

**HUE UNIVERSITY
COLLEGE OF ECONOMICS**

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**A STUDY TO DEVELOP E-COMMERCE IN SERVICE
ENTERPRISES OF KEY ECONOMIC ZONE IN CENTRAL
VIETNAM**

**Major : Business Administration
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**SUMMARY A DOCTORAL DISSERTATION
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This dissertation can be found in: The National Library and The
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Hue City, Thua Thien Hue province.

LIST OF ARTICLES OF THE AUTHOR RELATED TO THE THESIS TOPIC

1. Nguyen Xuan Thuy, Nguyen Dang Hao (2015), *Factors affecting TT-Hue enterprises' attitude toward using digital signature in e-commerce transactions*. Hue University's Journal of Science, ISSN - 1859 - 1388. Volume 109 Number 2015, October page 307 - 318.
2. Nguyen Xuan Thuy (2015), *Develop human resources in e-commerce for lodging enterprises in TT-Hue* . Economic and Forecast Review, ISSN 0866.7120. Number 04 2015, February (588) page 63 - 64.
3. Nguyen Xuan Thuy, Nguyen Thi Minh Hoa (2015), *E-commerce enhances competitiveness of Than Thien Hotel*. Economic and Forecast Review, ISSN 0866.7120. Number 11 2015, June (595) page 62 - 64.
4. Nguyen Xuan Thuy (2016), *Solution to develop human resources for service enterprises in TT-Hue*. Monograph: A few trade and Logistics issues in Renovation Period in Vietnam 1986 – 2016. Page 360 – 366. Labour and Social Publisher, 2015.
5. Nguyen Xuan Thuy, Nguyen Tai Phuc (2016), *E-business Index of economic center-point area in the Middle, Vietnam* . Records of the International Conference in Vietnam Finance in Integration Period: Opportunities and challenges. Nanhua University, Taiwan, Vietnam University of Commerce, University of Economics, Hue University. Page 35-45. Hong Duc Publisher, 2016.

concentration on one subject group to have further results.

- E-commerce in Vietnam has only been in its early stage so storing data in the Departments of provinces and cities still has a lot of shortcomings. Also, statistical indicators are not uniform. Therefore learning, surveying and collecting secondary data meet many difficulties.

4. Direction for further research

This result opened up some new ways to approach the research in the future:

First of all, there is a possibility of extending the research as well as the samples may be taken from different Vietnamese Zones. This helps policy makers and business managers grasp the development of e-commerce in order to continue offering appropriate strategies.

Secondly, there might be a focus on carrying out deep research on analyzing factors that affect the development of e-commerce in service enterprises which specialize in one major such as financial sector or tourism sector.

Thirdly, when the e-commerce develops at a higher level, this direction may narrow down the study area to spend time and effort on studying a specific type of service further to help the leaders offer more concrete solutions and improve business efficiency with the application of e-commerce./.

PART 1. INTRODUCTION

1.1. Significance of the dissertation

Information technology and e-commerce have been widely used in social life in general and businesses in particular. For enterprises, e-commerce contributes to the formation of the new business models, increasing revenue, reducing costs, improving business efficiency and enlarging a huge market for all types of customers domestically and abroad. For consumers, e-commerce helps buyers just sit at home and still be able to choose the goods and services in the market everywhere in the world with a few click movements. E-commerce is one of the important driving force to promote economic development, is a major factor accelerating the internationalization of economic life of the world.

On the date of December 7th 2010, the Prime Minister issued Decision No. 1073/QĐ-TTg on approving the master plan for e-commerce development in the period of 2011-2015 which defined "E-commerce was widely used and obtained the advanced level in the countries of the Association of Southeast Asian Nations (ASEAN), contributing to improving the competitiveness capacity of enterprises and the nation, accelerating the process of industrialization and modernization of the country".

The Central Key Economic Zone (CKEZ) was established under Decree No. 92/2006/ND-CP dated September 7th 2006 of the government, including 5 provinces and cities of Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai and Binh Dinh. On October 13th 2014, the Prime Minister issued the Decision No. 1874/QĐ-TTg on "Approving the master plan for socio-economic development of CKEZ up to 2020 and vision to 2030" in which CKEZ was importantly located in the strategy of socio-economic development and ensured the national defense and security for the Central coastal area and the Highlands. Building CKEZ to be a strong marine economy centre, creating position heading into the ocean to firmly protect the sovereignty of the motherland territorial waters and islands [61].

E-commerce joined Vietnam since about 2000 and grew at a rapid pace, especially in the service businesses. However, the e-

commerce application of enterprises in Vietnam in general and of those in CKEZ in particular was not as strong as expected. The complexity in terms of technology, lack of synchronous investment in infrastructure, unprofessional team of human resources, business qualifications, foreign languages ... was a barrier, making e-commerce deployment difficult. On the other hand, the service enterprises in CKEZ had their own characteristics, even less developed, small-scale business, lack of capital, limited human resources, lack of links ... so service businesses were still strange to e-commerce in their business activities. Meanwhile, potentiality and opportunities for application and development of e-commerce in service enterprises of CKEZ were rich, still the service businesses were not taken and paid attention to develop.

How to solve the outstanding issues in the development of e-commerce in the service enterprises in CKEZ at present? What factors are affecting the development of e-commerce in the service businesses in CKEZ? How the service enterprises in CKEZ pay more attention to the development of e-commerce in order to improve their business efficiency and competitiveness? There must be a research on development of e-commerce in service enterprises in CKEZ fully and comprehensively. At the same time, it is necessary to analyze the situation and the factors that affect the development of e-commerce, from that to interpret to find out measures and policies to promote e-commerce development. The research on development of e-commerce in the service enterprises in CKEZ will have great significance in policy implementation of the economic development of the country. With the reasons above, the author selected the topic: *"A study to develop E-commerce in service enterprises of The Central Key Economic Zone of Central Vietnam"* for his research.

1.2. Objectives

1.2.1. Overall objective

On the basis of assessing the situation and the factors that affect the development of e-commerce, it is recommended a feasible solution system to develop e-commerce in service enterprises in CKEZ and contributed to making e-commerce to be popular activities, strengthening competitiveness capacity of the service enterprises in CKEZ, accelerating the process of industrialization and

Enterprises should establish effective information channels between enterprises and consumers, especially the customer services in the process of using the service. It enables business service enterprises to know customers' though to carry out suitable policies.

2.3. For consumers

E-commerce growth means the level of electronic trading grows, consumers need to bravely shopping online. Consumers may start to try purchasing goods at reliable websites. Besides, individuals having shopping online experience should propagate actively, publicize images, encourage relatives and friends to join this convenient and beneficial kind of shopping.

Beside active shopping, to shape a safe e-commerce's environment, consumers need to equip themselves with basic knowledge of using the internet to avoid being taken in, being unveiled personal information or spreading viruses...

3. Research's limitations

The research was carried out in 5 provinces belonging to the key economic zone of Central Vietnam with approximate 500 models and lasted for months in 2015. However, there are still some limitations:

- According to WTO, services are divided into many sub-sectors (12 sub-sectors). It is hard for carrying research on developing e-commerce in service enterprises to solve all problems completely, because e-commerce application in each kind of services is different. The research only carried out on public service enterprises and did not go into a particular field to make the objective and tasks more concentrated.

- How is the criteria system for evaluating e-commerce development in service enterprises established and computed? In Vietnam in general and in the key economic zone of Central Vietnam in particular, there are not any annual statistic and it should be examined. With the form of e-commerce in service enterprises, how are the supply chain services (simple, complex) specified? This issue also needs to be studied.

- The number of models used in the thesis was not big enough (458) and they were divided into 3 groups of research subjects which are experts, managers; service enterprises and customers. In the future, the number of models will increase and there will be

safety security information. If the information is not secured, there will be many risks and consequences for both enterprises and customers. It will have bad impacts on faith in e-commerce. Next come solutions to legal environmental, technology infrastructure, payment instruments and residents' awareness.

2. Recommendations

2.1. For Government Management Agency

The Government management agency had better continue to promote propagating and popularizing e-commerce to increase the citizens' awareness of applying e-commerce in the centre-point area in the Middle.

The Government Management Agency should provide support for enterprises to seek for and develop new markets, publicize and develop e-commerce, apply suitable e-commerce models. Professional e-commerce management agencies need to do research and coordinate with relevant agencies to build and deploy programs, projects supporting enterprises to apply e-commerce models, which are suitable for each kind of service business as well as the enterprises' scales.

Also, the agency should continue to complete the legal system relating to e-commerce. To handle problems for enterprises when starting to boost electronic trading, it requires not only the complete legal environment but also concern and support by training, raising capacity and skill about e-commerce of person in charge.

2.2. For enterprises

Enterprises should invest more on their websites to attract and retain customers. A fair interface and eye-catching outlook will create interest in customers. This is also the first step for customers to choose products and services then make the decision to buy.

Enterprises have to observe the regulations and laws about e-commerce, electronic trading and electronic transaction. Enterprises must obey the regulations on the registration of e-commerce sites under the Decree No. 185/2013/ND-CP issued in 2013, 15th November about sanctions against administrative violations in commercial activities, fake and banned goods business, protecting the consumers' rights, including specific sanctions for violations of e-commerce.

modernization of the country.

1.2.2. Specific objectives

To achieve the overall objective mentioned above, the author has the view of micro perspective to approach the study in order to implement the specific objectives of the dissertation as follows:

- Research and systematize the theory of e-commerce development for service businesses; the theory of development; concept, features, benefits and advantages of e-commerce; service enterprises in CKEZ.

- Analyze the current status of e-commerce development in the service enterprises in CKEZ to withdraw the achieved results, the limitations and reasons in e-commerce development.

- Identify the factors that affect the development of e-commerce in service enterprises in CKEZ.

- Propose viewpoints, orientations, policies, solutions and recommendations in terms of micro and macro perspectives to aim at promoting the development of e-commerce in service enterprises in CKEZ to 2020 with vision to 2030.

1.3. Study scope and target group

1.3.1. Target group

The dissertation studied on the theory and practice relating to the development of e-commerce in service enterprises in CKEZ.

1.3.2. Scopes

The scope of content: On the basis of the theory of e-commerce development, service businesses, information and data related to CKEZ to analyze and assess the e-commerce development of service businesses in the study area. Building a study model to perform the survey, assess the situation as well as a desk study of secondary data, primary data for interpretation, identification of the factors affecting the development of e-commerce in CKEZ. On that basis, it is proposed the feasible solutions, policies and recommendations to develop e-commerce in service enterprises in CKEZ up to 2020, vision to 2030.

The scope of space: Study the development of e-commerce in service enterprises in CKEZ, including 5 provinces and cities of Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai and Binh Dinh.

The scope of time: The research time was mainly in the period of 2008 - 2015 and orientation solutions to 2020, vision to 2030. The announced studies and results were conducted from 2013 to 2016.

1.4. New contribution of the dissertation

- Systematize the theory of e-commerce as well as e-commerce development in the service businesses; highlight the characteristics, roles, benefits and advantages of e-commerce for business development of service businesses in CKEZ.

- Apply the TOE theoretical model (Technology - Organization - Environment) to study in depth the development of e-commerce in service enterprises in CKEZ.

- Point out the potentiality and strengths of CKEZ, the development of e-commerce are considered the breakthrough solutions in the effective exploitation of the potentiality and strengths.

- Analyze and assess comprehensively the status quo of e-commerce development in service enterprises in CKEZ, from then to show achievements, the limitations and reasons, and the issues raised need to be addressed in the development of e-commerce.

- The dissertation was to examine a case study on e-commerce application for lodging service in Thua Thien Hue province. The results of this case study have supplemented and enriched the development theory of e-commerce and a useful source of reference material for businesses who want to apply e-commerce for enhancing competitive capacity, increasing revenue, reducing costs, increasing profitability and sustainable development.

- The dissertation has identified the factors and the impact level of each factor on the development of e-commerce in the service businesses, those are: the socio-economic policy foundation, e-commerce related human resources; technology; legal environment; forms of payment; security and delivery of goods. The research results have practical significance not only for enterprise managers, but also for policy makers to promote e-commerce development.

- The dissertation has identified the direction, goals and proposed feasible and scientific policies and solutions to develop e-commerce in service enterprises in CKEZ.

1.5. Dissertation structure

The structure of the dissertation consists of 4 parts as follows:

Part 1. Introduction.

Part 2. Overview of studies on e-commerce development in the

society (environment factor), human resource (organization factor) and technology (technology factor) are the businesses to be put on the list of priorities to fit in the TOE model of researches all over the world. First, the necessary condition of developing e-commerce is technology infrastructure. If the enterprises' technology aspect have not been ready and other relating aspects have been low, it is hard to apply new technologies to business. The economic and social policies foundation is the condition to help enterprises develop every passing day, broaden business competence and carry out new business methods that meet the customers' higher demands. Besides, if there is not manpower that is well-informed about both technology and business, e-commerce couldn't get developed professionally.

E-commerce development plays a practical role in service enterprises because developing e-commerce means creating opportunities for applying e-commerce widely and deeply. The breadth here means there are more and more enterprises applying e-commerce and the depth means drastic applying level and wide range application in multiple operations. E-commerce development brings e-commerce's benefits to service enterprises in the key economic zone of Central Vietnam. It contributes to help a service enterprise widen the market, cut cost, increase the accessibility of specialization, cut the time of payment, reduce telecommunication cost in the negotiating processes, enter into contracts and contribute to the improvement of enterprise's image. E-commerce also helps the managers to make decisions timely in business activities, contributes to develop new kinds of businesses. Specifically, e-commerce helps customers shop in 24 hours a day, gives them the chance to join online auction. E-commerce does not have border, it allows people to work at home and to reduce traveling time.

The survey of experts' opinions about e-commerce development in service enterprises in e-commerce area in the Middle reflects the importance of e-commerce development measures of service enterprises. About evaluating the importance of the solutions to boost e-commerce development, all the experts say that these factors are all important, there should not be subjective and negligent of any factor when building a solution system to boost e-commerce growth. However, according to experts, the matter to be put on top priority is

PART 4. CONCLUSION AND RECOMMENDATIONS

1. Conclusion

E-commerce plays a very important role in business activities in general, especially in service enterprises. Vietnamese e-commerce has made a remarkable step beside the furious development of global e-commerce. However, there are differences in e-commerce development in different Zones in Vietnam. The study on the development of e-commerce in service enterprises in the key economic zone of Central Vietnam is dissimilar. In big cities such as Da Nang and Thua Thien-Hue, the electronic business index (EBI) ranks at a high rate, other small provinces like Quang Nam, Quang Ngai and Binh Dinh have the EBI at average rate or at a lower rate than others do in the country.

Through analyzing the subject, it can be seen that the development of e-commerce in service enterprises in the key economic zone of Central Vietnam basically reached level 2. There are professional websites with complex structures and numerous interactive functions with viewers, supporting viewers. Viewers can contact with enterprises conveniently. There are more and more enterprises that launch the e-commerce at level 3 to start selling or deploying services online. However, these enterprises have not had external database systems for servicing and connecting with online transactions. Transactions are still slow and the level of applying safety measures is low.

To develop e-commerce, it is necessary to conduct synchronously the methods mentioned in part 3 chapter 4 including choosing appropriate solutions and diverging to carry out how to accommodate factor endowment of each unit, each Zone, in order to boost e-commerce development. The survey result in 220 service enterprises in the key economic zone of Central Vietnam reflects the fact that enterprises' opinions about deploying solutions to develop e-commerce are very essential in the present circumstances. About the importance of solutions to boost e-commerce, the survey result indicates that in investing to build economic policy foundation,

service businesses.

Part 3. The study results, including 4 chapters.

Chapter 1. Rationale and practice of e-commerce development in the service businesses.

Chapter 2. Study areas and methods.

Chapter 3. Current status of e-commerce development in the service enterprises in CKEZ.

Chapter 4. Solutions for e-commerce development in the service enterprises in CKEZ.

Part 4. Conclusions and Recommendations

PART 2. OVERVIEW OF THE STUDIES ON E-COMMERCE DEVELOPMENT IN SERVICE BUSINESSES

2.1. The studies over the world

Currently, the development of e-commerce in enterprises in general and service enterprises in particular have been mentioned in a lot of different aspects in many studies at home and abroad. Especially for relevant foreign studies, it is diversified and studied from many different angles.

The readiness of e-commerce application: The research by Tung X. Bui (2003) [111], with the aim of identifying the factors that contribute to increasing e-commerce readiness of a nation, developing a quantitative set that can be used to calculate score for the factors of e-commerce readiness, providing an overall theoretical framework that can combine these elements to develop an index of e-commerce readiness.

According to the two authors Seyed Kamal Vaezi and H. Sattary I. Bimar (2009), it is compared some aspects such as the definition of e-readiness level, the target views of model and the scope of e-commerce application.

E-commerce application of enterprises: The group of authors Richard Duncombe and Richard Heeks in the Institute for Development Policy and Management - IDPM, University of Manchester, United Kingdom; the authors Robert Kintu and Barbara Nakangu, Kampala University, the Republic of Uganda; author Sunil Abraham Mahiti, Bangalore state, the Republic of India, the Institute for Development Policy and Management (2005).

About the role and impact of e-commerce on development: According to author Richard Heeks (2000) in the research namely eCommerce Analysing for Development.

The growth of e-commerce: two authors Alemayehu Molla and Paul S. Licker said that three level framework was in line with the study of the development of e-commerce, that was: network archetypes, also known as the hard infrastructure; application solutions, also known as soft infrastructure and business functions.

The researches used TOE model (Technology - Organization - Environment): The studies of the authors Zhu, K., Kraemer, K. L., Xu, S., & Dedrick, J. (2004) entitled “Information technology payoff in E-Business environments: An international perspective on value creation of E-Business in the financial services industry”. The study was based on the TOE model (Technology - Organization – Environment) to develop a research model to assess the value of e-business at the enterprise level. Based on the TOE model, the researches had developed six hypotheses and identified six factors (technological readiness, enterprise scale, global scope, financial resources, competitive intensity and legal environment) that were able to affect value creation of e-business.

Le Van Huy et al (2012) in the study entitled: An Empirical Study of Determinants of E-Commerce Adoption in SMEs in Vietnam: An Economy in Transition, had used the TOE model. In particular, the experts forecast powerful changes in e-commerce when Vietnam became an official member of the World Trade Organization (WTO) in 2007. The authors applied the TOE model and tested a model through e-commerce including many elements inside and outside that were defined in the experimental researches. This study pointed out that the policy had impact on the promotion of e-commerce application of SMEs in the economy in transition of Vietnam.

Therefore, the studies of e-commerce in the world and the posed gaps showed that: the world e-commerce had powerfully developed. The studies of e-commerce were also multi-dimensional analyses of activities and aspects related to e-commerce such as: the readiness level of e-commerce application; e-commerce application into enterprises; the roles and impact of e-commerce on development; growth of e-commerce. In addition, there were also studies relating to security, or

maintaining and updating websites of enterprises

4.2.2.5. Seeking opportunities for e-commerce applications for trading industry groups

4.2.3. Solutions for community of enterprises and industry associations

The role of business associations and industry associations was very important in promoting the development of a certain socio-economic area. By representing the interests of businesses and implementing specific supporting activities for their members, business associations can play a key role in supporting the enterprise sector and making the private sector grow rapidly.

CHAPTER 4: SOLUTIONS FOR E-COMMERCE
DEVELOPMENT IN THE SERVICE ENTERPRISES IN THE
CENTRAL KEY ECONOMIC ZONE

4.1. Viewpoints and development orientation to e-commerce in the service enterprises in CKEZ

4.1.1. Viewpoints of e-commerce development in the service enterprises in CKEZ

4.1.2. Orientation to e-commerce development in the service enterprises in CKEZ

4.2. E-commerce development solutions in the service enterprises in CKEZ

4.2.1. Solutions for the state, local governments of the provinces/cities in the key economic Zone

4.2.1.1. Building socio-economic policy foundation

4.2.1.2. Developing human resources for e-commerce

4.2.1.3. Investing in technological application for e-commerce development

4.2.1.4. Establishing a legal environment to serve the development of e-commerce

4.2.1.5. Promoting application of payment forms and means

4.2.1.6. Developing delivery areas of goods (logistics)

4.2.1.7. Raising awareness of the people

4.2.1.8. Improving the performance of the development coordination steering committees of key economic Zones and increasing links of the zone provinces and cities

4.2.2. Solutions for the service enterprises of the provinces in CKEZ

Enterprises were both environment and key driver for e-commerce implementation, thus for e-commerce really coming into socio-economic life of Vietnam in the situation of legal infrastructure, resources, payment...not fully formed, the service enterprises in CKEZ need to take some measures as follows:

4.2.2.1. Raising awareness of e-commerce

4.2.2.2. Making plans for e-commerce development

4.2.2.3. Stepping up the training of human resources for the development of e-commerce

4.2.2.4. Promoting online marketing through the opening,

study of e-commerce development in a particular sector (such as the tourism industry in China). The studies of e-commerce growth were also researching to what extent that country had developed e-commerce as well as e-commerce readiness of the country.

The issues in understanding researches on the world e-commerce were:

- How to focus on studying the development of e-commerce of a territory, or a certain economic zone.

- Indicate the zone to know what they need to do to develop e-commerce in order to stimulate production and reduce prices, to have high productivity and contribute to the economic development of the Zone and the country.

2.2. The studies in Vietnam

The readiness of e-commerce: From 2003 up to now, the Ministry of Industry and Trade issued constantly “Vietnam E-Commerce Report”, in which 2003 was the first year of reporting “Status of e-commerce application in Vietnam” with some comments: more and more enterprises recognized the benefits of e-commerce and wanted to apply e-commerce; E-commerce had been increasingly applied for marketing and advertising companies; the agreement, signing contracts and online payment in e-commerce had not implemented due to lack of an appropriate legal environment and the necessary information technology infrastructure and telecommunications; e-commerce application efficiency was not high because enterprises engaged in e-commerce spontaneously. The government did not have the official leadership, guidance or direction and no policy to encourage and support necessarily for businesses; human resources in e-commerce application were missing and weak[4].

The factors affecting e-commerce application of enterprises: The group of authors Luu Tien Thuan and Tran Thi Thanh Van (2015) had the study entitled “Factors affecting e-commerce application of small and medium-sized enterprises (SMEs) in Can Tho city”[74]. The study conducted with a random sample of 215 firms in Can Tho, using descriptive statistical methods, Binary Logistics and distinctive analysis used in the study.

E-commerce application of enterprises: in 2013, the Ministry of Information and Communications (MIC) had reported the assessment of e-commerce application of ministries, ministerial-level agencies, government agencies and the provinces and centrally-run cities. The level of IT application deployment of the state agencies were evaluated on five criteria groups.

Signing and implementation of electronic contracts: The doctoral dissertation of Nguyen Van Thoan (2010) with the topic: "Signing and implementing electronic contract (e-contract) in the context of the international economic integration of Vietnam

The issues raised need to be further studied and clarified: What was the development of e-commerce in CKEZ in recent time like? What were the indicators related to the development of e-commerce? Identify factors affecting the development of e-commerce in service enterprises in CKEZ? How and by what way to promote the development of e-commerce?

Hence, the study of the topic will have a positive contribution in terms of theory and practice for the development of e-commerce in service enterprises in CKEZ.

PART 3. STUDY RESULTS

CHAPTER 1. RATIONALE AND PRACTICE OF E-COMMERCE DEVELOPMENT IN SERVICE ENTERPRISES

1.1. Overview of e-commerce in the service enterprises

1.1.1. Service enterprises and the necessity for e-commerce development

1.1.1.1. Service concept

1.1.1.2. Service sector and service enterprises

1.1.1.3. The role of service enterprises in the business system

1.1.1.4. The need for e-commerce development in the service enterprises

1.1.2. E-commerce in service enterprises

1.1.2.1. The concept of e-commerce

1.1.2.2. Viewpoint of e-commerce in service enterprises

In the field of service business, e-commerce is understood as matters arising from all commercial relationships with application of

3.4.2. Limitations of e-commerce development in the service enterprises in CKEZ

The restrictions related to e-commerce development for the service enterprises in CKEZ were:

(1) The legal framework for e-commerce for service enterprises in CKEZ remained certain limitations, especially the policies derived from the local government of the provinces and cities in the Zone, many policies were not specific.

(2) Payment forms and means in e-commerce transactions of service enterprises in CKEZ had not yet developed strongly. The enterprises were also cautious, in one hand due to lack of belief in online payment, in other hand due to lack of tools.

(3) Information security was one of the biggest limitations in the development of e-commerce in the country generally and in CKEZ particularly.

(4) The society and economy in general and particularly in CKEZ were developing slowly, especially in the poor provinces and cities to slow down e-commerce growth.

(5) Lack of strong links among local authorities in CKEZ resulted in no strength synthesis in the development of e-commerce. Such as e-commerce indexes of Da Nang and Thua Thien Hue provinces were quite high meanwhile they were middle and low in other provinces, no experience exchange, sharing information and resources to develop together.

3.4. General assessment of e-commerce development in the service enterprises in CKEZ

3.4.1. The achieved results in the development of e-commerce in the service enterprises in CKEZ

(1) The local authorities in CKEZ have developed good policies to promote the development of e-commerce. Most of the provincial People's Committees issued the e-commerce development plan for 2011-2015 period as the basis for agencies to implement.

(2) Human resources of e-commerce of the service enterprises in CKEZ were focused to invest in terms of quantity and quality, the index of enterprise's human resources of the provinces in the Zone next year higher than last year. Businesses in Da Nang City and Thua Thien Hue province from 2012 to 2014, respectively ranked No. 3, 4 and 5 out of 63 provinces and cities.

(3) Technology infrastructure for e-commerce development in CKEZ basically met the demand. Especially, telecommunications networks were invested fundamental, extensive and modern technology with 12MB optical cable for household, 45MB for businesses, facilitated access to Internet, e-commerce implementation in enterprises.

(4) CKEZ had many companies of delivery, transport, logistics serving well-developed e-commerce, especially the seaport systems such as Chan May, Tien Sa, Han River, Quy Nhon... together with smooth traffic system in recent time such as the tunnels of Hai Van, Phuoc Tuong, Phu Gia, the highway from Tuy Loan to Tam Ky ... has amazingly contributed to the circulation and delivery of goods.

(5) The perception of customers, experts, especially of businesses about the benefits of e-commerce was good. Through survey, the respondents confirmed the huge benefits of e-commerce to business in the context of integration and development.

(6) The e-commerce transactions indexes of B2C, B2B, G2B of the service enterprises in CKEZ were relatively good. Danang was the one who often stood in the national top 10, Thua Thien Hue was relatively strong, also present in the top 10 of the country except B2B index due to the enterprises of Thua Thien Hue province had not developed.

electronic media. Any transactions on the provision and exchange of goods, services and other forms of industrial cooperation, business, transport of goods or passengers, payment activities, advertisement ... are done through the electronic means and network.

1.1.2.3. Development conditions of e-commerce in service enterprises

Socio-economic policy foundation; Human Resources; Technology; Legality; Payment Forms; Information safety and security; Delivery of goods.

1.1.2.4. Benefits of e-commerce for service enterprises

1.2. E-commerce development in service enterprises and evaluation criteria system

1.2.1. Development and contents of e-commerce development

1.2.1.1. Development of e-commerce

1.2.1.2. Contents of e-commerce development

Building a legal foundation and development policy of e-commerce activities; Construction and development of e-commerce infrastructure; Marketing, communication, dissemination and raising awareness of the whole society on e-commerce; Development of products, solutions for e-commerce application; Training and development of human resources for e-commerce activities; Building electronic payment system; Expanding international cooperation on e-commerce.

1.2.2. Level of e-commerce development in service enterprises

1.2.2.1. Levels of in depth development

In depth development of e-commerce activities are divided into 6 levels of development: (1) present on network; (2) have professional website; (3) e-commerce preparation; (4) e-commerce application; (5) wireless e-commerce; (6) the whole world in a computer.

1.2.2.2. Levels of in width development

Development of e-commerce activities in width are classified into three levels of development: (1) Information commerce; (2) Transaction commerce; (3) Integration commerce.

1.2.3. Index of e-commerce development.

1.2.4. TOE model (Technology – Organization – Environment)

1.3. Factors affecting the development of e-commerce in service enterprises

1.3.1. Factors related to technology

1.3.1.1. Technical infrastructure, application enterprise technology

1.3.1.2. Safety and security in e-commerce transactions

1.3.1.3. Billing system of enterprises were automatized

1.3.2. Factors relating to enterprise organization

1.3.2.1. Enterprise workforce

1.3.2.2. Awareness of enterprises on e-commerce

1.3.3. Factors related to the environment

1.3.3.1. Legal environment

1.3.3.2. Human resources environment

1.3.3.3. Technical environment, logistics infrastructure

1.3.3.4. International integration environment

1.4. International experience in developing e-commerce and lessons for the service enterprises in CKEZ

1.4.1. International experience in developing e-commerce

Experience from US businesses. Experience from Japanese enterprises. Experience from Singapore enterprises. Experience from Chinese enterprises.

1.4.2. Lessons learned in the development of e-commerce for the service enterprises in CKEZ

E-commerce in Vietnam is only in its early stage, many forecasts indicate that e-commerce will boom in the future. As reported by eMarketer, a research firm from the US, announced in December 2014 showed that Internet services in Vietnam is rapidly growing, a large part due to the excitement of the phone market and infrastructure is properly invested.

1.4.3. E-commerce on mobile background is the new development of e-commerce in the world as well as in Vietnam

Currently there are about 7.4 billion mobile devices, 2.16 billion smartphone users worldwide. In Vietnam, there are about 45 million Internet users and 35 million smartphone users showing the strong growth of smartphones and mobile connectivity.

CHAPTER 2. STUDY AREAS AND METHODS

2.1. The Central Key Economic Zone

Key economic Zone is a division of the national territory consists of a number of provinces and cities are converging favorable conditions and development factors, have great economic potentiality, play the role of motivation and motive force dragging

3.3.2.9. Assessment of experts on e-commerce development motivation

3.3.2.10. Assessment of experts on e-commerce development promoting solutions in service enterprises

3.3.3. Assessment of service enterprises in CKEZ

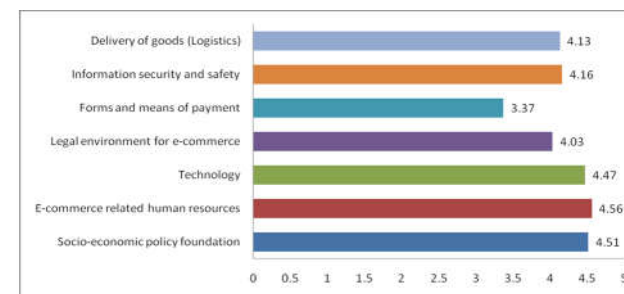
** Testing the difference in the assessment of types of enterprises*

** Comparison of the differences in the assessment of experts on enterprises and the importance of e-commerce development solutions*

3.3.4. Assessment of the consumers using Internet and information technology

3.3.5. Analysis of identifying e-commerce development factors

Through survey in the service enterprises in CKEZ, when referring to the factors affecting the development of e-commerce, there were many different opinions about the important level of the factors affecting e-commerce in the Zone. Assessing the factors affecting e-commerce, “E-commerce related workforce” and “Socio-economic policy foundation” were evaluated the most important that showed the tremendous role of educational organizations, state agencies in supporting the workforce and policies to e-commerce. Next, the access and application to new technologies as well as common ground in terms of technology among businesses, between enterprises and management agencies were also a very important factor. In addition, enterprises also agreed that the legal framework for e-commerce, information security and delivery system of goods, logistics for e-commerce were also important for the development of e-commerce.



Source: the author's study, 2015

Figure 3.29: Opinions of enterprises about the factors affecting e-commerce in service enterprises in CKEZ

environment 94.2%; payment forms and means 91.2%; information safety and security 94.7%; delivery of goods 86.4%. Information safety and security and ensuring a legal environment for e-commerce were two particular factors interested by the experts.

Table 3.23: Expert opinion on the important level of the conditions for e-commerce development in the service enterprises in CKEZ

Unit: %

No	Indicators	Not important	Less important	Normal	Important	Very important
1	Socio-economic foundation policy	0,0	0,6	17,1	53,5	28,8
2	E-commerce related workforce	0,0	0,0	12,4	53,5	34,1
3	Technology	0,0	0,0	10,6	54,7	34,7
4	Legal environment for e-commerce	0,0	0,0	5,9	42,4	51,8
5	Payment forms and means	0,0	0,6	8,2	47,1	44,1
6	Information safety and security	0,0	0,6	4,7	25,9	68,8
7	Delivery of goods (logistics)	0,0	0,0	13,5	53,5	32,9

Notes: Likert scale: 1 – Not important → 5 – Very important

Source: the author's study, 2015

Enabling transparent legal framework, information safety and security in e-commerce were placed on top by experts, the two factors were rated as the most important by experts accounting for 94.7% and 94.2% respectively. Based on these results, in order to develop e-commerce, it needed for appropriate investment in conditions, of which attention to the factors to be more important, including information safety and security, legal environment, payment forms and means.

3.3.2.8. Assessment of the difficulties affecting to e-commerce development

the overall development of the country. At present, there are four key economic Zones namely the northern key economic Zone, the central key economic Zone, the southern key economic Zone and the Mekong Delta with a total of 24 provinces and centrally-run cities.

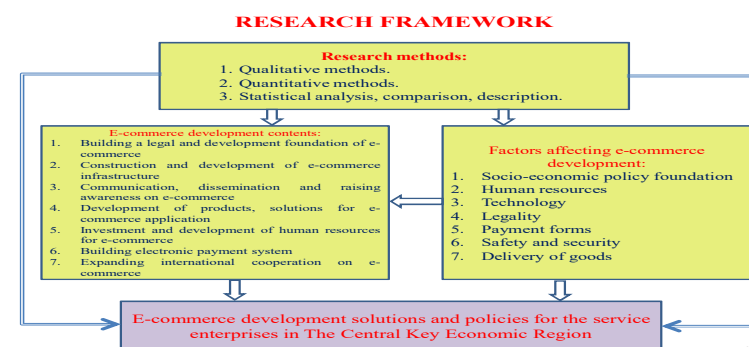
2.1.1. Natural conditions

2.1.2. Socio-economic conditions

2.1.3. Features of the service enterprises in CKEZ

2.2. Study methods

The research framework is presented through the following figure:



Source: the author's study, 2015

Figure 2.4: Research framework of the dissertation

2.2.2. Qualitative method

Qualitative research is a method of access to the documents related to the research issues, access to domestic and foreign researches ... to find out the research questions, seek to describe the factors affecting the development of e-commerce in the service enterprises in CKEZ, find out the observed variables in line with reality of the situation of the study area. This is very important and ensures high reliability for the research results.

2.2.3. Quantitative methods

2.2.3.1. Design of questionnaire

2.2.3.2. Approach

2.2.4. Other research methods

**CHAPTER 3. CURRENT STATUS OF E-COMMERCE
DEVELOPMENT IN THE SERVICE ENTERPRISES IN THE
CENTRAL KEY ECONOMIC ZONE**

3.1. Overview of the service enterprises in CKEZ

3.1.1. Service enterprises in CKEZ

3.1.2. Enterprise services by ownership

3.1.3. Enterprise services by capital size

3.1.4. Total retail sales of goods

3.2. Current status of e-commerce development in the service enterprises in CKEZ

3.2.1. E-commerce index of the service enterprises in CKEZ

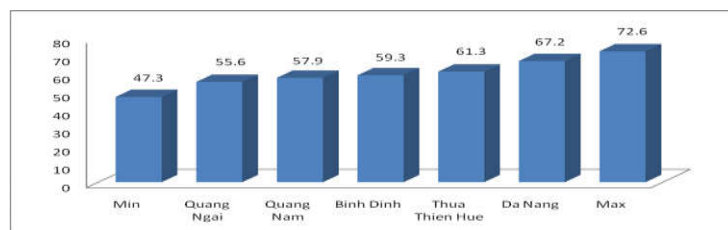
3.2.1.1. Index of human resources and IT infrastructure

3.2.1.2. B2C transactions index

3.2.1.3. B2B transactions index

3.2.1.4. G2B transactions index

3.2.1.5. E-commerce index of the service enterprises in CKEZ



Source: the author's study, 2015

Figure 3.1: EBI Index of the service enterprises in CKEZ in 2014

3.2.2. Assessment according to the contents of e-commerce development

3.2.2.1. Building a legal foundation and e-commerce development policy

3.2.2.2. Construction and development of e-commerce infrastructure

3.2.2.3. Marketing, communication, dissemination and raising awareness of the whole society on e-commerce

3.2.2.4. Training and development of human resources for e-commerce activities

3.2.2.5. Building electronic payment system

3.2.3. E-commerce revenue of service enterprises

3.2.4. Investment by service enterprises for e-commerce application

3.2.5. E-commerce workforce in service enterprises

3.3. Evaluation of the respondents on e-commerce development in CKEZ

3.3.1. Overview of survey sample

The study was conducted with three types of questionnaires for 3 target groups, total receipt of 489 questionnaires, of which 170 questionnaires from experts and managers, 220 from service enterprises and 99 from consumers.

3.3.1.1. Types of enterprises

3.3.1.2. Enterprise scale based on the number of employees

3.3.1.3. The total business capital of enterprises

3.3.1.4. Business areas

Business areas account for higher rates in the sample including tourism services and other travel related services (25.9%), general business (15.0%), construction services and execution (13.2%), transportation services (15.9%).

3.3.1.5. Revenue scale of service enterprises

3.3.2. Evaluation by experts in information technology and e-commerce in CKEZ

3.3.2.1. The level of IT use of enterprises in business activities

3.3.2.2. Assessment of e-commerce development aspects in service business

3.3.2.3. Assessment of e-commerce development conditions in service business

3.3.2.4. Assessment of e-commerce benefits

3.3.2.5. Assessment of e-commerce application level in service business sectors

3.3.2.6. Assessment of e-commerce contribution in the Zone

3.3.2.7. Assessment of the importance of e-commerce development conditions

Table 3.23 showed the conditions for the development of e-commerce played a very important role, so it was not surprised when most experts would assess the above-mentioned criteria extremely important. Specifically, the socio-economic policy foundation accounted for 82.3% (53.5% + 28.8%); workforce 87.6%; technology 89.4%; legal