ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

(GRADUATE PROGRAM)

A MASTER'S THESIS ON;

FACTORS AFFECTING THE IMPLEMENTATION OF ETHIOPIAN ELECTRONIC SINGLE WINDOW, THE CASE OF ADDIS ABABA AIR PORT CUSTOMS BRANCH OFFICE

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DECLARATION

I, the under signed, declare that this thesis is my original work, prepared under the guidance of Dr. Busha Temesgen (Assistant Professor). All sources of material used while working on this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any type of degree.

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Abstract

UN/CEFACT(2020) notes, Performing international trade requires preparation and submission of large volume of information and documents to government regulatory authorities and most of the time it is performed through their agencies and each will have their own electronic or paper forms as a result it is time taking and cost associated with procedures and documents is very high. Trade facilitation tools are helpful to avoid these extensive requirements and to decreases time and cost of processing trade. Electronic single window is one of the tools, it is a facility that allows parties involved in trade to lodge information and documents with a single entry point to fulfill import, export, and transit related regulatory requirements. The government of Ethiopia has launched an electronic single window in January 2020 as a means for trade facilitation.it has believed that it will decrease the time and cost of performing cross border trade, however since paper work was trend for many years there may be resistance to change and due to lack of technical knowledge and other technical issues it will not be easy to use the system so creating awareness through training, promotion and communication is needed. The study has conducted to identify major factors affecting the successfulness of the implementation of the SW. Five factors were identified from related literature review for successful implementation of single window namely; stakeholders' coordination, enabling legal framework, political will, business model and technical issues. The population of the study includes importers and agencies in Addis Ababa currently operating in Addis Ababa airport customs branch office using the system. In conducting the study primary data were collected using questionnaire and interview. The research approach was both qualitative and quantitative and the research design used was descriptive and explanatory. Data analyzed by quantitative and qualitative method of analysis and descriptive statistics was computed by using Statistical Package for Social Sciences (SPSS). According to the findings the implementation has five stages and it is now in its second stage; paperless customs has introduced in sep.2020 and the existing SW is just a bridge between traders and government agencies, the SW for import community, national single window and regional single windows are going to be implementing in the next stages respectively. Based on the study findings there is an appropriate political commitment, enabling legal frame work and a suitable business model, However improvement required regarding stakeholders' coordination and in some technical issues.

Key words: single window system, trade facilitation

Acronyms

ASYCUDA	Automated System for Customs Data
COMESA	Common market for eastern and southern Africa
ECC	Ethiopian customs commission
ECMS	Ethiopian customs management system
EDI	Electronic data input
ERCA	Ethiopian revenue and customs authority
ESCWA	Economic and Social Commission for Western Asia
ESW	Ethiopian electronic single window
ICT	Information and communication technology
KPI	key performance indicators
NBE	National bank of Ethiopia
SW	Single window
SWS	Single Window System
UN/CEFACT	United Nations Centre for trade facilitation and electronic data
UNCTAD	United Nations Commission on Trade and Development
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Commission for Asia and Pacific
UNNEXT	United Nations network of experts for paperless trade in Asia and the pacific
VAN	Value added networks
WCO	World Customs Organization
WTO	World Trade Organization
XML	Extensible Mark-up language

CHAPTER ONE

INTRODUCTION

1.1Background of the Study

In many countries, companies involved in international trade have regularly to prepare and submit large volumes of information and documents to governmental authorities to comply with import, export and transit-related regulatory requirements. This information and documentation often has to be submitted through several different agencies, each with their own specific (manual or automated) systems and paper forms. These extensive requirements, together with their associated compliance costs, can constitute a serious burden to both governments and the business community and can also be a serious barrier to the development of international trade. (UN/CEFACT RE.NO.33, 2020, p.1)

The idea of trade facilitation comes in to existence to decrease this burden especially recently using electronic trade facilitation tools, systems operating by employing information and communication technology (ICT), is becoming important. Trade facilitation looks at how procedures and controls governing the movement of goods across national borders can be improved to reduce associated cost burdens and maximize efficiency while safeguarding legitimate regulatory objectives. Grainger, (2007, p.42)

History of customs automation in Ethiopia started in July 1998 when the first site (A.A. Airport Cargo) was automated. ERCA (2004) - that is when ASYCUDA (Automated System of Customs

Data) provided by UNCTAD was implemented. Before that customs declaration was prepared and submitted manually. In July, 2017 ASYCUDA system was replaced by a web based system named ECMS (Ethiopian customs management system). It is a complete automated Customs Clearance system powered by Webb Fontaine's Trade World Manager TWM software platform and it covers all Customs Regimes Import, Export, Transit, Warehousing and others. (esw.et 2019) Since it is a web based system it is friendly than the ASYCUDA system and it can be accessed everywhere, however it has been used mainly by customs to perform clearance and related activities and by customs agents to submit declarations and documents online and by traders to access information regarding tariff exchange rate and for tracking shipments.

In January 2020, The Ethiopian government has launched an electronic single window designed to be used by stake holders of international trade. It has believed that it will reduce the 44 days long paper work process for importers and exporters to 15 days. Gradually, it is also expected to cut the 15 days to three working days. (ECC,.2020). Then based on letter written by customs commission to national bank of Ethiopia (NBE)-it becomes mandatory for traders to use the single window to request permits, to submit documents and to receive documents as of July 8, 2020.

Currently, some government regulatory authorities, insurance companies, banks, importers, and exporters are using the system. Since the single window is new and paper work was trend for many years, creating awareness or know how will be an issue and due to lack of enough training and experience it will not be easy to use the system. This study has conducted with the aim of

identifying factors affecting the successful implementation of Ethiopian electronic Single Window service.

1.2. Statement of the Problem

Performing cross border trade in Ethiopian requires submission of high volume of document and information and these information and documents have to be submitted manually. The requirement of submission of high volume of information and documentation along with long time customs procedure make it time taking and costly. The government tries to improve it through different ways and Customs automation is one of the solutions to simplify international trade operation.

In June 1998 the ACYCUDA system was introduced and till July 2017 it has been used to prepare and register customs declarations by customs agents and to accept declarations and perform customs clearance by customs offices, but most documents even declaration was submitting manually and as a result it was time taking and costly. In July 2017 a new web based system called ECMS has introduced and since then declarations have been preparing through the system and since September 2020 all documents necessary for customs clearance have been submitting by customs agents to customs offices using the system,. However documents like pre import and export permits were requested and issued manually.

The country launches an electronic single window system for traders in Jan. 2020 designed to be used for the application and issuance of licenses, permits, certificates and other documents required for the importation and exportation of goods electronically. it has believed that it will

decrease time and cost of trade procedure and has other benefits like decreasing corruption, decreasing bureaucratic procedures, increasing customers satisfaction, increases reliability of statistics.

Currently some government agencies, insurance companies, banks, importers and exporters are using the system as it is mandatory to use it to perform international trade and it has believed that it will facilitate trade. However since the system is in its introductory phase there is lack of awareness and it may be due to lack of adequate training promotion, and communication; it will not be easy to use the system because of other factors like; inaccessibility and unfriendliness of the system and lack of technical knowledge and other technical issues .This study has conducted with the aim of identifying factors that are affecting the implementation of Ethiopian electronic Single Window system, more specifically the following basic questions have addressed by the study:

1.3. Research Questions

1.3.1. General question;

What major factors are affecting the successful implementation of Ethiopian electronic single window?

1.3.2. Specific questions;

In addition to the general research question the study tries to answer the following specific questions;

1. How is the level of effectiveness of Stakeholder's coordination?

2. How much enabling the legal frame work of the county is for the implementation of the single window system?

3. What is the extent political will of the government regarding the implementation of the single window?

4, what type of business model has implemented in establishing the single window system?

5. Which technical issues have considered in establishing the single window system?

1.4. Research Objectives

1.4.1. General Research Objective

To identify major factors affecting the successful implementation of Ethiopian electronic single window system.

1.4.2. Specific objectives

1. To examine the level of effectiveness of Stakeholder's coordination.

2. To examine the level of legal frame work of the county to enable the implementation of the single window system.

3. To identify the extent of political will of the government regarding the implementation of the single window.

4. To identify the type of business model implemented in establishing the single window.

5. To examine the technical issues considered in establishing the single window.

1.5. Significance of the Study

Since the aim of the research is identifying factors that are affecting the implementation of Ethiopian electronic single window the result will be helpful for policy makers, researchers and stakeholders of international trade

1.6. Scope of the Study

The scope of the study is limited to importers and agencies operating currently in Addis Ababa airport customs branch office through the single window system and from cross border customs producers the study is limited to preclearance import customs procedures that have been performing thought the electronic single window system currently.

1.7. Limitation of the Study

Since the system has implemented before few months from now the study depend mainly on primary data and due to the existing covid-19 pandemic face to face interview and discussion was not easy.

1.8. Organization of the study

The study has organized in five chapters. Chapter one is Introduction: which contains background of the study, statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, limitation of the study, and organization of the study; chapter two: contains related Literature; chapter three contains Research Methodology; chapter four contains Results and discussion and finally Chapter five contain Summary, Conclusion, recommendation.

CHAPTER TWO

REVIEW OF REATED LITRATURE

2.1. Empirical review

2.1.1. Trade facilitation

WTO on its online training has defined Trade facilitation as “the simplification, standardization and harmonization of international trade procedures” where trade procedures are the activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade.

The modernization of trade and customs procedures and administrative practices in particular through use of information and communication technology (sometimes referred to as ICT) is often a key element in addition to the simplification, standardization, and harmonization objectives. (Grainger, 2011)

2.1.2 Elements of trade facilitation

As Grainger,(2011) notes, Independent elements that define trade facilitation include; The simplification and harmonization of applicable rules and procedures; The modernization of trade compliance systems, in particular the sharing of information and lodgment of declarations between business and government stakeholders; The administration and management of trade and customs procedures; and The institutional mechanisms to safeguard the effective implementation of trade facilitation principles and the ongoing commitment to reform. And the

focus of modernization of trade compliance systems is on speeding up the submission and processing of trade and customs declarations operations, especially through use of modern information technology. (Grainger, 2011)

2.1.3. Electronic trade facilitation

By adopting ICTs and reducing the complexity of international trade and minimizing the transaction costs, participants in international trade can save billions of dollars every year and benefit from an increased security and transparency in supply chains (UNECE, 2006b). And electronically facilitated international trade becomes indispensable in the face of increased volumes of international trade and the fear that the traditional paper-based system will not be able to cope with the rising amount of international trade transactions (UNESCAP, 2002).

The goal of electronic trade facilitation is to improve the operational efficiency and effectiveness of procedures, documentation flow and data exchange in international trade transactions. (UNESCAP, 1999) While recognizing the numerous benefits of electronic trade facilitation, many countries and international organizations have promoted the development and Implementation of trade portals that allow business operators and governments to process trade information submitted in electronic formats, typically in one place, to all the concerned parties. Moreover, the concept of trade facilitation in general, and that of a single window in particular, has been recently explored and piloted by several regional integration groupings as a means of trade facilitation at the regional level. (Nowak, 2007)

According to UNCE (2012), In the 1960s and 1970s, Customs authorities first began to automate their functions using systems such as ASYCUDA (Automated System of Customs Data) provided by UNCTAD. Later Electronic Data Input (EDI) and Value-Added Networks were used for trade exchanges, operated by VAN providers. In the 90's Port Community systems providing single interface between the trading community and Customs / Port Authority emerged. These systems offered very limited functionalities. The next step was the development of national electronic Single Windows starting in the early 2000s. In the recent years the discussion turned to regional Single Windows and cross-border interoperability of national single Windows to cover entire supply chains. (UNCE, 2012)

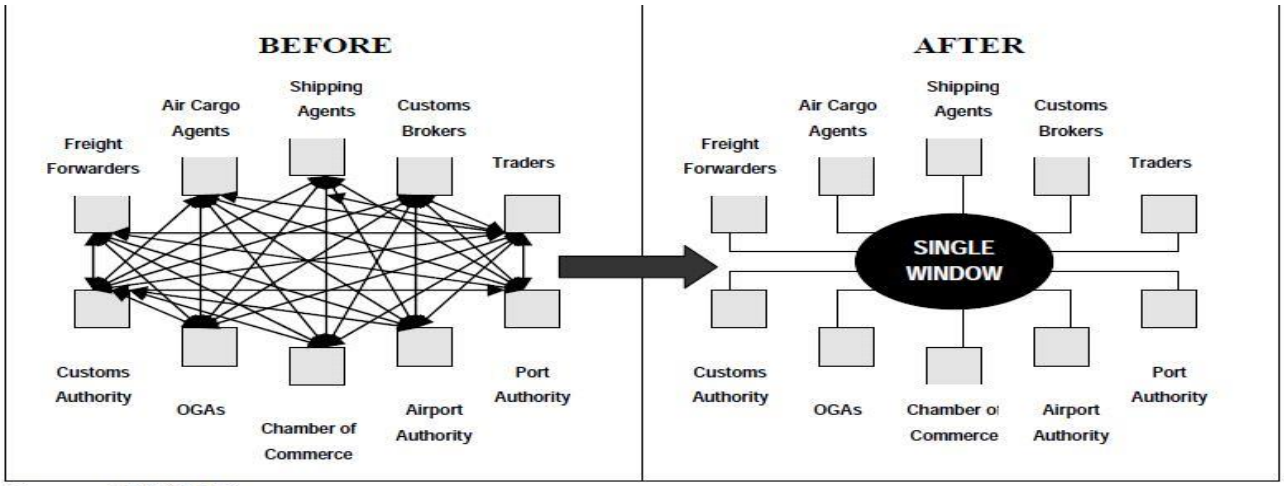
2.2. Theoretical review

2.2.1. The concept of electronic single window

According to UN/CEFCAT (2020,p.3) recommendation no.33, Single Window is defined as a facility providing trade facilitation that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. Individual data elements should only be submitted once electronically, in practical terms, the Single Window aims to expedite and simplify information flows between the private sector and the public sector and bring meaningful gains to all parties involved in cross-border trade. The Single Window is generally managed centrally by a lead agency, enabling the appropriate governmental authorities and agencies to receive or have access to the information relevant for their purpose. In addition, participating authorities and agencies should coordinate their controls. In some cases, the Single Window may provide facilities for payment of relevant duties, taxes and fees.

According to ESCAP (2018), Electronic Single Window (SW) generally refers to an electronic facility that allows parties involved in International trade and transport to submit all information needed to fulfill trade-related regulatory requirements at once and at a single-entry point. This digital trade facilitation measure aims at reducing the regulatory burden for traders when completing import, export and transit-related Procedures and It has emerged more than a decade ago and has become a core component of trade Facilitation reforms. (ESCAP, 2018)

UN/CEFACT (2020) R.no.33.15 notes that the objective of Electronic Single Window is to streamline processes and make trading easier both for private-sector operators and government agencies. It is not meant to only dematerializing existing paper processes (as dematerialization alone does not optimize processes for greater efficiency). The establishment of an electronic system for a Single Window is a means to achieve trade facilitation; the goal is trade facilitation, not an ICT system. (UN/CEFACT, 2020)



Source: UNCTAD.
Note: OGAs = other government agencies.

Figure 2.1.Trade documentation operations before and after SWS Implementation

Source: UNCTAD

2.2.2. Electronic single window in Ethiopia

Ethiopia has launched Electronic single window in in January 2020. (ERCA, 2020) It is a single window that connects traders with government regulatory agencies. It will decrease cost and time needed to perform international trade. Since the system is online any applicant can apply from everywhere and no need of physical contact to request and receive pre import or export permits and other documents as a result there will be a significant decrease in time and cost of possessing import or export.

esw.et (2020) notes that, Ethiopian Electronic single window is an electronic platform for the application and issuance of licenses, permits, certificates and other documents required for the importation and exportation of goods electronically. It is a single point of entry for the application submission, processing and issuance of such documents. A trader or any person who is importing or exporting goods submits application for receives the required documents from government regulatory institutions while he/she is at his/her office or any convenient place using the internet. This eliminates (or significantly reduces if not entirely eliminate at all) the requirement for visits to those institution. (esw.et 2019).The agency that is playing the leading and coordinating role for the implementation of the system is the Ethiopian Customs commission.

The ESW system consists three main parts; (esw.et 2019).

1. Trader Portal: is a portal in which a trader submits the trade documents required for customs and border clearance electronically, views the processing procedures and various statistical information and provides the function to pay the taxes and fees electronically.

2. CBRA Portal: is a portal that provides the function that the person in charge of the authorities to process electronically the verification, inspection and approval of the documents received through the trader portal.

3. Messaging Gateway: handles the electronic document exchange between the trader portal and CBRA portal, provides customs declaration and tariff information, bank and electronic pay.

2.2.3. Benefits of electronic single window

The government, public and private sectors will be benefited by the implementation of single window system .since it decreases volume of documentation and information to be submitted for the requirement of cross border trade procedure it benefits government by decreasing time and cost of trade and hence increasing revenue; and since in decreases physical contact it decreases corruption and bureaucratic processes; besides it increases the reliability of statistics and increases service coverage.

Public and private sectors will also be benefited by the implementation of national single window by saving time and cost of trade. There will be significant cost savings, faster clearance

and release of goods, Predictable application and explanation of rules, more effective and efficient deployment of resources and increased transparency.

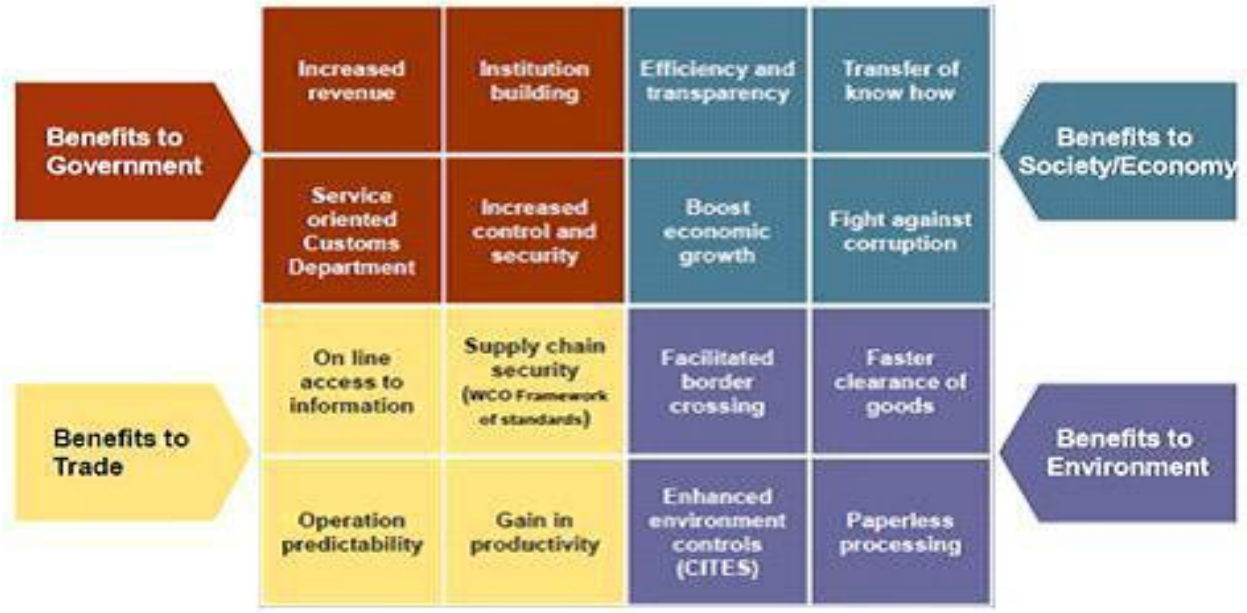


Figure2..2. Benefits of SW implementation Source: David (2007)

2.2.4 Key Performance Indicators

The Main reason for the implementation of the single window is to facilitate trade and decrease related costs, getting positive result is subject to balancing facilitating indicators and control indicators. Facilitating indicators includes; improvement of transparency, decreasing time and cost of trade, decreasing bureaucracy, improving user satisfaction, increasing service coverage, etc. and control indicators includes; decreasing fraud or corruption, increasing security, increasing revenue , etc. (UN/CEFACT, 2020)

Due to the complexity of data collection along the supply chain it is not easy to measure these indicators and improvement is a long time process it is possible to measure only when the single window is fully functional and actively used by all stakeholders. (UN/CEFACT, 2020)

Creating service level agreement is recommended between government agencies and all stake holders involved to measure key performance indicators. Frequent reports are monitoring tools for the analysis of performance of single window other tools like self-assessment of single window performance indicators, LPI of the World Bank and soon can be combined and used. (UN/CEFACT, 2020)

2.2.5. Key success factors in establishing a Single Window

The success of implementation and introduction of single window will depend on certain factors; that varies from country to country and from project to project. UN/CEFACT recommendation 33 lists some of the success factors;

1. Political Will

The existence of strong political will on the part of both Governments and business to implement a Single Window is one of the most critical factors for its successful introduction. Achieving this political will requires proper dissemination of clear and impartial information on objectives, implications, benefits and possible obstacles in the establishment of the Single Window. (UN/CEFACT, 2020)

2. **Strong Lead Agency**

In launching single window it is necessary to have A lead agency that have appropriate political support, Skilled man power, financial resources and links to the business community .besides the organization need to have a strong individual who will be the project Champion.

3. Legally-enabling environment

Having a proper legal environment is a precondition for establishing and implementation single window. Laws and legal restrictions have to be identified and analyzed. For example, changes in legislation can be required in order to enable electronic data submission/exchange and/ or an electronic signature system. Restrictions concerning the sharing of information among authorities and agencies, as well as organizational arrangements for the operation of a Single Window, may need to be overcome. Also, the legal issues involved in delegating power and authority to a lead agency needs to be examined. (UN/CEFACT, 2020)

4. Partnership between Government and trade

A Single Window is a useful model for cooperation between government agencies and between government and trading community. The single window is a setup for an opportunity for government and public partnership and it is important to have a strong partnership for a single window to be effective.

5. Collaboration framework

This could be defined as a strategic mechanism, encompassing the whole Single Window deployment project, that helps to support transformation and efficient change management processes such as a trade facilitation outline. Such long-term, global and coordinated reform requires an organizational structure driven by the right framework in order to effectively implement comprehensive and reliable operations. (UN/CEFACT, 2020)

6. Establishment of clear project boundaries and objectives

In developing establishing and implementing single window system having a clearly defined objectives and goals based on careful analysis of needs, desires and resources of key stake holders is important like any project. Besides it should be based on the existing infrastructure and the legal and political situations of the country.

7. User friendliness and accessibility

Mainly in the early implementation phase of the project full operating instructions and guidelines should be created for users. Help Desk and user support services, including training, should be established the feedback or information collected from areas of difficulty can be an important tool in further development of the system. It is essential that the design of the system be attuned to the real ICT capacities of the country or region in which it will operate. Keeping in mind the potential future technological developments in this area, the maximum number of users should be able to utilize the Single Window from the moment it is launched. In some cases, this may

dictate the establishment of service centers due to the limited online access capacity of a given geographical area. (UN/CEFACT, 2020/16)

8. International standards and recommendations

The implementation of a Single Window generally requires the harmonization and alignment of the relevant and most recent trade documents and data sets. In order to ensure compatibility with other international systems and applications, these documents and data models must be based on international standards and recommendations. Whenever electronic data interchange is involved, the harmonization, simplification and standardization of all data used in international trade are an essential requirement for smooth, automatic operation of the Single Window. (UN/CEFACT, 2020/16)

9. Training

In order to avoid misunderstanding and delays in implementation a single window operator should arrange training and capacity building and providing training and tools to all stakeholders. So that it will be ready to understand the challenges and to assess the best strategies and tools to bring the project to a successful result.

10. Promotion and marketing

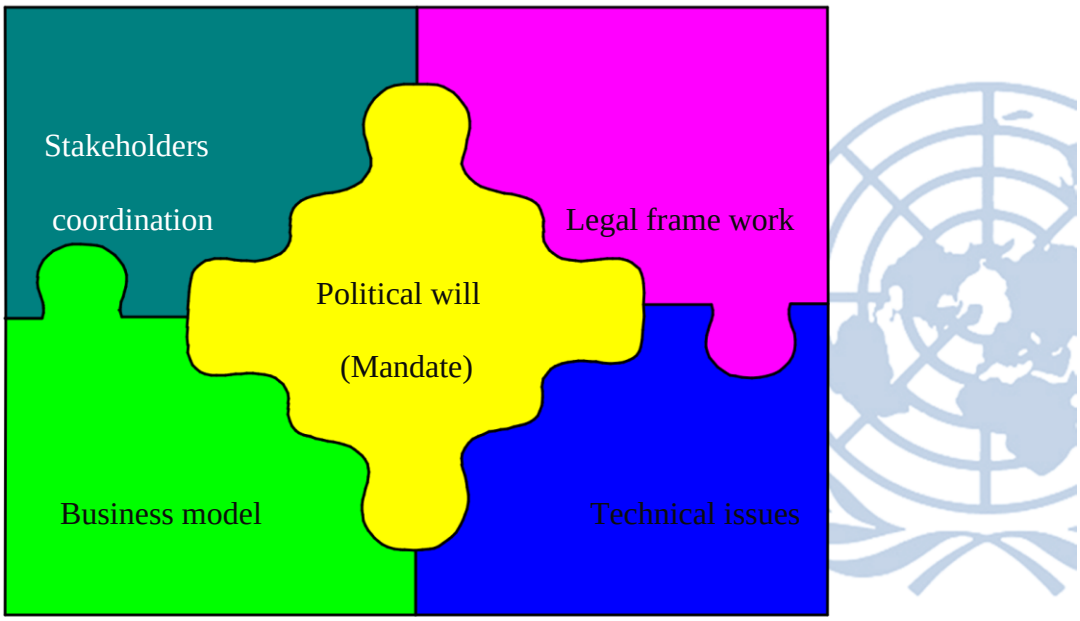
A well planned Promotion and marketing strategy designed by the involvement of representatives of key government and trade stakeholders of the single window is important these stockholders can provide valuable information about the expectations of the user community. In addition to that establishing and promoting clear implementation timetable at the

earliest possible stage of a Single Window project, so that potential users will plan their related operations and investments according to the schedule.

11. Communications strategy

Designing and implementing a well-defined and proper communication strategy is essential to keep all stakeholders informed on the project goals, objectives, targets, progress, challenges and deliverables using communication strategy in order to promote trust between all stakeholders of the SWS. Managing stakeholders' expectations is important to prevent overpromising and under delivering.

According to UNESCAP (2017) Key Success factors in Implementing National Paperless Trade Systems and Single Window are; political will or mandate, stakeholders coordination, legal frame work, business model and technical issues And it is demonstrated as follows;



Fig, 2.3, Key Success factors in Implementing National single window (ESCAP, 2017)

1 Stakeholder's coordination

Effective coordination of stakeholders is one of the preconditions that must be fulfilled during single window implementation. Since SWS implementation needs extensive engagement of stakeholders from both public and private sectors it bears different challenges.

Despite the common understanding of the benefits of a Single Window, the creation of a single entry point for submission, exchange and distribution of trade information may be viewed by some stakeholders as a potential threat to their control and authority over trade processes. Such a perception may lead to mistrust and animosity among stakeholders, possibly leading to the inefficiency in Single Window operation or, in the worst case, impasse in the process of establishing a single window facility. (UNECE, 2011)

Since government agencies provide different regulatory services cooperation among them is important, unless they join the initiative they may see the implementation as a risk to their mission and control functions. Similarly as traders are ultimate users of the single window system their involvement is very important and they need to participate starting from the planning process.

ESCAP, (2011) on its brief no.07 notes that considering both government agencies and traders as essential stakeholders is important in establishing single window and establishing effective coordination mechanism in early stage of implementation is vital as a result it will pay off in

terms of trust, two-way communication, ownership and ultimately genuine collaboration among all stakeholders.

Even if stakeholders coordination needs different approaches depending on country's situation Common critical factors are; political commitment and strategic mandate, strong lead agency, stakeholder engagement, interagency coordination, clear scope, and proper communication channel as demonstrated in fig.2.4.

Fig 2.4, stakeholder's coordination

Source: ESCAP (2017)

1. political will

UNNEXT Brief No. 07, (2011) notes that establishing political commitment plays an important role in initiating the implementation and insuring sustainability of single window .it is preferable to be at the highest level possible. Political commitment has also a direct and indirect implication for stakeholders' coordination;

- It has direct effect on resource mobilization ;since establishing single window needs significant amount of resource allocation a high level political commitment is important the highest the political commitment is the more secure the resource mobilization can be
- Political commitment is important for effective engagement of stakeholders success of SW implementation will be the single window affected directly by the level of political support.
- It is also essential to introduce legislation for SW implementation. For example to give legal authority for the organization in charge of taking responsibility for the implementation.

2. Legal framework

UN/ESCAP (2011) notes that the legal framework underlying the operation of SWs is a mixture of enabling e-commerce and e-transactions legislation and of SW-specific legislation or regulations, depending on the legal system of the country, enabling laws for the SW may take the form of legislation or/and regulations.

And since the fundamental legal principles for operating an electronic SW should be found in general electronic commerce legislation, the existence and content of that general legislation must also be addressed and developing the SW legal framework includes addressing the following basic issues:

1. National law should authorize SW implementation.

2. National law should authorize electronic commerce transactions.

3. National law should authorize acceptance of electronic documents, records, and messages

In implementing single window system the law in most countries needs to be improved to be legally enabling

3. Business models

Developing business model for establishing a single window based on county's political economic social and technological conditions and by applying inclusive approach considering all stakeholders is important as a result detailed estimating of single window implementation costs and identification of needs in terms of equipment, human resource, training, and communication will be possible. EUECE, (2015)

According to EU national window guide line, the success of the NSW will depend on to what degree the business model matches the users' expectations. There is a wide range of variants from which to choose, but some typical models are the following: EUECE, (2015)

- Fully operated and funded by public authorities. No payment for using the system.

- Funded by commercial port companies with no direct pay for usage this may make sense as a NSW can significantly simplify many port processes.
- Paid for by users as a fee per transaction this assigns costs directly to the users of the system.

The benefit of not charging usage fees is that it becomes more acceptable to the data providers.

This may in turn give lower return on investments for the authorities. When non-paying options are implemented it is important that long-term funding is ensured before those options are implemented. (EUECE, 2015)

4. Technical issues

There are various aspects of technical issues that have to be considered during Implementation of national single window system. The success of single window implementation highly depend on the ability of its components to interoperate and exchange operation each other electronically. (UNECE, 2012)

Document simplification and data harmonization provide an important standardization component; data protocols and approaches are required to ensure data and procedural interoperability between the different IT platforms connected to the single window.(UNECE 2012)

Types of business processes or services that a national single window will include the following;

1. Electronic reporting and processing of goods declaration
2. Electronic reporting and processing of manifest information

3. Electronic application of permit or license

Types of business processes or service to be provided using

2.2.6. Post implementation challenges

According to UNCEFACT (2020) recommendation 33, when a Single Window is implemented, a number of challenges remain:

1. Having all the stakeholders and processes on board:

Not including all stakeholders of international trade will result in not covering all procedures

2 **Meeting the KPIs**: If the initial KPIs are determined with inadequate basis they can become either too easy or very hard to meet. Adjusting the KPI targets is important to reflect the new reality and to make continuing performance improvements.

3. **Using international standards effectively**: A Single Window should be aligned with international standards for the exchange of trade data and documents internationally.

4. **Dealing with technological changes and evolution**:; The level of technology the single window using should meet the requirements for the problems it seek to solve

5. **Dealing with regulatory changes**: In principle, any National Single Window should be responsible for the domestic market they are operating, but it is very important for Governments, Single Window operators' and stakeholders to consider the issue of the legal compliance of any shared or exchanged data or documents in the international community. (UN/CEFACT,2020)

2.3. Conceptual Framework

Based on the literatures reviewed, the conceptual framework for factors affecting the successful implementation of Ethiopian electronic single window system, the case of Addis Ababa airport customs branch office has developed. The framework contains five factors, namely; stakeholders' coordination, legal frame work, Technical issues, political will and business model. The analysis and discussion of the study finding has performed based on these factors.

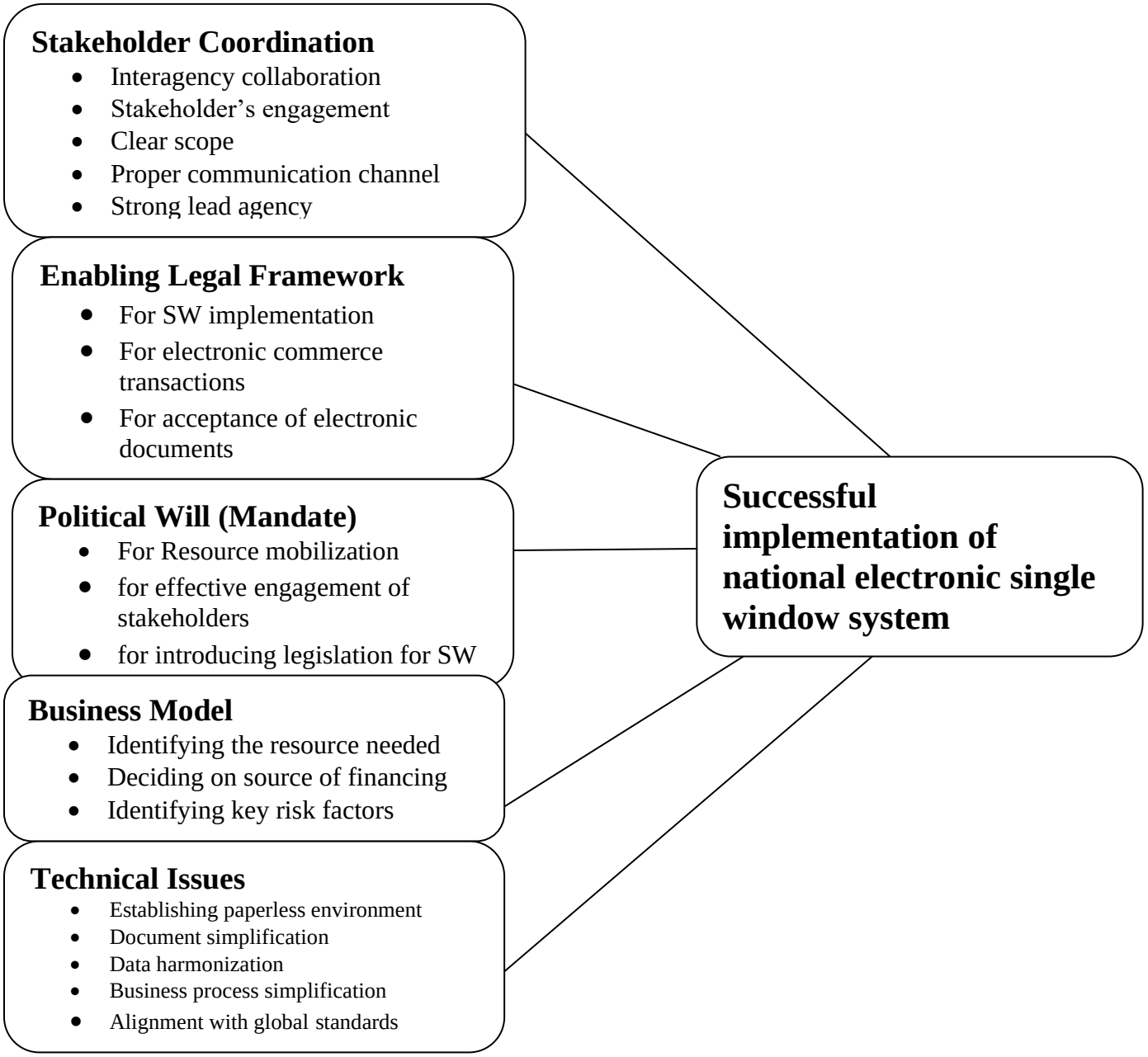


Fig.2.5. Conceptual frame work
Source; researcher

CHAPTER THREE

METHODOLOGY

3.1. Description of the Study Area

Importers, exporters, banks, insurance companies and some government agencies are main stakeholders of cross border trade currently using the single window system in Ethiopia. They are using the system to perform pre import or export procedures. Importers/exporters are using the ESW to request and obtain pre import/export permits, duty free privileges, insurance documents and bank permits; Government agencies are using the system to give Importers/exporters permission for restricted items; and banks and insurance companies are using the system to issue bank permit, insurance receipts and related documents.

It has been few months since the system has implemented and little is known about it and its operation hence, the study focused on identifying, describing and explaining factors affecting the implementation of the system.

3.2. Research Approach

The study was based on both qualitative and quantitative or mixed research approaches in order to decrease limitations from each approach and to understand the research problems and finally to get better result. The research is based on primary data; the data was gathered by using interview and questionnaire.

3.3. Research Design

Since the study is concerned about finding, describing and explaining factors affecting the newly implemented Ethiopian electronic single window system the research design used was descriptive and explanatory. This type of research design is helpful in studying problems not studied in detail before; it helps to give a better understanding for the existing problems.

3.4. Population and Sample

The population of the study includes importers and agencies in Addis Ababa currently using the system and operating in the customs branch office. according to the information obtained from the system administrator 16 agencies, including 14 government agencies, banks and insurance companies are operating using the system and according to data obtained from national bank of Ethiopia there are 18 active banks and 16 insurance companies and all head offices located in Addis Ababa. According to data obtained from the customs branch office; number of importers who has imported goods in the first six months since the implementation of the ESW in the branch was 630. The population included all these and Sample size was determined by using random/probability/ sampling technique, every unit in the population will have an equal chance for being selected as a sample unit.

The sample size for importers is 121; it is calculated by using the formula;

[n=z2 *p*q*N/e2 (N-1) +z2 *p*q] (Daniel, 1999)

Where:-

- n is sample size,
- z is the confidence level,
- p is the population variability,

- e is tolerated margin of error and,
- q Is 1-p (p is assumption)

* In the study case;

Confidence level will be 95% (z value is 1.96)

e= 8% margin of error (sample error)

p=population variability is 0.5

q=1-p (assumption) q=1-0.5=0.5

n= n= (1.96x1.96) x (0.5x0.5)*630/ (0.08)2*629+ (1.96x1.96) x (0.5x0.5)

0.9604*630/0.0064*629+0.9604

605.052/4.0256+0.9604=605.052/4.986=121=sample size for importers

- Stratified random sampling method was used to determine sample size for importers and agencies because they have different characteristics in using the system.
- Systemic random sampling was used to select 121 importers from the total of 630, Using the formula of systematic sampling; interval (K) is determined as;

K=Total Population (N) =630 =5

Sample size (n) 121

- Then the first importer has randomly picked between 1 & 5, it was the 3rd importer from the population and continued every 5th unit like 3, 8, 13,… and total 121 importers were selected.
- And since the population is small, the entire population was taken as a sample size for government agencies.

Stakeholders in Addis Ababa and operating in AA airport branch office	Population Size	sample size
Banks(head offices)	18	18
Insurance companies(head offices)	16	16
Government agencies	14	14
Importers	630	121
Total	**678**	**169**

Table 3.1 sample and population

3.5. Data Collection instruments

Instruments used to collect data include interview and questionnaire. Interview questions were prepared based on research objectives and interview was held with a system administrator at Ethiopian revenue and customs authority head office. And Questionnaire was prepared based on the objective and conceptual frame work of the study then distributed to selected importers and government agencies and collected to be organized for analysis.

3.6 Validity and Reliability

Reliability and validity are concepts used to evaluate the quality of a research. They indicate how well a method, Technique or test measures something. Reliability is about the consistency of a measure and validity is about the accuracy of measure (Finona M 2019). Validity is more concerned about measurements of instruments used in the data collection process. Pilot test has

been conducted to measure the validity of the questionnaire and to check the reliability of the result of the research the researcher had computed reliability coefficient using Cronbach alpha using SPSS 20. And the result is presented in table2.1

Cronbach's Alpha[a]	No of items
0.763	30

Table .3.2.Reliability Statistics

Source: computed by the researcher from the primary data, (2021)

- A coefficient α between 0.70 and 0.80 is presumed to have good reliability

According to Zikmund et al, (2010) coefficient alpha ranges from 0-1. If the value is close to 0 it means less consistent whereas the value close to 1 is more consistent or reliable;

i. A coefficient α between 0.80 & 0.95 is presumed to have very good reliability.
ii. A coefficient α between 0.70 and 0.80 is presumed to have good reliability,
iii. A value between 0.60 and 0.70 is presumed to have fair reliability.
iv. A coefficient below 0.6 is presumed to have poor reliability.

3.7. Ethical Consideration

According to Kumar and Kandasamy (20012) ethical considerations in research work includes; the Right to Choose, the Right to Safety, the Right to be informed, the Right to Privacy and Confidentiality: in conducting the research all of the above rights were considered especially

confidentiality the name of respondents was not identified, in reporting findings and summaries anonymous reporting has employed.

3.8. Data Analysis

The data collected was analyzed by using both qualitative and quantitative methods. The data collected by interview was organized, classified and analyzed based on the research objective and research questions. The data collected by the questionnaire was coded and processed through SPSS software. SPSS is widely used computer software program for the analysis of quantitative data and descriptive statistics was used to describe demographic characteristics of the respondents and to describe variables. Then the results were analyzed based on the research objective and research questions and presented in chapter four.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

Findings of the study are presented in this chapter and discussions of the result or findings performed to create understanding and to elaborate relationships between variables and the reviewed literature and research objectives. Since objective of the study is to identify and explain factors affecting the implementation of ESW the collected data was analyzed by using descriptive statistics.

Since it been only ten months since the single window starts functioning it is difficult to measure its successfulness, because the result will be measured by balancing trade control indicators and facilitating indicators and this indicators are difficult to measure in this early phase. These indicators are often difficult to measure due to the complexity of efficient data collection along the supply chain & Improvement is generally a consequence of a long process and is only measurable once the Single Window is fully operational and actively used by all stakeholders. (UN/CEFACT R.33, 2020/ p.12)

only some government agencies and active traders are currently using the ESW and it is on its second stage of implementation next to the paperless customs implementation out of its five stages, therefore it is not easy to isolate its real impact from other functions at this early stage as a result it is difficult to measure its successfulness.

Because of the above reasons this study focused only identifying factors affecting the implementation of the single window and describing and explaining the relationship between those factors. Five factors were identified as a key for implementation of single window and questioner and interview questions were designed based on these factors and the result presented in the following sections of the chapter.

4.2 Analysis of findings of the questionnaires

- Questionnaires were designed based on the research objectives and factors identified from the literature part and distributed to the selected 169 respondents, out of these 130 questionnaires were replied it implies, majority of the respondents were willing to replay and it has 77 % response rate. findings are analyzed and discussed as follows;

4.2.1 Demographic characteristics of Respondents

4.2.1.1. Gender of respondents

As we can see in table 4.1 the sex of respondents is almost proportional 51.5%of them were male and 48.5%were female.

Sex	Frequency	Percent
Male	67	51.5
Female	63	48.5
Total	**130**	**100.0**

Table 4.1.Sex of respondents
Source: computed by the researcher from the primary data, (2021)

4.2.1.2. Age of respondents

As it is presented in table 4.2.the age of majority of respondents was between 31 and 35 years which is 28.5% of the total respondents and the least was in 'less than 25 years' which is 9.2% of the respondents.

Age	Frequency	Percent
less than 25	12	9.2
26-30	32	24.6
31-35	37	28.5
36-40	30	23.1
above 40	19	14.6
Total	**130**	**100.0**

Table 4.2 ages of respondents
Source: computed by the researcher from the primary data, (2021)

4.2.1.3. Educational level of respondents

Out of the 130 respondents 7.7% of them have diploma, 47.7% have first degree and the rest 44.6% have second degree and above. This implies that most of the employees who are handling pre import export and clearance activities and performing regulatory activities hold BA/BSC degree & MA/MSC and above and very few of them have diploma. And no diploma holder respondent was found in regulatory Government authorities.

Educational level	**Frequency**	**Percent**
Diploma	10	7.7
Degree	62	47.7
masters and above	58	44.6
Total	130	100.0

Table 4.3. Educational level of respondents

Source: computed by the researcher from the primary data, (2021)

4.2.2. Descriptive statistics Analysis

Questionnaire was prepared on a 5-point Likert scale respondents were asked to indicate from 1 to 5 for each question under each variable. 1 was used to represent strongly disagree to the question/statement, 2 represent disagree to the statement, 3 represent neutral, 4 represent agree to the statement and 5 was given for strongly agree to the statement. Therefore, the lower the mean value is the more the respondents disagree on the question or statement and the higher the mean value is the more respondents agree with the question or statement.

4.2.2.1. Descriptive statistics of independent variables

Stakeholders coordination, political will, legal framework, business model, and technical issues are identified independent factor for the successful implementation of single window, the descriptive statics analysis of findings of each variables presented as follows;

A. Stakeholders coordination

Stakeholders' coordination is one of the key factors for successful implementation of single window system .as discussed in the related literature review and conceptual framework parts there are many activities or elements included under stakeholders' coordination and out of these eight main elements were selected for the questioner and the mean values of findings has presented in the following table. (table4.4)

Statement	N	Mean
Government agencies have organized inter-agency coordination and collaboration	130	3.04
Traders and Government agencies have strong partnership	130	2.892
the lead agency(Ethiopian customs commission) have appropriate political support	130	3.17
The lead agency have appropriate human and financial resource to lead the single window	130	3.08
A two-way communication which is timely and updated channel that all stockholders can accesses has established	130	2.85
There is a Public awareness creating program, by using Public relation tools and channels like and press releases special events and the like to promote the single window	130	2.82
training has been given for every company that has joined the single window	130	2.78
Any potential applicant can ask and get tanning &the content of the training is very helpful	130	2.87

Table 4.4 description Statistics of stakeholder coordination

Source: computed by the researcher from the primary data, (2021)

As it is presented in table 4.4 selected importers, government regulatory officers, bank and insurance officers were asked to indicate their agreement about the level of organized inter-agency coordination between government agencies, and the mean value of the observations were 3.04. From this we can understand that most of the respondents slightly agree that government organizations have interagency coordination and collaboration. And they were asked about the strength of partnership between traders and government agencies and the mean value of observations were 2.892, this implies that most of the respondents disagree about the presence of strong partnership between traders and government agencies.

Respondents were also asked to indicate their degree of agreement of the level of political support the lead agency (Ethiopian customs commission) have and the appropriateness of human and financial resource of the lead agency to lead the single window, and from the findings mean value was 3.17 and 3.08 respectively from this we can understand that most of respondents somewhat agree that the lead agency is strong enough to lead the single window.

From the findings about the presence of a two-way timely and updated communication channel for keeping all stake holders informed, the presence of a Public awareness creating program, by using Public relation tools and channels like and press releases special events and the like to promote the single window and the presence of adequate training; the mean value were 2.85, 2.82 and 2.78 respectively. From this we can understand that most of the respondents did not agree about the presence of proper communication channel for stakeholders, the presence of appropriate promotion and training.

B. Enabling legal framework

Legal frame work is also one of the key factors for success of implementation of single window. Enabling the legal frame work by introducing new legislation or by improving the existing one before implementation and operation begins is mandatory to make the implementation successful. Respondents were asked about their agreement about the presence of enabling legal frame work and the mean value of the result has presented in table 4.5 below.

Statement	N	Mean
New statements and articles have approved to make law enabling to the SW implementation	130	3.96
New legislation has introduced to make the law enabling for single window implementation	130	3.85
New legislation has introduced to make the law enabling for electronic commerce transition and acceptance of electronic document	130	3.66

Table 4.5. Descriptive Statistics of enabling legal frame work

Source: computed by the researcher from the primary data, (2021)

As it is presented in table 4.5 most of respondents agree that New statements and articles have approved to make law enabling to the SW implementation with mean value of 3.96 and most of them agree that New legislation has introduced to make the law enabling for single window implementation with mean value 3.85 and finally most of the respondents agree that New legislation has introduced to make the law enabling for electronic commerce transition and acceptance of electronic document, with mean value 3.66. Generally most respondents agree about the presence of enabling legal frame work in Ethiopia for successful implementation of single window system.

C. Political will

As discussed in the related literature part in implementing a single window system having a political will at the highest level possible is helpful to make stakeholders' engagement easy and for high resource mobilization. Respondents were asked about their agreement about the level of political commitment the government have towards the single window implementation and the mean value of their response is presented in table 4.6 below.

Statement	N	Mean
The SW implementation has support at the highest level	130	4.40
There is a high resource mobilization for the SW implementation project	130	4.12
There is a strong political will of the government towards the implementation of single window system	130	4.48

Table 4.6 Descriptive Statistics of political will

Source: computed by the researcher from the primary data, (2021)

As it is showed in table 4.6 most of the respondents strongly agree that the implementation have a strong political support from the highest level of the government and they agree that there is high resource mobilization for the single window project and they agree that there is a strong political will of the government towards the implementation of single window.

D .Business model

In implementing single window system developing business model for establishing a single window based on county's political, economic, social and technological conditions and by applying inclusive approach considering all stakeholders is important. As it has discussed in the related literature part there are different types of business models for the implementation of single window system and the model assumed by the study to be appropriate for Ethiopian case is a business model funded by the government with high resource mobilization and payment free for users. Respondents were asked to indicate there agreement about statements; The implementation of the single window is fully funded by the government(public authorities), enough resource has

allocated for the implementation, No payment is required to use Single window service; and the mean value of findings are presented in table 4.7.

Statement	N	Mean
The implementation of the single window is fully funded by the government(public authorities)	130	3.49
enough resource has allocated for the implementation	130	3.43
No payment is required to use Single window service	130	4.15

Table 4.7 Descriptive Statistics of business model

Source: computed by the researcher from the primary data, (2021)

As it is presented in table 4.7, the mean value of the response for the statements 'The implementation of the single window is fully funded by the government (public authorities)' and 'enough resource has allocated for the implementation' are 3.49 and 3.43 respectively, which indicates that most of respondents agreed that the implementation is funded by the government and there is high resource mobilization; the mean value for the statement 'No payment is required to use Single window service' is 4.15 which implies some of the respondents strongly agree and most of them agree that there is no payment to use the single window.

E. Technical issues

In addition to the above factors addressing technical issues like making the system friendly and accessible by enabling it to operate by simplified documents and information; by helping users to use the system easily by giving enough training ,by creating a formal help desk, by creating guideline manual and etc.is important for successful implantation of the single window..

Respondents were asked to indicate there agreements about statements /questions designed based on some major elements that explain technical issues and the mean values of their response has presented in table 4.8.

Statement	N	Mean
A paperless environment has established (there is no need of submitting documents physically in operation trade)	130	2.52
Simplified procedure and document are required to request submit and to receive/make permissions using the system	130	2.64
Maximum number of users were able to use the Single Window from the moment it had launched	130	2.36
Help Desk and user support services have established	130	2.51
The system is user friendly and accessible	130	2.38
Comprehensive operating instructions and guidelines Created for users	130	2.42

Table 4.8 Descriptive Statistics of technical issues
Source: computed by the researcher from the primary data, (2021)

As it is indicated in table 4.8 the mean value of the response about; their agreement on the presence of paperless environment, the requirement of simplified documents and procedures, the existence of maximum number of stakeholders using the system, the presence of help desk and user support service, the friendliness and accessibility of the system and the presence of comprehensive operating instructions and guidelines were; 2.52, 2.64, 2.36, 2.51, 2.38 and 2.42 respectively it indicates that most of the respondents do not agree about any of technical issue elements positivity.

4.2.2.2. Descriptive statistics of the dependent variable; Successful implementation of SW

Since the ultimate goal of single window implementation is to facilitate trade its success will be measured by evaluating control and facilitating indicators that are used to measure trade facilitation as it is disused in the literature part and in the introduction part of this chapter. Questions were designed based on these controlling and facilitating indicators and respondents were asked to indicate their agreement about the statements/questions and the mean values of findings has presented in the below table. (Table 4.9)

Statement	N	Mean
Cost related to procedures and document processing & handling have been decreasing since the implementation of the SW	130	3.18
time related to procedures and document processing & handling have been decreasing since the implementation of the SW	130	3.16
The SWS has been improving user satisfaction	130	3.03
The SWS has been improving service coverage	130	3.05
The SWS has been improving reliability of statistics	130	3.44
The SWS has been decreasing corruption	130	3.20
The SWS is decreasing bureaucratic processes	130	3.34

Table 4.9. Descriptive Statistics of success of implementation of SW

Source: computed by the researcher from the primary data, (2021)

As it has presented in table 4.9 the mean values for the first and the second statements were 3.18&3.16 respectively, which implies the respondents almost equally agree that time and Cost related to procedures and document processing & handling have been decreasing slightly since the implementation of ESW .The mean values for the third and fourth statements were 3.03 and

3.05 respectively, the mean values were almost the same and it indicates that most of them are almost equally neutral about the improvement of service coverage and user satisfaction. The mean values for statements 'SW is decreasing corruption' and 'SW is decreasing bureaucratic processes' are 3.2 and 3.34 respectively, which indicates that respondents somewhat agree that the implementation is decreasing both but relatively it is decreasing bureaucratic process than corruption. Finally most of the respondents agree that the implementation has been improving reliability of statistics as its mean value is 3.44.

4.3 Analysis of Findings from interview

As there are no enough literatures, almost no in the Ethiopian context, the study primarily depends on primary data. Therefore in addition to the questionnaire interview was conducted with a system administrator of the single window in Ethiopian revenue and customs authority head office to get a better understanding about the research objectives and research questions and findings are analyzed and presented as follows;

Based on the discussion, the implementation of single window system in Ethiopia has planned to have five phases namely;

1st stage; implementation of paperless customs

2nd stage; implementation of single window for traders

3rd stage; implementation of single window for import community

4th stage; implementation of national single window

5th stage; implementation of regional single window

The first and second phases are already implemented. Paperless customs has implemented since. September 2020 except payment almost no need of submitting documents physically to perform import or export process. And the second stage is just a bridge between the trading community and government agencies; it is used to request submit and receive pre import or export permits, insurance receipts, bank permits duty free permits and other documents necessary for international trade process..

According to the interviewee, 73 government agencies were identified as stakeholder and out of these 51 have agreed to join the single window and Currently 16 government agencies including banks and insurance companies have joined the single window and the remaining will be considered in the coming phases. agencies currently using the system includes; banks, insurance companies, Ministry of trade and industry, ministry of agriculture, Ethiopian chamber of commerce and sectorial associations, ministry of finance, Ethiopian communications authority, Ethiopian food and drug authority, information network security agency(INSA), Ethiopian customs commission, Ethiopian investment commission, Ethiopian radiation protection authority, ministry of mines and petroleum, veterinary drug and feed administration and control authority, Ethiopian conformity assessment enterprise and regional investment offices.

❖ Findings of the interview based on the identified variables are summarized as follows;

1. **Business model**; the implementation of the single window is fully funded by the government and no need of payment to use the system. the budget allocated was 32(thirty two) million US dollar and out of this 16 million has consumed.in the first two phases .in addition to that the project has got financial support for the regional single window implementation from COMESA which is a good opportunity and the project is going to be implemented side by side with the implementation of next stages.

2. **Political will (mandate);** there is high political commitment towards the implementation of the single window implementation. It is supported at the prime minister level under the prime minister there are three teams or committee; the stream committee, technical working group and the core technical team. The stream committee has seven governmental organizations under it; Ethiopian revenue and customs authority, customs commission, information network security agency (INSA) and other four governmental organizations. The working group comprises directors from sixteen agencies that have already joined the single window system. The lead agency is Ethiopian customs commission.

3. **Legal framework;** the legal frame work of the country was not enabling to implement single window. to make it enabling the government approves an electronic transaction legation and cyber security legislation and electronic transaction supported statements and articles are approved and published.

4. **Stakeholders' coordination;** as stakeholders' coordination is key factor for successful implementation of single window the interviewee was asked about the presence of two way communication, adequate promotion, adequate training, and inter-agency coordination, coordination between government and traders and about the strength of the lead agency and the response has summarized;

    - There is no formal communication channel with stakeholders and promotion, however there is was a plan the stream committee to meets every three months and the technical committee to meet every 15 days but after covid-19 pandemic it becomes in months and there is no enough formal communication channel with traders.

    - Virtual training in Amharic language have published and streamed through YouTube and everybody can get and use it, on job training is been providing through phone, and by the support of World Bank training has given for 2400 users who voluntarily ask for training for six months starting from December. However it is not enough to address all stake holders especially traders and there is a plan to expand the training.

    - Interagency coordination and coordination between traders and government authorities is good and it is planned to have a formal communication to strengthen it.

5. **Technical issues;** Paperless customs has implemented since September 2020 and except payment no need of submitting documents physically to perform import or export process, however it is difficult to say paperless environment is created because some government agencies are not using the single window to give pre import /export permits and other services.

   Business process or services the system providing currently includes; requesting and issuing pre import/export permits, bank permits, insurance permits and receipts, electronic certificate of origin and etc…

According to the interviewee, the system is friendly and accessible .it is a web based system so anyone can access anywhere and anytime, however formal helpdesk and user manual has not established but support has been given through telephone every day in office hour and there is a plane to certify private partners to give training on behalf customs.

CHAPTER FIVE

SUMMARY, CONCLUSION&RECOMMENDATION

5.1. SUMMARY

According to the discussions and analysis made in chapter four the implementation of Ethiopian electronic single window has five phases: paperless customs, Single window for traders, single window for import community, national single window and regional single window. The existing single window is an electronic single window for traders, which is used as a bridge between traders and government agencies and sixteen government agencies including banks and insurance companies and 20,000 active importers and exporters are using the system currently.

There is high political commitment towards the implementation of the single window; it is supported in the prime minister level. An electronic transaction legation, cyber security legislation and electronic transaction supported statements and articles are approved and published to make legal frame work enabling for implementation of single window.

The business model used was public financing, the Implementation was full funded by the government and 32million US dollar was allocated for it and out of this 16 million has consumed. Besides no payment is needed to use the system

There is no formal communication channel to keep all stake holders informed. 20 virtual trainings are created and published in Amharic so everybody can get and use it, on job training through phone is been giving. The relationship between traders and government agencies is good and there is a good collaboration between agencies but the relationship between traders and government agencies is not satisfactory.

A paperless customs or paperless declaration is implemented since September 2020 but payment is still performing physically. The system needs high volume of information and documents, no enough formal Comprehensive operating instructions and guidelines were created for users and there is no formal Help Desk and user support services for users.

From data analysis findings we can understand and conclude that from the three identified factors; the three factors political will, legal framework and business model is suitable for the successfulness of single window implementation, however stakeholders 'coordination and some technical issues need improvement.

5.2 CONCLUSION

Based on findings and discussions held the following conclusion has made;

The implementation of single window is helpful for the country for trade facilitation by decreasing time and cost of international trade, decreasing corruption, decreasing bureaucratic processes, increasing service coverage, increasing customer satisfaction and increasing reliability of statistics and as a result it will have a positive impact to the economic growth of the country.

The government has high commitment to the implementation of the single window it gives political support at a prime minister level and the existing laws and regulations have amended to make legal frame work enabling for the implementation of single window, besides the implementation is fully funded by the government and free from payment to use. These have a positive impact for the successfulness of the implementation.

As it is presented in chapter four from findings the existing stakeholders' coordination is not enough to make the single window successful. And as discussed in the literature part stakeholders' coordination is key for the success of the single window, so it needs more to do to make it strong enough by providing adequate training, adequate promotion and two way and trimly communication.

As it is presented in the findings there are technical issues that need improvement; for example there no formal help desk and user instruction and the system requires high volume of information and documents.

Generally the three identified factors political will legal framework and business model are positively impacting the implementation of the single window, however the remaining factors; stakeholders' coordination and technical issues needs improvement.

5.3 RECOMMENDATIONS

1. As discussed in the above parts the existing feature of the three factors political will, legal frame work and business model is positively affecting the implementation of the single window, so keeping them is recommended

2. The other factors; stakeholders coordination and technical issues, need improvement and the study recommends the following;

- Establishing a two way, timely and updated communication channel that will keep stakeholders informed.
- Certifying and giving training for private companies and giving them permission for training traders and agencies to address stake holders in all area of the country
- Creating Public awareness program, by using Public relation tools and channels like press releases special events and the like to promote the single window.
- to make assessment on user satisfaction and make improvement on identified areas
- to establish formal helpdesk
- To crate Comprehensive operating instructions and guidelines for user.

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Appendix

QUESTIONNAIRE

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

Department of Logistics and Supply Chain Management Survey Questionnaire to be replied by stakeholders of cross border trade operating in Addis Ababa

Dear sir/madam

I am a post graduate student in Logistics and Supply Chain Management in Addis Ababa University School of Commerce. Currently, I am conducting a research titled; "**factors affecting the Implementation of Ethiopian electronic Single Window, the case of customs commission Addis Ababa airport customs branch office**". Therefore, your response is very important for the ending of the study and you are requested to completely and objectively respond all questions. Your response will be treated with at most confidentiality and will be used only for academic purpose.

I would like to appreciate in advance for your cooperation!

If you have any question, please don't hesitate to ask:
Cell phone#; 0911724228, Email address;

bleneabay@gmail.com.

Abaynesh Anteneh

This questionnaire has three parts; kindly answer all the questions by ticking (√) in the appropriate box and by writing in the spaces provided.

PART I: General Information of the Respondents

1. Gender;	Male [ ]	Female [ ]	
2. Age;	Less than 25 [ ]	25-30[ ]	31-35[ ]
	36-40[ ]	Above 41[ ]	
3. Educational level;	Certificate [ ]	Diploma [ ]	Degree [ ]
	Masters and above [ ]		

4. Your organization? Government agency [ ] Importer [ ]

Insurance company [ ] Bank [ ]

PART II. Please read each statement and put (√) on your first preference from the alternative given alternatives

Key:

1 = SD: Strongly Disagree
2 = D: Disagree
3 = N: Neutral
4 = A: Agree
5 = SA: Strongly Agree

Variable 1.stakholders coordination						
	Statements	**SA(5)**	**A(4)**	**N(3)**	**D(2)**	**SD(1)**
1	Government agencies have organized inter-agency coordination and collaboration					
2	Traders and Government agencies have strong partnership					
3	the lead agency(Ethiopian customs commission) have appropriate political support					
4	The lead agency have appropriate human and financial resource to lead the single window					
5	A two-way communication which is timely and updated channel that all stockholders can accesses has established					
6	There is a Public awareness creating program, by using Public relation tools and channels like and press releases special events and the like to promote the single window					
7	training has been given for every company that has joined the single window					
8	Any potential applicant can ask and get tanning &the content of the training is very helpful					
Variable2. Legal Framework						
9	New statements and articles have approved to make law enabling to the SW implementation					
10	New legislation has introduced to make the law enabling electronic commerce transaction and acceptance of electronic document					
11	New legislation has introduced to make the law enabling for single window implementation					
Variable 3. Political Will (Mandate)						
12	The SW implementation has support at the highest level					
13	There is a high resource mobilization for the SW implementation project					
14	There is a strong political will of the government towards the implementation of single window system					
Variable 4.business model						
15	The implementation of the single window is fully funded by the					

	government(public authorities)					
16	enough resource has allocated for the implementation					
17	No payment is required to use Single window service					
Variable 5. Technical Issues						
18	A paperless environment has established (there is no need of submitting documents physically in operation trade)					
19	Simplified procedure and document are required to request submit and to receive/make permissions using the system					
20	Maximum number of users were able to use the Single Window from the moment it is launched					
21	Help Desk and user support services have established					
22	Comprehensive operating instructions and guidelines Created for users					
23	The system is user friendly and accessible					
Variable 6.Successfulness of implementation of single window system						
24	Cost related to procedures and document processing & handling have been decreasing since the implementation of the SW					
25	time related to procedures and document processing & handling have been decreasing since the implementation of the SW					
26	The SWS has been improving user satisfaction					
27	The SWS has been improving service coverage					
28	The SWS has been improving service coverage					
29	The SWS has been improving reliability of statistics					
30	The SWS has been decreasing corruption					
31	The SWS is decreasing bureaucratic processes					