis variables.

#### 4.4 Correlation Matrix

**Table 6. Estimate the beta coefficient of the model by the Enter method**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(constant)	0.056	0.153		0.365	0.715		
X1	0.124	0.053	0.226	4.023	0.000	0.326	3.071
X2	0.135	0.053	0.143	2.557	0.011	0.326	3.065
X3	0.046	0.054	0.046	0.854	0.394	0.354	2.825
X4	-0.015	0.057	-0.016	-0.273	0.785	0.297	3.370
X5	0.122	0.060	0.125	2.026	0.044	0.271	3.684
X6	0.484	0.065	0.464	7.431	0.000	0.264	3.793

Adjusted R Square = 0.800

F (ANOVA) = 130.966

Sig. (ANOVA) = 0.000

Durbin-Watson = 1.733

The statistical value  $F = 130.966$  with the value  $\text{sig} = 0.000$  proves that the regression model is adequate for the data set, according to the ANOVA analysis results. The Durbin-Watson coefficient is 1.733, indicating that there is no association between the variables in the model. The corrected R square coefficient is 0.800, indicating that the independent variables account for 80 percent of the variation in the dependent variable.

As the table above can see, the factor X3 has the regression coefficient  $\text{Sig} = 0.394 > 0.05$  and the factor X4 has the regression coefficient  $\text{Sig} = 0.785 > 0.05$ , so this independent variable has no explanatory significance for the dependent variable. The Standardized regression equation:  $Y = 0.464 * X6 + 0.226 * X1 + 0.143 * X2 + 0.125 * X5$   
The 4 factors that were originally set were accepted; 2 factors were eliminated.

#### 4.5 Verification of Conformity of the Model

Scatter graph A linear trend assumption is not violated, as seen by residue scatter arbitrarily crossing around 0 degree around the path and varying greatly within the region  $\pm 1$ . A standard

distribution curve is overlaid on the frequency figure, with a very small mean near to 0 (Mean = -4.32E-1) as well as a variance near to unity (Std. Dev= 0.984), suggesting a distribution of

approximation values. The P-P plot also reveals that the viewpoint does not stray too far from the expected straight line, indicating that no residual distribution deviates from the standard distribution.

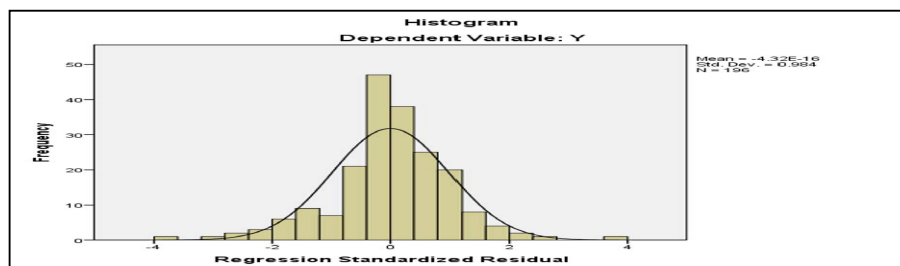


Fig3:Histogram

## 5. Discussion

Based on the results of E-logistics research, influenced by 06 groups of factors and analyzing the current situation, the research team proposes a number of strategic solutions to develop electronic logistics services (E-logistics) in Da Nang as follows.

*Building an E-logistics model with the connection of e-commerce activities.*

Building an E-logistics model with the connection of e-commerce activities brings great opportunities for businesses to develop and improve the process of connecting customers' goods and trading activities.

*Promoting investment in science and technology application.*

With E-logistics, businesses need to make investment decisions in techniques and technology of E-logistics with technologies such as: security technology, application of logistics network connection and growth express delivery. Besides, artificial intelligence (AI) technology helps develop self-learning ability, serving analysis and making predictions. From there, businesses will easily further improve the quality of their services in E-logistics activities.

*Building a Logistics Center, combined with completing and synchronizing infrastructure.*

In addition, in order to improve the quality of E-logistics services, businesses must also be able to store, transshipment, and supply goods to customers' distribution chains in many places based on different technologies. processing and control technology in its E-logistics activities.

*Exploiting a centralized network of industry enterprises, with various forms of online transactions, in order to share and exploit industry resources together.*

Lack of capital and human resources are two basic factors that significantly affect the quality of E-logistics services. In addition, the application of information technology is still limited, most business websites lack the utilities that customers need such as: order tracking tools, tracking documents, viewing train schedules, e-booking.

Therefore, businesses need to upgrade the level of logistics service provision by developing electronic logistics (E-logistics) and effective supply chain management. Only then, new businesses can strengthen the exploitation of the network of centralized industry enterprises through the establishment of an E-logistics Center. Combined with the development and application of science and technology to E-logistics, with various forms of online transactions, in order to improve and collectively exploit industry resources.

*Promote training, improve the quality of industry human resources, foster human resources.*

Up to the present time, we still have a shortage of human resources for Logistics, in the future it will certainly be difficult to meet the human demand for E-logistics. This will also greatly affect the quality of service provision of businesses to their customers. Therefore, businesses need to be more serious in training and developing human resources if they do not want their service quality to face many problems in the future.

## 6. Discussion

Services are crucial in e-logistics since they determine whether or not a company will survive. Businesses that provide excellent customer service will be able to thrive and grow. E-logistics service quality is influenced by a variety of factors. We discovered six issues affecting e-logistics services after conducting a survey with 196 responses from

Da Nang businesses: Security, Infrastructure, Intellectual Property and Consumer Protection, Electronic payment system, Human Resources.

We think that by publishing this scientific research report, we will be able to assist businesses in partially resolving the problems with the quality of e-logistics services.

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