MANAGEMENT OF E- COMMERCE IN CLEARING AND FORWARDING; A CASE OF TANZANIA PORT AUTHORITY

By

Alice Edward

A Dissertation Submitted in Partial fulfillment for the award of Master's Degree in Business Administration in Corporate Management of the Mzumbe University Dar es Salaam Campus College

2013

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University, a dissertation entitled ***Management of E-Commerce in Clearing and Forwarding; A Case of Tanzania Port Authority,*** in fulfillment of the requirements for award of the degree of Master of Business Administration of Mzumbe University

……………………………………..
Major Supervisor

………………………………….
Internal Examiner

Accepted for the Board of ………………………………………….

DEAN, DIRECTOR, FACULTY, DIRECTORATE SCHOOL BOARD

DECLARATION
AND
COPYRIGHT

I, **Alice Edward** declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature ___________________________

Date________________________________

ACKNOWLEDGEMENT

I have taken efforts in this dissertation. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.

I am highly indebted to DR BARONGO for his/her guidance and constant supervision as well as for providing necessary information regarding the research and also for his/her support in completing the project.

I would like to express my gratitude towards my parents for their kind co-operation and encouragement which helped me in completion of this dissertation.

I would like to express my special gratitude and thanks to Attorney Generals Chamber for giving me such attention and time.

My thanks and appreciations also go to my colleague in developing the dissertation and people who have willingly helped me out with their abilities

"May Almighty God, bless the work of my hands

DEDICATION

This dissertation is dedicated to MY LATE MOTHER who inspired me to take my masters degree.

ABBREVIATIONS AND ACRONYMS

CFA	:	Clearing and Forwarding Agent
CFS	:	Container Freight Station
CRO	:	Customs Release Order
EDI	:	Exchange of Business Documents
ESCAP	:	Economic and Social Commission for Asia and the Pacific
ICD	:	Inland Container Depot
TPA	:	Tanzania Ports Authority
TRA	:	Tanzania Revenue Authority
TTRS	:	Tanzania Time Release Study
UN/ CEFACT	:	United Nations Centre for Trade Facilitation and Electronic Business
WIPO	:	World Intellectual Property Organization

ABSTRACT

This research was about investigating the management of e-commerce in clearing and forwarding at TPA. The focus was to (1) to investigate the operating environment experienced by private sector as it relates to the timely removal of cargo from the port facilities and identify the steps required to revise the environment including identification of any legal and regulatory changes required, (2) to investigate the reasons for delays at Dar es Salaam port as far as can be determined through current documentation and discussion with colleagues and contracts, (3) to investigate how transaction costs can be lowered for customers using e- commerce.

The results of this study provide treasured information for TPA Management and the government as policy makers, employees as implementers of the policies, academicians and other interested people. More specifically, the study highlights on the importance of implementing e-commerce as a new business model to be used by TPA.

In order to get acquainted with the problem stated, the researcher reviewed both theoretical and empirical literatures with the regards to the management of e-commerce. Through theoretical review, different concepts in relations to the clearing and forwarding, e-commerce and were defined. The review also examined various theories related to the study.

Generally it was found that respondents were found to be aware on increasing efficiency of TPA by adopting e-commerce, creating a favorable environment for smooth run of business at the port and quick clearing of cargoes at TPA.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE PROBLEM

1.1 Introduction

The Clearing and Forwarding can be a source of great confusion for many people. The average people in the world generally fall into one of three groups. The first believes investing into Clearing and Forwarding is risky and as such is frightened to invest, thereby depriving themselves of their share of their national cake. The second group thinks Clearing and Forwarding is a form of gambling.

They believe that if you invest you are surely going to lose your money. Often these fears are driven by the personal experiences of family members or friends who suffered similar fates. These feelings are not farfetched, they are predicated on ignorance because these people as much as they mean well are grossly unaware of what the Clearing and Forwarding is or why it exist. The third group are those who are aware of the Clearing and Forwarding, they know they should invest but don't know how to and where to begin. This class of people thinks that Clearing and Forwarding is for the elite class, others in this class are of the opinion that they should leave their investment decision in the hands of the professional, they know next to nothing about investment strategies. Their investment strategy is tailored after the "Herd mentality" follows the direction of the masses (Masky, 2002)

The Freight Forwarder is usually referred to as a "Clearing and Forwarding Agent" who performs clearing and forwarding business. Freight Forwarding or Shipping and Forwarding as it was formerly known, is recognized worldwide as a branch of International Trade; the forwarder being a vital link between the exporter or shipper (seller of the goods), the carrier (owner of the transport that carries the goods) on the hand, and other bodies such as the Department of Customs and Excise, the Tanzania Ports Authority, the shipping company (or agents) and the consignee on the other.

The forwarder performs all the services that are related to transport and transportation. These include choosing suitable modes of transport, documentation and payment of dues and charges. To these, some forwarders have in recent times added packing, consolidation, warehousing, haulage and insurance.

In this regard, Freight Forwarding is a profession that requires both academic and vocational training. But due to inadequate or non-existent facilities for training forwarders locally, many of the Tanzania forwarders are unaware of their proper role in international trade. Most Tanzania forwarders for example, do not know that forwarding requires the knowledge of International Trade and payments, Economic geography, Mercantile Law, Cargo Insurance and the Law governing the carriage of goods by sea, air, rain and road. Furthermore, some forwarders are ignorant of certain local requirements and procedures.

This lack of awareness on the part of the Nigerian forwarders has been due partly to non-availability of sufficient publications on the subject of Freight forwarding. It is not uncommon to find illiterates going about at the ports with brief-cases acting as Customs Brokers, but calling themselves Clearing Agents! This manual has therefore carefully outlined the roles of each body or department concerned with documentation and the procedures in clearing goods from the seaports. This has been rising much concern about the management issues in Clearing and forwarding Industry, and hence the impetus of e-commerce in clearing and forwarding industry.

1.2 Background to the Problem

The 20th century has witnessed rapid and new innovative technologies with fundamental changes in the way commerce takes place. Those e-commerce changes and the inception of internet that has been a subject of great interest attracting many people require regulatory changes. The digital revolution has brought fundamental change to communications and fuelled dramatic development for the new digital economy, (WIPO 2000, paragraph 1). The efficacy offered by the digital technology has opened up enormous potentials for participants in international trade for countries through e- commerce.

E- Commerce is rapidly gaining a prominent place in a global marketing matrix. The volume of transaction that is carried out over the internet globally is extremely huge.

It is estimated that in the next decade, e- commerce activities would be a major source of foreign exchange, and key indicator of national development.

The global development of e- commerce might be stymied by old laws enacted at the time when it was still at best a figment of few technologists imagination hence require uniformity rules. Electronic commerce – business conducted over the computer network is growing explosively. It can be argued that the current commercial laws are likely to be affected by the rapid e- commerce changes, inviting alternative regulatory approaches that would not impede e- commerce while advancing and ensuring consumer protection interests. E- Commerce through digital revolution offers great opportunities for economic growth.

Studies show that e- commerce development in developing countries, especially in Africa is comparatively very low. Infrastructural, economic and management factors have been previously identified as contributing to the low level of e- commerce development in developing countries.

The result of those studies show that perceived advantages, internet and complexity, accessibility and management support have statistically significant influence on the adoption of e- commerce, while perceived disadvantages and other facilitating conditions do not significantly affect the decision to adopt e- commerce. The study results tend to agree with the theory of planned behavior, but attitude seems to weigh more than subjective norm and perceived behavioral control.

In this context, the chapter will examine the nature and evolution of e- commerce in clearing and forwarding and will identify key adoption drivers and benefits based on recent research. Also, this research will identify key adoption drivers and benefits but also will recognize that there are many barriers that ongoing will need to address if the potential of e commerce is to be fulfilled

1.3 Statement of the Problem

The primary objective of e- commerce in clearing and forwarding business is to influence agents to the whole process of clearing and forwarding cargoes. For a long time now there has been blames on the e- commerce especially on clearing and forwarding besides all efforts being made by the government to improve its performance by warning its citizens to be more careful when dealing with e-business.

This is because of the inefficient use of modern technology thus information technology, hence failures in computer system network port congestion due to low network, delay of documents, unprofessionalism from agents, corruption, language barrier between customer and agent and theft cases due to long storages caused by network errors and sometimes disguised dealers in overseas obtains money from customers by false pretence, pretending to sell goods while they are not and at the end of the day when the customer deposit money he or she will never get what he has ordered.

Due to this, the government of Tanzania sometimes in 2009 warned its citizen to take extra care when doing commerce electronically as there were a lot of complains. (Ministry of Foreign Affairs 2009). During this time a lot of people ordered cars from overseas but they were coined their money.

E- Commerce is being mentioned as one of the growing sector which grows very fast in the world. Tanzania Port Authority is at present being mentioned as one of the offices who are its performance is increasing though there are failures also. Presence of all these pitfalls shows that there is a gap in the management of e-commerce especially in clearing and forwarding sector. With this fact this research anticipated to fill this gap by coming up with the knowledge aiming at solving if not curbing the identified gap.

1.4 Research Objectives

The following were research objectives;

1.4.1Main Objective of the Study

To investigate the management of e- commerce in clearing and forwarding companies of Tanzania Ports Authority (TPA) in Dar es Salaam.

1.4.2 Specific Objectives

Specifically, this research anticipated to:

(i) Investigate the operating environment experienced by private sector as it relates to the timely removal of cargo from the port facilities and identify the steps required to revise the environment including identification of any legal and regulatory changes required.

(ii) Identify the reasons for delays at Dar es Salaam port as far as can be determined through current documentation and discussion with colleagues and contracts.

(iii) Investigate how transaction costs can be lowered for customers using e-commerce.

1.5 Research questions

The study was guided by the following research questions:

(i) To what extent does the operating environment experienced by the private sector thus clearing and forwarding companies relates to the timely removal of cargo from the port.

(ii) What are the specific causes of delays in clearing cargoes at the port?

(iii) How transaction costs can be lowered for customers using e- commerce?

1.6 Significance of the Study

From the beginning of this study, the significance was assigned to three facets. Generally speaking even after the completion of the study and writing of this dissertation the following remain to be significance:

(i) Adding knowledge to the existing body of knowledge on managing e-commerce in clearing and forwarding.

(ii) Giving the researcher and e-commerce practitioners some insights of the importance of using e-commerce as a new business model to automate requisition and purchase order creation and integrates payment.

(iii) Help organizations develop plans for more effective management of sourcing and logistics before the arrival of the cargoes

(iv) A partial fulfillment for the award of Master of Business Administration in Corporate Management of Mzumbe University.

1.7 Scope of the Study

To accomplish the task the researcher in this paper basically focused on the TPA headquarters Dar es Salaam. Recognizing that e- commerce is of different types depending on the nature of transaction and the procedure in clearing and forwarding. Hence these types of e- commerce are business to business and this is done when the transaction is done between businesses. The second type is called businesses to customer e- commerce and this refers to the placing of finished goods or services to end users thus customers who can be corporate entities or individuals. Therefore the researcher focused on the second type which is business to customer e- commerce.

1.8 Limitations of the Study

The awkward procedures in clearing and forwarding and the limited use of modern technology in government offices was a setback to my study as it was time consuming.

Availability of data; It was abit difficulty in collection of data because of beuaracracy. Source of data is not is not centralized. Data are scattered.

Access to Finance; Due to lack of enough funds, it has caused me to visit only Dar es Salaam Ports although there are other ports controlled by TPA namely MWANZA PORT, KIGOMA PORT, MTWARA PORT, TANGA PORT, and KASANGA PORT on Lake Tanganyika etc.

1.8 Delimitations

Those awkward procedures in clearing and forwarding maybe improved through the following suggestions;

(i.) Simplification of customs procedure as well as automation of all works done in government offices.

(ii.) Transparency and centralization of data at a single point so as everyone can get easily access of it.

(iii.) TPA should also set aside a portion of fund out of its annual budgets so as to cover for researchers who are doing it for the benefits of ports performance hence country's economy.

(iv.) Strengthening collaboration between government and business chambers to ensure a better business environment.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this part the researcher revised the available literature relevant to the study in order to obtain broader insights of what has already been done and discussed by different writers so far. This review showed the way different literature attempt to explain the concept e- commerce in clearing and forwarding companies.

2.2 Theoretical Literature

2.2.1 E- Commerce in Broad Context

E- Commerce can be defined as a commercial exchange system which makes use of the computers and communications network advances. It is the use of production information in electronic forms instead of paper, for business or government operations. This suggests that e- commerce means using technological advances to promote everything involving the exchange of business information among computers and human traders and customers.

As a network e-commerce has been defined as sale or purchase of goods or services conducted over computer – mediated networks. The goods and services are ordered over those networks but payment and ultimate delivery of the goods and services may be conducted on or offline.

2.2.2 Clearing and Forwarding

This is where a shipping company clear cargo or shipment through custom and then deliver to its respective destination. Important shipping documents that are used here are standard shipping order, mates' receipts, bill of lading, shipper's declaration of dangerous goods if any, stowage plan and stowage order, certificate of origin and charter party. Apart from these the following bank documents are used such as Importers declaration form, bill of exchange and letter of credit.

In Tanzania, the available a list of C & F agents is 400. The interest of this number is catered by Tanzania Freight Forwarders Association (TAFFA).(Mathenge, 2011)

Pre- shipment Arrival Declaration, TRA points out that the arrangement for pre – cargo arrival declaration has been in place since 2004. But experience has shown that most importers and their clearing agents do not make the best use of this facility. Hence, most importers lodge their declarations one or two days before or after arrival of the ship. As a result cargo clearance time is extended, contributing to cargo dwell time at the port. (Kimbuga, 2009).

TRA has now advised importers to take advantage of the pre- arrival cargo declaration at least ten days prior to arrival of the cargo to shorten clearance time. The freight forwarder has always played an important role in E-commerce and international carriage of goods. Traditionally the freight forwarder was the link between the owner of the goods and the carrier and provided forwarding or clearing services. The forwarder acted as the agent for the cargo owner and in some cases at the same time.

According to the United Nations Centre for Trade Facilitation and Electronic Business (UN/ CEFACT), figures gathered from across the world suggest that export process involves, on average 27 parties, more than 40 documents, more than 300 copies of documents and re- keying of 60 to 70 per cent of all data at least once. This process entails significant costs. The benefits that can result from trade facilitation measures such as reducing the number of documents required per transaction are always positive, although the magnitude varies depending on the context (Nathan Associates Inc. 2009)

Alavi (2005) presenting a fragmented international trade transaction process, also pointed out the possible time- saving and cost- saving benefits that might come from shifting paper- based trade to paperless trade in particular electronic commerce.

2.2.3 The development of International Technology and its Impact on Ports.

Currently, time based competition is very stiff. Any delays to the ship and its cargo are costly to everyone involved in the supply chain.

The creative and proper use of information technology will create a great benefit. Nowadays, International Technology especially Internet based system is greatly being employed in all transport services. As shippers understand and appreciate sophisticated supply chain management, ports will be faced with both opportunities and threats. (ESCAP, 2002)

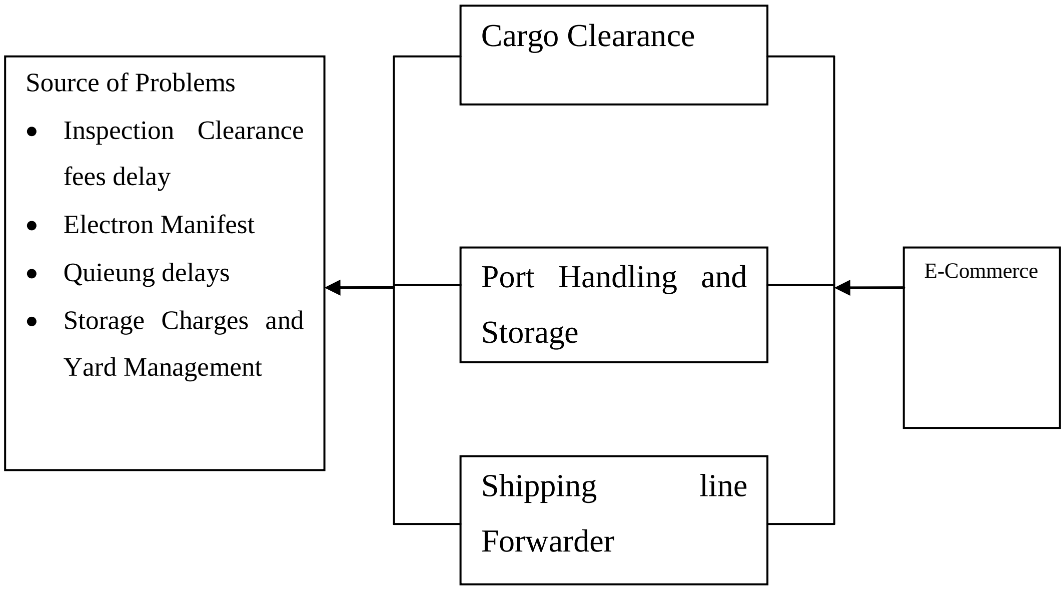
Information Technology has transformed ship-owners into valued- added logistics services providers. E- Commerce will encourage demand for shipping service by increasing trade volume in general. Ship owners and their suppliers also may soon use the internet for innovative purposes such as bunker auctions, ship inspections using electronically transmitted data and internet- based classification society records.

The leading area for shipping related information technology is in ports, particularly in terminal operating systems and intra-port communications. Among other things, data communication systems can handle custom filings, transmittal of manifests, and processing of bills is reshaping the shipping and port intensity.

The application of e- commerce in ports could contribute to the efficiency of international trade. Ports are of crucial importance to many countries as they constitute a critical note in the transport chain linking international transport services with local transport services.

With the growing use of International Technology in cargo booking, tracking, clearance and delivery by major shipping lines as well as in customs clearance, all ports are required to become efficient interfaces for shipping services in a world closely connected through logistics chains. (ESCAP, 2002)

Figure 2.1: A Framework of Problems facing Management of E-Commerce in Clearing and Forward



Source: *Field Research (2013)*

2.3 Role of E- Commerce

Network technologies enabled by e- commerce standards have the potential to transform and integrate the functional elements of many industries. The internet facilitate the abolition of trade- off between rich-ness and reach of information, which means that communication can occur at almost zero cost, without constraints on the richness of information. (Graham et al; 2004; Evans and Wurster, 1997).

Richness of information includes characteristics such as bandwidth, customization, and interactivity. Reach is defined as the connectivity, and is the number of agents involved in exchanging information. Before the development of the internet, to reach large numbers of people with rich information was a costly and time consuming process and prone to errors due to manual information replication.

2.4 Theories in E- Commerce

Different approaches have been taken in understanding the concept of e- commerce. Many individual theorists have developed their own views and theories. They approach e- commerce from different economic theories. Four economic theories are described here.

2.4.1 Economic Theory

This theory suggests that intermediaries lower the probability of unsuccessful trades, and consequently reduce the risk associated with trading. Moreover, because intermediaries trade over longer periods of time, they have incentives to maintain their reputation by providing high quality of goods and services and offering warranties. Thus, intermediaries are preferred over other trading mechanisms because they increase the users trust in a favorable transaction outcome. (Chiran, David and Kauffman, 2000).

2.4.2 Transaction Cost theory

States that, companies exist because they can conduct marketplace transaction internally more cheaply than they can with external companies in the marketplace. Companies and individuals seek to economize on transaction costs. Using market is expensive because of coordination costs such as locating and communicating with distant suppliers, monitoring contract compliance, buying insurance, obtaining information on products. (Laudon and Laudon, 1996).

Transaction costs have also a very important influence on customer value. One of the aims of this paper is to investigate how transaction costs can be lowered for customers using e- commerce and which of these transaction costs can enhance (or worsen) trustworthiness in e- commerce. For example, it is already clear from the definition that offering goods and services on the internet cancels travelling costs for customers. Although this type of transaction cost might be the most obvious one, there are many types to discover.

2.4.3 Agency Theory

This theory views the company as a nexus of contracts among self- interested individuals rather than a unified, profit- maximizing entity. Agents need constant supervision and management which raises agency costs or coordination costs.

Information technology by reducing the costs of acquiring and analyzing information, permits organizations to reduce overall management, costs, and allows them to grow in revenues while shrinking the numbers of middle management and clerical workers (Laudon and Laudon, 1996).

Although this definition of agency theory views their associated costs as costs the company incurs, I believe the customer also incurs agency costs in dealing.

The economic theory on trust helps explain how lowering agency costs increases trust. In a competitive environment, companies have substantial interest in keeping their reputation high, reducing the risk of trading. Therefore usability elements that decrease agency costs are expected to increase trust, because they reduce the risk of trading.

2.4.4 Organization Theory

It provides a cross- disciplinary definition of trust that applies to a large range of relationships among individuals and organizations. In this definition, trust refers to the willingness of a trustor to be vulnerable to the actions of the trustee. Trust implies benevolence, integrity and ability in an exchange relationship, as well as predictability.

2.5 Other related studies on management of E-commerce in clearing and forwarding

Under this part the researcher will review various works of previous researcher to ascertain what has been so far done on the management of e commerce in clearing and forwarding.

Cronje Thys (August 2011) wrote a report which investigated the high unacceptability dwell time compared to Durban where dwell time is in the region of two days, the Dar es salaam port performs poorly which reported dwell times of up to 17 days (although dwell times have reportedly been reduced recently, the delays are still substantial)

Reducing these dwell times is crucial to improving trade flows in the region, reducing costs and enhancing the competitiveness of these ports. This report also proposed short term critical solutions to include enhancing the customs system to allow for clearance prior to arrival of the vessel and even before the manifest is inputted in the system, curb the period to be stored in the terminals and lastly strictly apply the TRA 21 day's stipulation to auction uncleared goods.

Furthermore in the long term there is a need to commission the design of a paperless custom e- system that provides full inter- interconnectivity between the various role players. The proposed short term solutions do not carry prohibitive costs and have the potential to significantly reduce dwell time at the Dar es Salaam.

Arnold, Mathenge, Nora Dihel and Nicholas Strychacz (May, 2011) wrote on the current role of clearing and forwarding agents within the international trade logistics chain in the East Africa Community, an aspect of logistics industry that has been relatively under- examined

Further, Sweeney and Claudia- Maria Wagner (2011) examined the nature and evolution of e- marketplaces and goes on to identify key adoption drivers and benefits based on the supply chain management. They also identify the scope of clearing and forwarding, the field environment including rights, duties and responsibilities of freight forwarders.

All these researchers and many more recognizes that there are many barriers that ongoing research needs to address if potential of e- commerce is to be fulfilled. But none of them have written about the management of e- commerce.

Hossain and Rahman (2011) In their paper on facilitating trade through simplification of trade processes and procedures in Bangladesh, the analysis revealed that the business process for export of woven garment from Bangladesh to India by sea involves 12 steps, 26 documents and agencies, and can generally be completed within 40 days, an average. This has been said is due to awkward procedures in export – import procedures. Hence the limited we of modern technology in government offices and banks in the context of international trade have been criticizes by all stakeholders.

Container terminal in Dar es Salaam port

Dar es Salaam port is the Tanzania principal port which rated capacity of 4.1 million dry cargo and 6.0 million bulk liquid cargo. The port has a total quay length of about 2000metres with 11 deep water berths. It handles about 95% of the Tanzania international trade.

The serves the landlocked countries of Malawi, Zambia, Democratic Republic of Congo, Burundi, Rwanda and Uganda. The port is strategically placed to serve as a convenient freight linkage not only to and from east and central Africa countries but also to middle and Far East, Europe, Australia and America. (www.tanzaniaports.com)

2.6 Legal Issue

As agreed at the UNCTAD Expert Meeting on Capacity-Building in the Area of Electronic Commerce: Legal and Regulatory Dimensions, the existing laws and regulations are generally applicable in an electronic environment. However, as they were mostly developed in the absence of electronic systems, they may create uncertainty as to their legal effect and would need to be adapted or supplemented in view of the new media currently in use.

Legal issues identified by various studies as creating legal barriers to the development of E-commerce are equally relevant to transport. A document issued by the UNCTAD secretariat reviewed many of the legal issues arising from paper-based rules and regulations such as the requirements for “writing”, “signature” or “original”, the evidential value of an electronic message, negotiability and documents of title, validity and formation of contract. These issues have been dealt with by the UNCITRAL Model Law on Electronic Commerce, which is aimed at providing guidelines to national legislators for removing legal barriers to e-commerce.

Transport conventions

There are laws governing certain transactions such as transport which require a written and signed paper document for the validity of the transaction. Such obligations may also arise international conventions applicable to international trade and transport early international conventions applicable to transport proceed on the implicit assumption that the "documents" which are governed by the conventions, such as the bill of lading, air waybill or consignment note, must be in paper form. The Convention for the Unification of Certain Rules Relating to Bills of Lading 1924 (Hague Rules) and the Protocol of 1968 to amend this Convention (Hague/Visby Rules) apply only if a "bill of lading or similar document of title" has been issued.

The requirement in these instruments that a bill of lading must be "issued" and "surrendered" and that certain information be "noted" on or "inserted" in a bill of lading presupposes the existence of a paper document

The United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules), on the other hand, applies to "contracts o f carriage" as opposed to "bill of lading or similar document of title" and allows the use of electronic signatures (article 14). Most provisions of the Convention, however, relate to bills of lading, which are defined (article 7) in terms reflecting those of a traditional negotiable bill of lading. Furthermore, the Convention does not define the term "document," which appears in a number of its provisions.

The Convention on the Contract for the International Carriage of Goods by Road, 1956 (CMR) provides that the consignment note "shall be made out in three original copies signed by the sender and by the carrier. The first copy shall be handed to the sender, the second shall accompany the goods and the third shall be retained by the carrier" (article 1).

The Warsaw Convention on air transport (1929) and the Hague Protocol of 1955 contain somewhat similar provisions. The Convention covering International Carriage by Rail, 1980 (CIM) contains a formal requirement for the use of a traditional consignment note for concluding a contract under the Convention (article 11). While the Conventions on air and rail transport were revised in 1999, permitting the use of electronic messages to replace the traditional transport documents, no revision of the CMR Convention is envisaged.

Failure to comply with the requirement for a transport document under these Conventions may have important consequences. In the case of conventions such as the Hague and Hague/Visby Rules, which apply to documents, it would render the Convention inapplicable by force of law with the loss of the right to rely on the benefits of the Convention, such as the limitation of liability and the evidentiary value of the document. In the case of conventions which apply to contracts such as the CMR and the Hamburg Rules, it would mean that while the Convention would apply to a transport contract, the absence of a prescribed transport document would render the relevant provisions on documentation inapplicable

The UNCITRAL Working Group on E-Commerce, discussing its future work, noted that "in many jurisdictions treaty obligations had precedence over internal legislation. Where an international instrument posed obstacles to use of electronic means of communication, such obstacles could only be removed by another international instrument of the same hierarchical nature". The Group, therefore, agreed to recommend to the UNCITRAL Commission that it undertake work towards the preparation of an international convention to remove legal barriers that might result from international trade law instruments.

Bills of lading – electronic alternatives

It is the document of title feature of the bill of lading that has caused most difficulty and is likely to continue to do so in relation to establishing its electronic alternative. Thus, the question in this context has been whether it is possible to achieve the functions of the traditional bills of lading in an electronic environment.

The first two attributes of the bill of lading, namely its function as a receipt and evidence of a contract, should not present specific legal problems. The legal issues arising in this context are common to other transport documents. Questions arise whether the law recognizes the validity of electronic signatures and authentication measures and whether electronic incorporation of the terms and conditions of the contract of carriage by reference is permitted by law.

The value of a paper document as a receipt and evidence of a contract mainly depends on the authenticity and integrity of its signature. There is no doubt that electronic authentication mechanism such as digital signatures can achieve greater authenticity because of the uniqueness of the algorithm method used. Digital Signatures and encryption techniques are used to ensure the integrity, authenticity and Confidentiality of electronic messages. The question, however, is the legal validity of such signatures.

The UNCITRAL Model Law on Electronic Commerce has been used by a number of States in removing legal barriers, including requirements for “writing”, “original” or “signatures”, recognizing the evidentiary effect of data messages, and permitting incorporation by reference of the terms and condition of the contract.

It is the unique characteristic of the bill of lading as – a document of title – that presents a challenge in the context of e-commerce. Under the existing national and international laws, legal rights are attached to the physical possession of the paper document. The possession of the traditional paper bill of lading represents constructive possession of the goods, and the right to delivery of the goods is based on the physical possession of an original document.

Thus, some commentators on the subject believe that under the existing legal regimes an electronic bill of lading is not a “negotiable document of title” and that it is “highly questionable whether the electronic bill can be used for the transfer of the title to the goods”. It has also been commented that: “In the present state of legislation, negotiability cannot be divorced from the physical possession of the original paper document". Furthermore in "jurisdictions in which physical endorsement and delivery of a document of title are required for the transfer of the

Ownership of goods, paperless transactions would be without effect". It has also been pointed out that "as a rule the creation of negotiable documents of title is a prerogative reserved solely for statutory law. These comments highlight the need for legislative reform in order to achieve the title function of the bill of lading in an electronic environment.

2.7 Security issues facing e-commerce in general

There are a number of security issues facing e-commerce that threaten its success. These threats are such as;

Liability – Consumer versus business

At the moment all of the risk in e-commerce transactions lies with the provider of the transaction (be that credit cards providers, PayPal, etc.). These entities protect themselves from online threats and fraud through insurance policies to cover the transactions and take a risk based approach. There is a ground swell within these entities to shift the liability away from themselves and provide a more balanced approach were consumers are liable if they do not act as a reasonable person on the Internet and make unsafe transactions.

Such a shift of legal liability would certainly erode e-commerce confidence in consumers and in particular discourage new entrants to online shopping. This is also raised in the latest Verizon report that even though breaches relating to payment cards cost between a few dollars to in excess of $100million; more substantial were the regulatory and legal fees for several victims. Ultimately the consumer is paying indirectly for this liability that these entities hold through transactional fees that are either passed to the consumer, the retailer or both parties. If such a swing was to occur this would lessen the financial risk posed and therefore reduce the insurance premiums; and there the next battle would begin around recognition of that reduced premium and how that is recognized in reduced transactional fees.

Trust

The Internet continues to be plagued by incidents which erode consumers' confidence. In particular e-commerce is directly affected as consumers are still wary of providing their personal and financial details to an online store in case a breach occurs of their data. Studies have continued to show that consumers are wary of purchasing online and one such study in 2005 of 5,000 Internet consumers came to the conclusion that 32% are more cautious when they shop online, and 14% buy fewer items because of security concerns.

Security incident-cost of clearing

There are many and varying standards that detail the notification of the loss of data. Some are industry driven and other are regulatory bodies (government). Generally the rules for disclosure are different in each country, but some companies that have an International presence may fall under multiple requirements to disclose the same incident in various ways, means and timeliness.

They are various costs to consider for an e-commerce security breach that could affect a business

- Regulation / Standard breach costs - this could include privacy breaches and pending legal action.
- Notification - there are requirements both legal or industry that business inform consumers of any breach, the cost would be variable depending on the type and size of business.
- Cleanup of compromised or infected systems - these costs could include bringing in specialist IT security professionals (forensics) or system / application engineers to rebuild any damaged or destroyed systems or applications.
- Loss of business critical data - this could put a business offline for days or even worse forever if there are no backups of critical data.
- Customer retainment.

Customer Retainment.

Businesses are and should be concerned about retaining their customers when a security breach occurs. Recent research from Uisys' Security Index in Australia found that "1,205 people found 85% of respondents would take their business elsewhere, while 47% would take legal action and 64% would expose the issue in a public forum".

Interestingly even the method of disclosure has found to be directly linked to the satisfaction and ultimately retainment of customers. With entities that do report an incident are likely to experience more than four times the customer turnover. To achieve the best outcome it is best to respond quickly through right communication channel - that being a personal telephone call and a follow-up personal letter.

The only counter evidence is that these studies date back to 2006 and with consumers more readily accepting email as a formal mechanism for communication the impact would like be less today, however, the message is the same – report quickly, accurately and sensitively as you are dealing with a consumer's asset that you have been entrusted to safe keep. Such a retribution against a company would cost them substantial brand damage and not only an immediate reduction in revenue from customer loss but take an extended time to recover and gain customer confidence back to regain revenue.

2.8 Challenges Facing East African Logistic Industry

There are several ramifications that arise from the fragmentation observed in the East Africa logistics system;

Firstly, fragmentation means that the various actors within the logistics chain have little interaction with one another, leading to longer waiting times for freight in the shipyard as well as inefficient customs processes that can result in costly errors and delays.

Poor infrastructure, physical constraints in ports and inefficient customs processing systems can cause delays and confusion, creating an environment where errors can easily occur. These problems increase the cost of conducting international trade in East Africa and in this way they act as a constraint on trade and limit the economic gains from trade.

Secondly, the vertical segmentation of the sector affects the types of services that are distributed through the logistics chain, and has led to differing levels of quality among clearing and forwarding agents and logistics firms. The larger firms are the most reputable and the most professional; they deal with large clients that demand a high level of services and their C & F agents tend to be the best trained and most skilled.

Small firms and individual agents are more likely to be untrained, and sometimes engage in unprofessional or corrupt behavior. For a long time, some of C & F agents were involved in unethical practices related to avoiding duties and taxes and diverting transit cargo into the local economy.

In the past many C & F agents were able to enter the profession during lapses in many countries' regulatory procedures. For example, in the mid- 1980s in Tanzania the responsibility for clearing cargo was transferred from the public sector to the private sector without sufficient oversight and there were no standard in place for the certification of new C & F agents.

For this reason, the quality of many smaller C & F firms and individual agents in the region is still suspect. Unprofessional and bad practices in the logistics sector have generally involved individual agents and small logistics firms.

There are two primary ways in which these actors introduce inefficiencies into the logistics sector;

1. These actors often lack the technical capacity or skill level for expecting and processing their shipment efficiently.

2. Individual agents and small firms are more likely to demand bribes from their clients in order to facilitate processing or to help their client evade tariff.

Policies for Overcoming the Challenges Facing the Logistics Industry

- Overcoming the Fragmented Nature of the Logistics Industry

  The East Africa international logistics chain is characterized by a sprawling and fragmented collection of actors and bureaucracies. The efficient use of modern technology can be an important part of reform by linking different parts of the logistics chain during customs processing because it is difficult to overcome fundamental lack of infrastructure quickly.

  For this reason, customs authorities in Tanzania is midway through much-needed process of technological reform.

  They have simplified the customs declaration form and introduce information and communication technology (ICT) system for processing documentation upgraded their processes for valuation developed simple risk profiles, introduced channeling and set up preferred trader programs.

- Overcoming the lack of training for some C & F agents.

  The level of competence of C & F agents in the East Africa Community varies dramatically. In general, large firms with foreign ownership and international scope employ the majority of trained C & F agents. Although this is partly due to the fact that large firms are better able to compensate highly trained agents, it also is due to the roles that different firms play as well as the requirements of their clients; large firms tend to handle complex transactions for international companies.

  Most agents working for small C & F firms have only on the job experience, and while this is sufficient for simple transactions, they lack knowledge of modern trade practices such as incoterms, rules of origin, documentary requirements for bilateral trade agreements, intermodal transport, bonded operations, technical and supply chain software.

A recent trend is that C & F agents must be certified and licensed and are suspending licenses where a pattern of illegal behavior is observed. The standards for certification at national level now include an examination and training in modern customs procedures in several countries.

Officials in C & F business have recognized that strict training and certification for C & F agents is essential and demand for higher levels of training from freight forwarding associations is growing.

Lastly with the most competent suppliers resulting in successful and quality provision of shipping, clearing and forwarding services and subsequent cost saving there must be an advantageous agreement;

Scope of Contractor's service

- The contractor shall provide full clearing and forwarding services, as and when request by bidders in its capacity as an accredited clearing and forwarding company limited.

- The contractor shall at all times follow the instructions given by C & F company, not withstanding its obligation to advice such services on better conditions available to it, in terms of tariffs, carriers , couriers.

- The enumeration of services as set forth in the scope of services although compulsory is intended only to be illustrative of the range of services requested.

The contractor's service will therefore include, but will not be limited to the following, in particular;

(a) Upon receipt of the request, purchase order in respect of each shipment, designate the contractor's local office or a local agent, to provide services under this contract based on the geographical location of the staff supplier and notify the staff member or supplier in writing of such designation.

(b) Cause the agent to establish and maintain individual files for each request received and estimate the delivery date to consignee based on the anticipated packing date of personal effect or confirmed delivery date from the supplier.

(c) Cause the agent to initiate expediting procedures to insure that the goods are available for delivery from the supplier by the date specified by in the purchased order.

(d) Initiate follow ups actions with the supplier in the event the good listed on the shipping documents covering the shipment against the purchased are short-shipped by the supplier and / or incase the supplier advises on such shipping documents that certain goods back ordered are unavailable at the time the first portion of the purchase order is forwarded by the supplier.

(e) Insure that the number of pieces, dimension of each piece the description of items, the packing and the gross weight in documents submitted by the supplier and C & F firm and in those cases were goods are physically received by the contractor, check the packing to ascertain it is specifically for carriage.

(f) As soon as it has received the goods on behalf of C & F firm issue a signed arrival note indicating partial delivery number, the date goods were received, the number of pieces, goods volume and weight, the description of goods, name of staff member, supplier invoice number, the currency and amount, point of origin (delivery point or port of loading) and port of discharge

(g) Select the most direct, economical and advantageous, port of loading and discharging, or select port as instructed by the firm.

(h) Negotiate with non-vessel operating common carriers and other transportation companies giving swift reliable services in order to obtain the lowest available freight rates or as instructed by firm. The rates in no event are to exceed published tariff rates.

(i) Pepared required documentation based on the frim standard instruction, special instruction contained on the requestor purchased order/ applicable laws, regulations and as detected by the nature of the good and their packing or indicated by the firm.

(j) Once confirmation of particular forwarding has received by the agent advice the consignee with copy to the firm by telex or via local agent pertinent shipping information including estimated time of arrival of vessel or other means of transportation.

(k) Ensure distribution of all shipping documents to consignee and to firm. These documents will enable the consignee to clear the goods immediately upon arrival at the port of destination.

(l) Notify the consignee when vessel arrives at the ultimate port of discharge.

(m) Inform firm any situation which might lead to delay on the forwarding of the goods or placed the goods in jeopardy.

(n) Pre pay all applicable charge from point of collection from staff members residence/delivery by the supplier as indicated in the purchase order to point of destination named on the request to the point where the consignee takes delivery.

(o) Insure that all invoices submitted to the form shows the detail breakdown of the services and charges. Inform the firm for purpose of approval of any situation under the contract, which might impose financial obligation to the firm.

(p) Investigate any complaints from the firm staff regarding the shipment of their goods an d personal effects handled by the contractor and take necessary action.

(q) Supply transportation estimates and freight rates, for evaluation of bids on the firm purchase.

The contractor shall assign sufficient number of qualified staff to work exclusively on servicing this contract. And shall provide at the point of loading containers adequate loader and incase of additional loaders shall be provided at an agreed rate.

Financial Arrangements

Bidders are responsible for their own cost in preparing the bids. All payments shall be made on receipt for appropriate invoices upon completion of works.

2.9 Research Gap

From the empirical review, most of the authors and researchers have investigated on what can be done to facilitate trade through simplification of trade processes and procedures at the port. Management of e commerce in clearing and forwarding as one way of improving efficiency of the port remains un- researched at a desired rate. This is a gap and researcher anticipated to fill it.

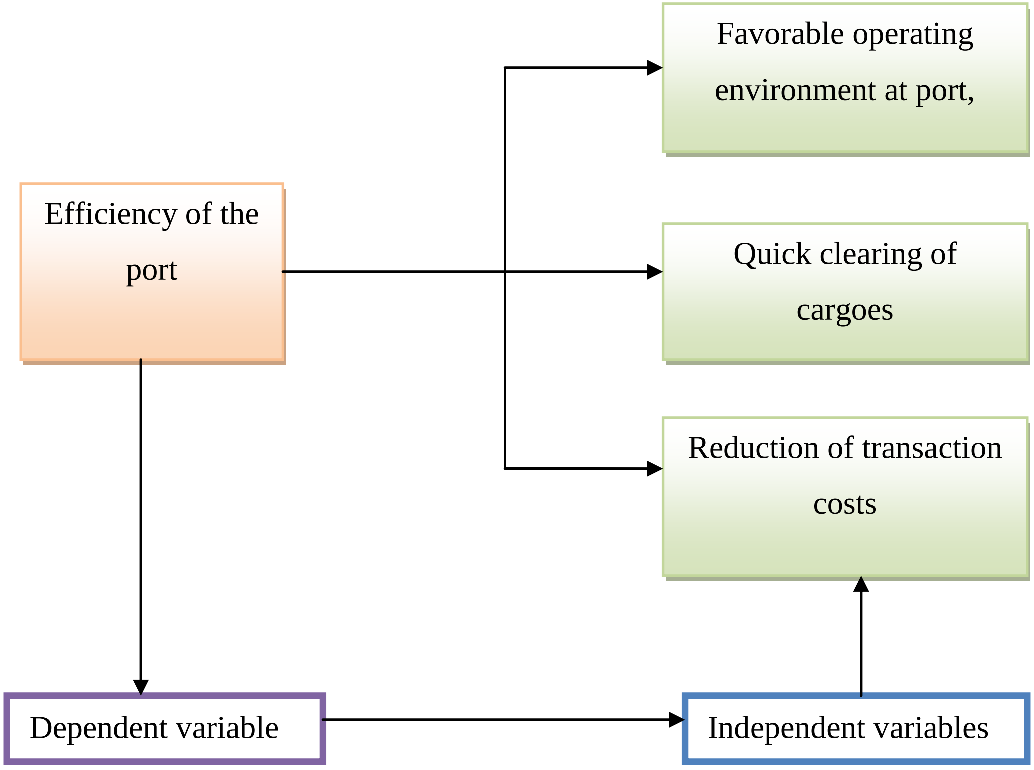
2.10 Conceptual Framework

A conceptual framework is defined as a broad idea and principles taken from relevant fields of inquiry and used to structure a subsequent presentation (Reinchel and Rammey, 1987). It is essentially a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate this. It forms part of the agenda for negotiation to be scrutinized and tested, reviewed and formed as a result of the investigation (Guba and Lincoln, 1989).

In this research we have independent variables and dependent variables whereby the independent variable is what the researcher (or nature) manipulates a treatment or program or cause, it influences, predict, control and determine the dependent variables. The dependent variable is what is affected by the independent variable, the roles or outcomes and the intervening variables work with the independent variables to influence the dependent variables.

For the purpose of this research, the independent variables are favorable operating environment at port, quick clearing of cargoes, and reduction of transaction costs. The dependent variable in this research is only one and it efficiency of the port.

Figure 2.2: Conceptual Framework



Source: Researcher own construction (2013)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents research methodology which was employed by the researcher during the field study. It describes the type of study design, study area, study population, sample size, sampling technique, types and sources of data collection methods.

3.2 Research Design

Kothari (2009) defined research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It is a conceptual structure within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data.

The main objective of the study is to assess the management of e- commerce in clearing and forwarding companies of TPA in Dar es Salaam. The design of this study was a case study because the study wants to study in depth the management of e- commerce in clearing and forwarding companies. Data collected through the case study design are comprehensive and reliable because of their ability to explore instances in depth. The design enabled the researcher to get information, which was purposive and comprehensive.

3.3 Research Area and Justification

The area of this study was in Dar es Salaam region as this was chosen because it has formal and informal sector activitities due to urbanization process and also all the activities concerning clearing and forwarding are mostly conducted in Dar es Salaam compared in other areas. Moreover this was an area mostly likely to find all activities regarding ports activities.

3.4 Sources of Data

A study of this nature requires the sampling of the views of people (primary source) as well as documents (secondary source). The observations of the researcher also came to bear in the study. These sources, when blended, helped to balance and guide the thought of the researcher towards a meaningful analysis cum conclusion.

3.4.1Primary Source

The primary source of data gives first hand information on the subject matter. This source allows a researcher the privilege of meeting stakeholders and getting their views on the particular subject of interest.

Osuala (1982) sees the primary data as the collection of facts and figures relating to the population. To collect the primary data for this research, questionnaires and interview were used.

Though the primary data is usually expensive to gather, it remained a very vital part of this study. For example, the opinion of TPA employees of the selected departments (ICT, Finance, Legal Services, Management Systems, Human Resources, Marketing, Procurement and Supplies, and Corporation Communications) helped the researcher in knowing the state of welfare of ICT usage in clearing and forwarding. This enhanced the appropriateness and feasibility of the recommendations.

3.4.2 Secondary Source

Any data that has been documented for the purpose of references or any other data that can be accessed without necessarily involving a face-to-face interaction is regarded as secondary. Occasionally, however, data collected for some other purpose, frequently for administrative purposes may serve as secondary data, (Osuala, 1982). The secondary source is a rich store for compiling a large number of statistics. For this research, our secondary data included Annual Reports of TPA. Other sources of literature included text books, journal articles, internet materials, World Bank publications, Government Publications, seminar papers, reports and records of TPA.

3.5 Data Collection Methods and Instruments

This section presents the tools used to gather data and on which the study relies absolutely. For instance, the interviews, questionnaires and nonparticipant observations used to elicit data for the study are defined and described below.

3.5.1 Interview and Interview Questions

The interview is a method of collecting social data at the individual level. This is a face-to-face method that ensures a higher response rate than postal questionnaires. It is very suitable for descriptive and exploratory purposes. Interviews could be guided or unguided. Any purposive conversation in which the interviewer attempts to obtain honest and complete answers to specific amount of questions is known as guided interview. Though it grants a face-to-face contact it is quite expensive in determining attitude and requires a trained interviewer to obtain accurate results.

The case is quite different with the unguided interview where the interviewee is the one leading the discussion, i.e. he determines the pace of the discussion. This allows the interviewer get as much information as he desires because his questions are structured in a way that allows him probe and establish emotional contact with the interviewee. For this study, the interview was made to capture the views of the Managing Directors of TPA regarding the management of E-commerce in clearing and forwarding. Interview questions were used to affect interviews.

3.5.2 Questionnaire

Questionnaires are most commonly used tools in survey research because they are easier to respond to and at the same time score and code. Respondents on the other hand, find them more convenient because they do less or no writing at all. Questionnaires involve framing questions about a particular subject matter and getting the relevant individuals to react to them.

They provide descriptions of the individual or group characteristics such as their personal data like gender, age, status, etc. The focus is to make comparison between groups, and between individuals and see the group dynamics or differences in perception. For the purpose of this study, the questionnaire was structured to capture the respondents' degree of agreement or disagreement on the elements of management of e-commerce in clearing and forwarding.

3.6 Population, Sample Size and Sampling Technique

Population refers to an entire group of individuals, events or objects having observable characteristics. In other words population is the aggregate of all that conform to a given specification, (Kothari, 2009).

Mugemba (2003) defined population as the entire set of objects and events or group of people which is the object of the research and about which the researcher wants to determine some characteristic.

The entire population for this study therefore is **60**. This is the total number of officials and other staff members of the TPA in Dar es Salaam region (Source: http://www.tanzaniaports.com/ accessed on 16th July, 2013 at 0906hrs) as depicted in the table below:

Table 3.1: Population under Study

S/N	Office	Category	Total Number
1	ICT	Employee	11
2	Finance	Employee	7
3	Legal Services	Employee	3
4	Management Systems	Employee	10
5	Human Resources	Employee	9
6	Marketing	Employee	8
7	Procurement and Supplies	Employee	10
8	Corporation Communications	Employee	2
TOTAL			**60**

Source: *Field Research (2013)*

This study does not intend to use the entire population but, a sample will be utilized for the purpose of generalization. A **sample** therefore is a smaller group of elements drawn through a definite procedure from a specified population, and the elements making this sample are those that are actually studied.

To determine the sample size for this study, and because the population is finite, we chose Yamane's formula to arrive at the appropriate number of staff to be administered questionnaire, thus;

3.7 Methods of Data Presentation and Analysis

The researcher adopted simple percentages, and tables' tools of analysis using Microsoft excel to present and analyze data in this study. The simple percentage and tables are to enable descriptive and inferential analysis respectively.

3.8 Justification for the Method of Analysis

This technique is very common in social sciences like business administration because it is relatively simpler to use and understand. And because it tends to also search for discrepancies and causal relationships between variables, the technique became more appropriate.

CHAPTER FOUR
PRESENTATION OF FINDINGS

4.1 Introduction

The data for this study were collected using questionnaires, interview and written sources. Questionnaire was the main method of data collection while interview and written sources were supplementary where the need arose. The questionnaires were distributed to the sample that was randomly drawn from the TPA Dar es Salaam. The data were analyzed using the Statistical Package for Social Science Software (SPSS) Version 16. However, in some other circumstances MS Excel was also used to make analysis of data. This chapter therefore presents the findings as analyzed from the questionnaires which were returned to researcher.

4.2 Respondents' Profile

The profile of the respondents was heterogeneous in terms of age, sex, education level, job category and working experience. The rationale behind the heterogeneity adopted is that the implementation of e-commerce in clearing and forwarding is a multi-facet phenomenon which involves all staff as long as they are the staff of the TPA. This part therefore provides the findings of the respondents' profile as analyzed from the questionnaires.

4.2.1 Sex of Respondents

The findings from table 4.1 indicate that males were 27 (60%) while females were 19 (40%) out of 46 respondents. The analysis shows that males were the majority who were 60% of all respondents against females who were 40% of the total number of respondents.

Table: 4.1: Sex of Respondents

Sex	Frequency	Percent
Male	27	60%
Female	19	40%
Total	**46**	**100%**

Source: Field data 2013

4.2.2 Age of Respondents

The Researcher was interested to examine the age of respondents. Therefore, table 4.2 shows the age categories of the respondents. The findings from the table, indicate that 3 (6.7%) of the respondents were at the age of 18 and 25 years and 10 (20%) of the respondents were at the age of 26 and 33 years. On the other hand 14 (31.1%) of the respondents were at the age of 34 and 41 years while, 9 (20%) of the respondents were at the age of 42 and 49 years. In terms of age, the analysis shows that the majority of the respondents were between the age of 34 and 41 years which is 31.1% of all the respondents while the minority of the respondents were at the age of 18 and 25 which is only 6.7%.

Table 4.2: Age Categories of Respondents

Age category	Frequency	Percent
18 – 25	3	6.7%
26 – 33	10	20%
34 – 41	14	31.1%
42 – 49	9	20%
50 and above	10	22.2%
Total	**45**	**100%**

Source: Field Data 2013

4.2.3 Education Level of Respondents

The respondents were also asked to indicate their highest education level they had attained. The purpose was to ensure that the Researcher seeks the opinions of respondents irrespective of education level. The highest education levels indicated were "Master's Degree", "Postgraduate Diploma", "Bachelor Degree", "Ordinary Diploma", "Form Six", "Form Four" or "Standard seven".

The findings from table 4.3 indicate that 20 (44.4%) of the respondents had Master's Degree, while 4 (6.7%) had Postgraduate Diploma. The findings further reveal that 10 (22.2%) of the respondents had Bachelor Degree while only 2 (4.4%) of the respondents had Ordinary Diploma. A total of 9 (20%) of the respondents had Secondary Education which was 8.9% and 11.1% for Form Six and Form Four education level respectively. The table also shows that only 1 (2.2%) respondent had Standard Seven education level.

Table 4.3: Education Level of Respondents

Education Levels	**Frequency**	**Percent**
Master's Degree	20	44.4%
Postgraduate Diploma	4	6.7%
Bachelor Degree	10	22.2%
Ordinary Diploma	2	4.4%
Form Six	4	8.9%
Form Four	5	11.1%
Standard Seven	1	2.2%
Total	**45**	**100%**

Source: Field Data 2013

4.2.4 Respondents' Job Categories

The respondents were also requested to indicate the job category they were working in. The job categories as per the TPA Scheme of Service are "Auxiliary Job Category", "Clerical Job Category" and "Professional Job Category". The TPA Scheme of Service provides these as the broad job categories for non-management staff.

The findings from table 4.4 reveal that 9 (17.8%) of the respondents were Auxiliary Staff while 7 (15.6%) of the respondents were Clerical Staff. The table further shows that Professional Staff were 30 (66.7%) of all the respondents. The analysis shows that Professional Staff were the majority who were 66.7% of all the respondents while Clerical Staff were found to be respectively few (15.6%) of all the respondents.

Table 4.4: Respondents' Job Categories

Job category	Frequency	Percent
Auxiliary Staff	9	17.8%
Clerical Staff	7	15.6%
Professional Staff	30	66.7%
Total	**45**	**100%**

Source: Field Data 2013

4.2.5 Respondents Working Experience

It was also the interest of the researcher to examine for how long the respondents had been working with the TPA. The years of working experience were categorized into five broad bands. The first band was from 1 to 7 years while the second band was from 8 to 15 years. The third band was from 16 to 23 years and the fourth band was from 24 to 31 years while the last band was from 32 years and above. It should however be noted that these broad bands were the researcher's own construction.

The findings from table 4.5 reveal that 9 (20%) of the respondents had been working with the TPA for the period of 1 to 7 years. The table further reveals that 21 (44.4%) of the respondents had working with the TPA for the period of 8 to 15 years. Again it was also found that 6 (13.3%) of the respondents had been working with the TPA for the period of 16 to 23 years. On the other hand 8 (17.8%) of the respondents had been working with the organization for the period of 24 and 31 years. The analysis also indicates that 2 (4.4%) of the respondents had been working with the organization for the period of 32 years and above.

Table 4.5: Respondents Working Experience

Years of Working Experience (Broad Bands)	Frequency	Percent
1 - 7 years	9	20%
8 - 15 years	21	44.4%
16 - 23 years	6	13.3%
24 - 31 years	8	17.8%
32 year and above	2	4.4%
Total	**45**	**100%**

Source: Field Data 2013

4.3 Operating Environment Experience of Private Sector at Dar es salaam Port

The first objective of this study among others was to investigate the operating environment experienced by private sector as it relates to the timely removal of cargo from the port facilities and identify the steps required to revise the environment including identification of any legal and regulatory changes required. The staff awareness was measured using one question. The question was whether as employees they have put some favorable environment on timely removal of cargo by customers.

4.3.1 Customs and Clearing and Forwarding Activities

A table 4.6 below illustrate the time in Port: Container imports for Tanzania. The findings show that the time from the discharge of the container up to the time of its removal from the container terminal (dwell time) is 15.9 days. The total customs process from receipt of the clearance documentation to release of the container takes 6.0 days, of which, the physical input of customs takes 4.6 days and the clearing and forwarding agent's (CFA) portion is 1.4 days. Of particular significance here is that it takes 6.2 days by the CFA to initiate the clearing process and another 2.7 days to arrange evacuation from the terminal after a customs release has been obtained. Of the dwell time some 64.8% can thus be attributed to the input of the CFA.

Table 4.6: Time in port: Container imports for Tanzania

Process	Customs time (days)	CFA time (days)	Total CFA time (days)	Total terminal time (days)	Total time in port (days)
Arrival to removal∗				1	15.9
Arrival to lodgment of TANSAD		6.2			
Lodgment of TANSAD to issue of CRO	4.6	1.4			
Release to removal		2.7	10.3		
Total	**4.6**	**10.3**		**1.0**	**15.9**

∗ *Container should be ready for collection after 24 hours*

Source: Field Data 2013

4.3.2 Time in Port: Container Imports for Over Border Countries

The findings relative to the time in port for an import container in transit to an over border country are reflected in Table 4.7. Dwell time amounts to 13.5 days, in respect of which, CFA activities represent 61.5% and those of Customs 31.1%. In this case the CFA takes 4.6 days to initiate the clearing process and once again 2.7 days to arrange collection of the container for delivery.

Table 4.7: Time in Port: Container Imports for Over Border Countries

Process	Customs time (days)	CFA time (days)	Total CFA time (days)	Total terminal time (days)	Total time in port (days)
Arrival to removal∗				1	13.5
Arrival to lodgment of TANSAD		64.6			
Lodgment of TANSAD to issue of CRO	4.2	1.0			
Release to removal		2.7	8.3		
Total	**4.2**	**8.3**		**1.0**	**13.5**

∗ *Container should be ready for collection after 24 hours*

Source: Field Data 2013

4.3.3 Time in Port and ICD: Container Imports Moved to ICDs

Table 4. 8 below shows the findings relative to container imports moved to ICDs. It was revealed that for an import container that was moved to an ICD the dwell time in port amounted to 6.6 days while it remained in the ICD for 11.4 days before it was collected. The ICD operator would have arranged movement to the ICD which took 6.6 days from discharge. CFA time is confined to activities at the ICD, in respect of which, it is assumed that it took 8 days, or 70.2% of the total ICD time, to complete clearing formalities. It is assumed that it took 2.3 days to remove the container from the ICD including internal ICD operations.

Table 4.8: Combined Time in Port and in ICD: Container Imports Moved to ICDS

Process	Customs time (days)	CFA time (days)	ICD operations (days)	Port time (days)	ICD time (days)	Total time in port and ICD (days)
Arrival at port to removal from ICD*						18
Port time				6.6		
ICD time					11.4	
Customs	1.1					
CFA		8.0				
ICD operations			2.3			
Total	**11.4**			**6.6**		**18**

Assume this is combined time in port and ICD

Source: Field Data 2013

4.4 Reasons for delays in clearing cargoes at the port

The second objective of the study was to examine the reasons for delays in clearing cargoes at the port of Dar es Salaam. The employee's views were measured by the use of ten factors, namely respondents' opinions on

(i) Inadequacy of inland transport, both in capacity and efficiency, in relation to trucks, wagons, highways and port access routes,

(ii) Failure of port management and planning authorities to make adequate plans in time for port developments,

(iii) Lack of co-operation between different private and governmental organizations working in the port area,

(iv) Inappropriate policies which lead to transit facilities being used for long-term storage where space is inadequate,
(v) Lack of reserve capacity in the ports.
(vi) Faulty documents,
(vii) Outmoded clearance facilities,
(viii) Importers allowed ordering shipments without sufficient funds to take delivery on arrival,
(ix) Impossibility of improving back-up land access in ports because adjacent land has been occupied by urban development,
(x) Activities carried out in the port area, not related directly to cargo handling, which may conflict with higher port throughput, e.g., Customs controls, inspection procedure.

Respondents were required to use the Likert scale ranging from 1 to 5 for the three statements that were given ranging from 1 for “strongly agree”, 2 for “agree”, 3 for “somewhat agree”, 4 for “disagree”, and 5 for “strongly disagree”

The researcher sought to examine the respondents’ opinions on the inadequacy of inland transport, both in capacity and efficiency, in relation to trucks, wagons, highways and port access routes as one of the cause of delaying clearing of cargoes at the port. Table 4.9 shows that 42 respondents counting 91.3% of the respondents strongly agreed, 2 respondents (4.3%) were in agreement, another 2 (4.3%) were strongly disagreed.

Table 4.9: Response on Inadequacy of Inland Transport, Both in Capacity and Efficiency, in Relation To Trucks, Wagons, Highways and Port Access Routes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	42	91.3	91.3	91.3
	agree	2	4.3	4.3	95.7
	strongly disagree	2	4.3	4.3	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Failure of port management and planning authorities to make adequate plans in time for port developments was another factor of investigation to seek opinion from respondents. Results show that 17 respondents (37%) were strongly agreed and 18 respondents (39.1%) were in agreement with this factor. Either 9 respondents (19.6%) were somewhat agreed and the rest 1% each were either disagreed or strongly disagreed.

Table 4.10: Response on Failure of Port Management and Planning Authorities to Make Adequate Plans in Time for Port Developments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	37.0	37.0	37.0
	agree	18	39.1	39.1	76.1
	somewhat agree	9	19.6	19.6	95.7
	disagree	1	2.2	2.2	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

On lack of co-operation between different private and government organizations working in the port area, table 4.11 shows that 17 respondents (37.0%) strongly agreed with this factor, 18 respondents (39.1%) were in agreement. 9 respondents counting 19.6% shown that they were in somewhat agreement. The rest 1 respondents in each counting 2.2% each were either disagreed or strongly disagreed.

Table 4.11: Response on Lack of Co-Operation between Different Private and Governmental Organizations Working in the Port Area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	17	37.0	37.0	37.0
	agree	18	39.1	39.1	76.1
	somewhat agree	9	19.6	19.6	95.7
	disagree	1	2.2	2.2	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Inappropriate policies which lead to transit facilities being used for long term storate where space is inadequate was another factor contributing a delay of clearing cargoes at the port of Dar es Salaam. Table 4.12 depict that 27 respondents (58.7%) were strongly agreed while 16(34.8%) agreed. The rest counting only 1(2.2%) in each were either somewhat agreed, or disagreed or strongly disagreed.

Table 4.12: Response on Inappropriate Policies which Lead to Transit Facilities Being Used For Long-Term Storage where Space is Inadequate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	27	58.7	58.7	58.7
	agree	16	34.8	34.8	93.5
	somewhat agree	1	2.2	2.2	95.7
	disagree	1	2.2	2.2	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Another factor for the respondents' analysis was lack of reserve capacity in the ports as shown in table 4.13. Results shows that 29 (63%) were strongly agreed on this factor. 3 (6.5) were in agreement, 5(10.9%) were somewhat agreed, 5 (10.9%) were disagreed and the remaining 4 (8.7%) were strongly disagreed.

Table 4.13: Response on Lack of Reserve Capacity in the Ports

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	29	63.0	63.0	63.0
	agree	3	6.5	6.5	69.6
	somewhat agree	5	10.9	10.9	80.4
	disagree	5	10.9	10.9	91.3
	strongly disagree	4	8.7	8.7	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Faulty documents are another factor contributing to delay of cargoes at Dar es Salaam port. This is justified by results depicted in table 4.14. From the table below, almost 21 (45.7%) were strongly agreed, 18 (39.1%) agreed, 5(10.9%) were somewhat agreed while the remaining correspondents counting 1(2.2%) were either disagreed or strongly disagreed.

Table 4.14: Response on Faulty Documents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	45.7	45.7	45.7
	agree	18	39.1	39.1	84.8
	somewhat agree	5	10.9	10.9	95.7
	disagree	1	2.2	2.2	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

On outmoded clearance facilities is contributing to the delay of cargoes at the port. Most of the facilities are too old making them not be effective as witnessed by results shown in table 4.15. Results shows that 21(45.7%) were strongly agreed followed by 8(17.45) who were in agreement. 7(10.9%) respondents were somewhat agreed while the rest 5(10.9%) each were either disagreed or strongly disagreed.

Table 4.15: Response on Outmoded Clearance Facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	21	45.7	45.7	45.7
	agree	8	17.4	17.4	63.0
	somewhat agree	7	15.2	15.2	78.3
	disagree	5	10.9	10.9	89.1
	strongly disagree	5	10.9	10.9	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Sometimes, importers are allowed ordering shipments without sufficient funds to take delivery on arrival. This is caused by delivery fee charged by TRA and TPA. Results are witnessed at table 4.16 where 26 (56.5%) were strongly agreed while 7(15.2%) were in agreement. 6(13%) were either somewhat agreed or disagreed in each. The rest 1 (2.2%) was strongly disagreed.

Table 4.16: Response on Importers Allowed Ordering Shipments without Sufficient Funds to Take Delivery on Arrival

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	26	56.5	56.5	56.5
	agree	7	15.2	15.2	71.7
	somewhat agree	6	13.0	13.0	84.8
	disagree	6	13.0	13.0	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Another factor analyzed as one of the factors contributing delay in clearing cargoes at the port was impossibility of improving back-up land access in ports because adjacent land has been occupied by urban development. Results indicated in table 4.17 show that 31 (67.4%) were strongly agreed while 15 (32.6%) were in agreement.

Table 4.17: Response on Impossibility of improving back-Up Land Access in Ports Because Adjacent Land has been occupied by Urban Development

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	31	67.4	67.4	67.4
	agree	15	32.6	32.6	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

Respondents viewed that activities carried out in the port area, not related directly to cargo handling, which may conflict with higher port throughput is another factor supporting delays of clearing some cargoes at the por. Results in table 4.18 shows that 40 (87%) were strongly agreed, while 3 (6.5%) were in agreement. 1 respondent (2.2%) was somewhat agree while 2(4.3%) disagreed.

Table 4.18: Response on Activities Carried Out in the Port Area, Not Related Directly to Cargo Handling, which May Conflict with Higher Port Throughput, E.G., Customs Controls, Inspection Procedure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	40	87.0	87.0	87.0
	agree	3	6.5	6.5	93.5
	somewhat agree	1	2.2	2.2	95.7
	disagree	2	4.3	4.3	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

4.4 How E- Commerce Can Reduce Transaction Costs

Objective 3 of this research was to investigate how transaction costs can be reduced to customers in case TPA adopts e-commerce in its business transactions. The employees views were measured by the use of three factors, namely respondents' opinions on (1) E- Commerce is more affordable than traditional EDI, (2) E-Commerce allows more business partners to be reached than with traditional EDI and (3) E-Commerce can reach a more geographically dispersed customer base.

Respondents were required to use the Likert scale ranging from 1 to 5 for the three statements that were given ranging from 1 for "strongly agree", 2 for "agree", 3 for "somewhat agree", 4 for "disagree", and 5 for "strongly disagree"

Generally the findings shown in table 4.19 indicate that adaptation of e-commerce would reduce transaction costs at a large extent. In examining this factor there was a strong agreement on the statement "e-commerce is more affordable than traditional EDI" by the mean score of 1.39 which is less than three (3.0) the threshold (decision point). On the other hand, on statement "e-commerce allows more business partners to be reached than with traditional EDI" the mean score was 1.37 which is again less than (3.0) the threshold (decision pint). Furthermore, the statement "e-commerce can reach a more geographical dispersed customer base" has an impact by mean score of 1.35 which is less than (3.0) the threshold.

Table 4.19: Summary of How E-Commerce Can Reduce Transaction Costs

		E- Commerce is more affordable than traditional EDI	E-Commerce allows more business partners to be reached than with traditional EDI	E-Commerce can reach a more geographically dispersed customer base
N	Valid	46	46	46
	Missing	0	0	0
Mean		1.39	1.37	1.35
Median		1.00	1.00	1.00
Mode		1	1	1
Std. Deviation		.856	.853	.924
Variance		.732	.727	.854
Range		4	4	4
Minimum		1	1	1
Maximum		5	5	5
Sum		64	63	62

Source: SPSS output from field survey, 2013

The researcher sought to examine the respondents' opinions on E-commerce is more affordable than traditional EDI. Table 4.20 shows that 35 respondents counting 76.1% of the respondents strongly agreed, 7 respondents (15.2%) were in agreement, another 2 (4.3%) were strongly disagreed. The rest were either disagreed or strongly disagreed by 2.2% each.

Table 4.20: E- Commerce is More Affordable than Traditional EDI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	35	76.1	76.1	76.1
	agree	7	15.2	15.2	91.3
	somewhat agree	2	4.3	4.3	95.7
	disagree	1	2.2	2.2	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

On the factor postulating E-commerce is more affordable than traditional EDI, table 4.21 give results as 36 respondents (78.3%) were strongly agreed followed by 6(13.0%) who were in agreement. 2 respondents (4.3%) were somewhat agreed and 1 respondent was strongly disagreed.

Table 4.21: E-Commerce Allows More Business Partners to be Reached than with Traditional EDI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	36	78.3	78.3	78.3
	agree	6	13.0	13.0	91.3
	somewhat agree	2	4.3	4.3	95.7
	disagree	1	2.2	2.2	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	46	100.0	100.0	

Source: SPSS output from field survey, 2013

The researcher was interested to analyze a factor that E-commerce can reach a more geographically dispersed customer base. Results show that 39 respondents counting 84.8% were strongly agreed while 2(4.3%) were agreed, somewhat agreed or disagreed in each. The rest 2.2% was strongly disagreed.

Table 4.22: E-Commerce Can Reach a More Geographically Dispersed Customer Base

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	39	84.8	84.8	84.8
	agree	2	4.3	4.3	89.1
	somewhat agree	2	4.3	4.3	93.5
	disagree	2	4.3	4.3	97.8
	strongly disagree	1	2.2	2.2	100.0
	Total	**46**	**100.0**	**100.0**	

Source: SPSS output from field survey, 2013

4.5 Analysis of the Conceptual Framework and Data findings

In the pursuit to explain the efficient of the port, the conceptual framework shown in figure 2.2 in chapter two was developed by the researcher. The underlying assumption developed in the conceptual framework is that efficient of the port depends on favorable operating environment at the port, quick clearing of the cargoes and reduction of the transaction costs.

The first independent variable in this conceptual framework is favorable environment of the port. The assumption behind this framework is that when there are favorable environment at the port in terms of lack of bureaucracy, lack of theft, good policies etc then the chance if increasing in efficient could be registered. It is therefore evident that respondents expect the organization to create an enabling environment for the smooth run of businesses.

The second independent variable in this conceptual framework is the quick delivery of the port. The assumption is that, when cargoes are delivered timely to their arrival, then this is an increase of efficiency of the port.

The third independent variable in this conceptual framework is the reduction of transaction costs. The assumption is that when the port promote on the use of e-commerce in all its business transactions, then there could be a reduction of transaction cost and hence increasing the efficiency of the port.

The results from table 4.23 and 4.24 show that there is significant impact of favorable operating environment at the port, quick clearing of the cargoes and reduction of the transaction costs to the efficiency of the port with all factors significantly contributing to it. The adjusted R square value from the model was 0.0. This indicates that 100% of efficiency of the port depends on favorable operating environment at the port, quick clearing of the cargoes and reduction of the transaction costs.

The findings from the analysis made depict a positive relationship between efficiency of the port and favorable operating environment at the port, quick clearing of the cargoes and reduction of the transaction costs.

The findings therefore uphold the fundamental inter-relationship of variables in the framework developed by the researcher. It should however be noted that, ethics of the port depends on between efficiency of the port and favorable operating environment at the port, quick clearing of the cargoes and reduction of the transaction costs by 100% leaving a lee way of other factors which may come into play.

Table 4.23: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.150[a]	.022	.000	.340	.022	1.013	1	44	.320

a. Predictors: (Constant), Reduction of transaction costs

Source: SPSS output from field survey, 2013

Alavi (2005) presenting a fragmented international trade transaction process, also pointed out the possible time- saving and cost- saving benefits that might come from shifting paper- based trade to paperless trade in particular electronic commerce.

Table 4.24: ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.117	1	.117	1.013	.320[a]
	Residual	5.100	44	.116		
	Total	**5.217**	**45**			

a. Predictors: (Constant), Reduction of transaction costs

b. Dependent Variable: Efficiency of the port

Source: SPSS output from field survey, 2013

Chiran, David and Kauffman, (2000) theory suggests that intermediaries lower the probability of unsuccessful trades, and consequently reduce the risk associated with trading. Moreover, because intermediaries trade over longer periods of time, they have incentives to maintain their reputation by providing high quality of goods and services and offering warranties. Thus, intermediaries are preferred over other trading mechanisms because they increase the users trust in a favorable transaction outcome.

Table 4.25: Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.300	.176		7.394	.000
	Reduction of transaction costs	-.150	.149	-.150	-1.006	.320

a. Dependent Variable: Efficiency of the port

Source: SPSS output from field survey, 2013

CHAPTER FIVE
DISCUSSION OF THE FINDINGS

5.1 Introduction

This chapter provides an in-depth discussion of the findings in relation to the stated objectives in chapter one. The discussion made a synthesis between the research findings, the literatures on the matter and researcher's own point of view. Each research objective was thoroughly discussed for the purpose developing logical remarks and recommendations thereafter this chapter.

5.2 Respondents' Profile

The profile of the respondents was found to be heterogeneous in terms of age, sex, education level, job category and working experience. These sub-variables seemed to have the impact on the responses of the respondents. For instance, in terms of education, the findings indicate that 20 (44.4%) of the respondents had Master's Degree. The researcher was of the opinion that group was knowledgeable to conceptualize issues related to management of e-commerce in clearing and forwarding.

5.3 Experience of Private Sector on the Operation Environment at TPA

The findings of this study clearly illustrate the significant influence that the customs and clearing process has on the dwell time in the port terminal. For this purpose, the total time in port (dwell time) and time for each process action was extracted in this study. Each process was then allocated to the party responsible for that process to arrive at the time contribution of each of the role players.

In areas where the time could not be clearly determined from the information at hand, assumptions were made in order to present a reasonable reflection of the situation on the ground. This, in turn, enabled identification of the areas of concern relative to the time constraints and possible impediments in the extant processes. The same procedure was followed for the ICDs.

The findings shows that the underlying factors that contribute to the lengthy dwell time experienced at the port of Dar es Salaam in terms of the TTRS are: the unacceptable average time of between 4 and 6 days to initiate the clearing process, the unacceptable average time of about 3 days that occurs between release by Customs and the actual evacuation of the container, the duration of the clearing process through customs of about 5 to 6 days, the abnormally excessive time taken to evacuate a container either in transit to another country or an ICD, the utilization of an ICD as an extension to the port terminal is a relatively pricy addition to overall transportation costs and the following factors negatively impact on the necessary minimization of the cost implications, the lapse of time of about 7 days before a container is moved to the ICD, which is unacceptable, the abnormally high dwell time of 11 days in the ICD, the unacceptable lengthy time of 8 days that includes the time before lodging the clearing documentation as well as the time between release by Customs and removal of the cargo from the ICD.

5.4 Causes of Delays in Clearing Cargoes at the Port

The second objective of the study was to examine the reasons for delays in clearing cargoes at the port of Dar es Salaam. Dwell time can be defined as the time a container remains in the container terminal, calculated from the time the container is stacked until the time it is de-stacked for placement on a vehicle for delivery.

The findings show that dwell time probably is one of the most important efficiency measurements in respect of container terminal operations as it relates to terminal operational fluidity and, very importantly, terminal capacity utilization. The average dwell time at a specific terminal depends on the utilization of the available space in terms of the services offered, incumbent regulations, rules and the like, i.e., period of stay restrictions, as well as the capacity and efficiency of the land based transport servicing the terminal.

There are registered factors that impact on dwell time some of them include:

1. inadequacy of inland transport, both in capacity and efficiency, in relation to trucks, wagons, highways and port access routes. failure of port management and planning authorities to make adequate plans in time for port developments,
2. lack of co-operation between different private and governmental organizations working in the port area, consignees without adequate financial resources or physical facilities to take cargo,
3. inappropriate policies which lead to transit facilities being used for long-term storage where space is inadequate,
4. lack of inland or port storage facilities causing cargo to remain too long in the port transit facilities,
5. lack of reserve capacity in the ports, late arriving documents, faulty documents, outmoded documentation requirements and processing methods,
6. outmoded clearance facilities, importers allowed to order shipments without sufficient funds to take delivery on arrival,
7. impossibility of improving back-up land access in ports because adjacent land has been occupied by urban development, activities carried out in the port area, not related directly to cargo handling, which may conflict with higher port throughput, e.g., Customs controls, inspection procedure.

On researcher's view point, many listed causes above are the results of lack political will by the government to ensure that port of Dar es Salaam could be on one the sector to increase the national income. The Port of Dar es Salaam is ideally located to service, via the various corridors, most of the countries forming the East African Union in addition to Zambia and the DRC, the latter two countries connected by rail. Through its location, it competes with Mombasa for traffic to/from some of the landlocked countries in the region. Dar es Salaam is also connected by rail to South Africa.

5.5 How E- Commerce Can Reduce Transaction Costs

This was the third objective of the research. From the benefits mentioned by respondents, there were three major benefits as shown in table 4.20, 4.21, 4.22

respectively. These are the benefits which are relative benefits of Internet and Web-based electronic commerce over traditional EDI methods. The cost and installation of EDI systems is generally quite high, and it has typically been beneficial only to larger firms like TPA that have enough sales volume to justify the costs of developing their own networks or subscribing to a value-added network. A value-added network (VAN) is a service to which a firm can subscribe. VANs provide many services, including data transmission, EDI translation, and store and forward messaging of transaction data. Because of the low cost of connecting to the Internet, medium and small businesses can now afford the connection cost. Further, because of software developments that allow Web-based EDI systems to interface with traditional EDI systems, businesses of all sizes can now transact with one another. This vastly expands the number of potential electronic business partners, some of which may be a substantial geographical distance away. The Internet offers a greater choice of global partners with which to conduct electronic commerce.

Procurement costs can be lowered by traditional EDI systems by consolidating purchases, developing relationships with key suppliers, negotiating volume discounts, and better integrating the manufacturing process. Internet electronic commerce offers additional benefits and potential for cost reductions over traditional EDI. Procurement costs can be lowered for all companies, regardless of size, due to the increased ability to transact electronically with one another. Data transmission costs can be lowered. A wider net can be cast when searching for suppliers. Options for partnering with other firms increase. For example, small and mid-sized companies benefit because they are now able to conduct business with the larger firms that are casting the wider nets. The smaller firms also have the opportunity to reduce their processing costs by using integrated electronic processing systems.

From researcher’s point of view, a reduction in inventory is desirable because of the associated reductions in storage, handling, insurance, and administrative costs. Internet electronic commerce can help firms to more optimally order the inventories by electronically linking suppliers and purchasers and allowing them to share updated production forecasts and projected inventory levels in order to allow both parties to collaboratively “fine tune” their production and delivery schedules. Businesses can also use the Internet to “unload” unwanted inventory or sell excess capacity very quickly and with extremely low marketing costs.

CHAPTER SIX
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1 Introduction

This chapter is divided into three parts: The first part is the summary of the study from chapter one to four; the second part is the conclusion and the third part is the recommendations.

6.2 Summary

This research was about investigating the management of e-commerce in clearing and forwarding at TPA. The focus was to (1) to investigate the operating environment experienced by private sector as it relates to the timely removal of cargo from the port facilities and identify the steps required to revise the environment including identification of any legal and regulatory changes required, (2) to investigate the reasons for delays at Dar es Salaam port as far as can be determined through current documentation and discussion with colleagues and contracts, (3) to investigate how transaction costs can be lowered for customers using e- commerce.

The results of this study provide treasured information for TPA Management and the government as policy makers, employees as implementers of the policies, academicians and other interested people. More specifically, the study highlights on the importance of implementing e-commerce as a new business model to be used by TPA.

In order to get acquainted with the problem stated, the researcher reviewed both theoretical and empirical literatures with the regards to the management of e-commerce. Through theoretical review, different concepts in relations to the clearing and forwarding, e-commerce and were defined. The review also examined various theories related to the study.

The empirical literature review was done by exploring a number of other different researches conducted. The empirical part of the study aimed at providing insights of information about what actually affects port efficiency. The review was used to make inter linkage between the theories and actual findings of the previously conducted studies. The inter linkage developed was used to construct the conceptual framework.

The researcher adopted case study design through which TPA Dar es Salaam was used. A total of 46 respondents out of 60 were selected using simple random sampling technique. Data collection tools included (1) questionnaires, (2) interview and (3) documentary review. The data collected were analyzed quantitatively and qualitatively and they were presented using tables of summary of frequencies and percentages. Statistical analysis for descriptive data provided the mean score where the threshold mean was used for decision making.

Generally it was found that respondents were found to be aware on increasing efficiency of TPA by adopting e-commerce, creating a favorable environment for smooth run of business at the port and quick clearing of cargoes at TPA.

6.3 Conclusion

The TPA has made major efforts during the past few years to relieve congestion at the Port of Dar es Salaam. The TPA recently seriously started to implement some of the recommendations contained by various researchers in response to which an improvement in the dwell time has been reported. It is believed that more actions are being contemplated by the port stakeholders to further improve the situation.

The contents of this report specifically discusses the causes of the unacceptable level of the dwell time in the container terminal in the Port of Dar es Salaam and advances remedial actions to improve the situation. The recommendations must be seen as supplementary to those contained in other researchers and are inspired by best practices in use at other major container terminals in ports in the SADC region.

6.4 Recommendations

From research observations, a researcher would like to recommend to TPA as the organization should be aware of the fact that adequate supporting infrastructure such as access roads, port ingress and egress facilities and truck staging areas be developed along with any extension to port facilities, undertake a study to ascertain whether adequate road truck capacity exists and to recommend solutions to the problems, if any, allow containers for storage for protracted periods only if spare capacity is available in the terminal, not allow empty containers not be allowed into the terminal before the carrying vessel's export stack opens, establish special empty container parks for the storage of empty containers or, alternatively, use ICDs for that purpose, move empty containers to/from the terminal at night to create more delivery capacity during the day and highly consideration on the transformation of doing business traditionally to adaptation of e-commerce.

REFERENCES

Alan E. Branch (1999); *Export Practice and Management* - London, International Thompson Business Press.

Alan E. Branch (1995**);** *Dictionary of Shipping International Business Trade Terms and Abbreviation* **-** London , Witherby and Co. Ltd.

Arnold. J, Mathenge. J, Nora Dihel and Nicholas Strychacz (2011); The *Role of Clearing and Forwarding Agents in Reforming the EAC Logistics Sector*.

Aurecon Group (2011) *Baseline Survey to Launch a Transport Observatory along the Central and Dar-Es Salaam Corridors in East Africa*, Second Draft Final Report,

Boateng.R, Molla. A and Heeks, R (2009); E- Commerce in Developing Economies: A Review of Theoretical Frameworks and Approaches IGI Global.

Freight clearing and Forwarding Procedures EAC CU 007

Kimbunga T. *In Monthly Newsletter of the Confederation of Tanzania Industries; The voice of Industry*, Issue No. 142, ISSN No. 0856-8146, January/ February, 2009.

Kothari, C. R (2009**);** *Research Methodology: Methods and Techniques*, New Age International.

Hossain, S and Rahman T. (2011); *Facilitating Trade through Simplification of Trade Processes and Procedures in Bangladesh in ESCAP*

Wagner C. Maria and Sweeney. E (2010); *E- Business in Supply Chain Management*, Dublin Institute of Technology.

Israel (1994) *Institutional Development: Incentives to Performance*, World Bank Publication, Baltimore: John Hopkins University Press.

TRA (2009) *Tanzania Time Release Study*,

Tshepo Kgare, Gael Raballand and Hans Ittman, (2011) *Cargo Dwell Time in Durban and its Lessons for Ports in Sub-Saharan Africa.*

TICTS website *Facilities at Dar es Salaam Container Terminal, Import Process, Conditions for ships to anchor at Dar es Salaam Port*" accessed on 19th July 2013, at 1151hrs

APPENDICES

Appendix 1: Research Questionnaire for TPA Staff

Introduction

This study is undertaken to examine the Management of E-Commerce in Clearing and Forwarding. The study is an academic requirement (dissertation) for the award of Master of Business Administration in Corporate Management (MBA-CM) of Mzumbe University. I kindly request you to take a brief moment to complete this short questionnaire. Your honest response will enable the establishment of important facts necessary for improving the Dar es Salaam port efficiency.

General Instruction: Choose the correct answer by writing its letter in the brackets.

Part One: Background Information

No	Category	Variables
1	Sex	a.) Male ( ) b.) Female ( )
2	Age	a.) 18 – 25 ( ) b.) 26 – 33 ( ) c.) 34 – 41 ( ) d.) 42 – 49 ( ) e.) 50 and above ( )
3	Education level	a.) Master's Degree ( ) b.) Postgraduate Diploma ( ) c.) Bachelor Degree ( ) d.) Ordinary Diploma ( ) e.) Form Six ( ) f.) Form four ( ) g.) Standard Seven ( )
4	Job Category	a.) Auxiliary Staff ( ) b.) Clerical Staff ( ) c.) Professional Staff ( )
5	Working Experience	1 1 – 7 years ( ) 2 8 – 15 years ( ) 3 16 – 23 years ( ) 4 24 – 31 years ( ) 5 32 years and above ( )

Part Two: Causes of delays in clearing cargoes at the port

		1	2	3	4	5
S/N		**Strongly agree**	**agree**	**Somewhat agree**	**disagree**	**Strongly disagree**
6	Investments in berths without ensuring that back-up areas are sufficient to efficiently service the berths					
7	Inadequacy of inland transport, both in capacity and efficiency, in relation to trucks, wagons,					

		1	2	3	4	5
S/N		**Strongly agree**	**agree**	**Somewhat agree**	**disagree**	**Strongly disagree**
	highways and port access routes					
8	Failure of port management and planning authorities to make adequate plans in time for port developments.					
9	Lack of co-operation between different private and governmental organizations working in the port area					
10	Consignees without adequate financial resources or physical facilities to take cargo					
11	Inappropriate policies which lead to transit facilities being used for long-term storage where space is inadequate					
12	Lack of enough inland or port storage facilities causing cargo to remain too long in the port transit facilities.					
13	Lack of reserve capacity in the ports					
14	Late arriving documents.					
15	Faulty documents.					
16	Outmoded documentation requirements and processing methods					

		1	2	3	4	5
S/N		**Strongly agree**	**agree**	**Somewhat agree**	**disagree**	**Strongly disagree**
17	Outmoded clearance facilities.					
18	Importers allowed to order shipments without sufficient funds to take delivery on arrival					
19	Impossibility of improving back-up land access in ports because adjacent land has been occupied by urban development					
20	Activities carried out in the port area, not related directly to cargo handling, which may conflict with higher port throughput, e.g., Customs controls, inspection procedure					

Part Three: How E-commerce can reduce transaction costs

		1	2	3	4	5
S/N		Strongly agree	agree	Some what agree	disagree	Strongly disagree
21	E- Commerce is more affordable than traditional EDI					
22	E-Commerce allows more business partners to be reached than with traditional EDI					
23	E-Commerce can reach a more geographically dispersed customer base					