ST.MARY'S UNIVERSITY COLLEGE
BUSINESS FACULTY
MANAGEMENT DEPARTMENT

ASSESSMENT OF SERVICE DELIVERY SYSTEM ANALYSIS AND DESIGN PRACTICE THE CASE OF QUALITY AND STANDARDS AUTHORITY OF ETHIOPIA

BY

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June, 2011

SMUC

Addis Ababa

AN ASSESSMENT OF SERVICE DELIVERY SYSTEM ANALYSIS AND DESIGN PRACTICE: THE CASE OF QUALITY AND STANDARDS AUTHORITY OF ETHIOPIA

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Approved by the Committee of Examiners

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Table of Content

	Content	Page

List of Tables

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The major goal of systems analysis and design is to improve organizational systems. Often this involves developing & acquiring application soft ware and tanning employees to use it. (Josephs v. 2003 p.p.4)

System analysis is an important activity that takes place when needed information systems are being built or existing one are changed. Its most crucial role is in defining user requirements. But way are special Activities, such as systems analysis, needed to bulled good information systems? Why these things don't happens a matter of course in an organization**?** (Igor H. ,2004 p. p 7).

Systems analysis often now called business systems analysis to emphasize its business emphases is needed to clearly identify what is possible and how a new system will work. This includes gathering the necessary data and developing models for the new system. This is not an easy task because, in large systems, many people need to be satisfied and many conflicts resolved. System analysis help people to solve their problems, and suggest solution and ways of implement them. Often they must help resolve conflicts as different people in organization may have different needs. Analysts have to justify their solution to deferent classes of users, often interims of whole organization and thus they are expected to see their work as being relevant to the whole organizations**.** (Igor H. ,2004 p. p 7).

The system analyst must be able to find out details about the system itself to do this, the analyst will have to look at such things as forms used in the system, data used in the system, data used by the organization, content of computer files, and computers output and inputs. System analysts must also be able to work in environments that have considerable ambiguity and uncertainty Such

environments there are often conflicting accounts of what is happening and what is needed different users perceive deferent system problems. The system analyst must be able to resolve these kinds of conflict and produce an agreed up on statement of the system operation and problems. (Igor H. ,2004 p. p 8).

System analysts must be creative and imaginative in producing new salutions to meet user requirements. They must have knowledge of techniques and devices that exists outside the organization, as well as a good understanding of what is needed inside. They must them put all the pieces together in a creative way to satisfy these requirements. This of course, may require more than one try. Some of these solutions may be to totally unsuitable, where as others may be acceptable after some changes have been made. Such solution may them then be amended and then justified again, often this is done in an interactive way and at all times systems analysts must be responsive and creative using all their knowledge to woke to ware an effective and acceptable solution.(Igor H.,2004 p.p 8).

1.2 Background of the Organization

The Quality and Standard Authority (QSAE) is the National Standards body (NSB) of Ethiopia established in 1970. It becomes fully operational in 1972. The Authority is a non-profit governmental organization accountable to the Ministry of Since and technology. It has undergone several restructuring, of which the latest was based on proclamation No. 102/1998, and organizing the Authority to effectively promote quality management practices as one of its central objective in addition to Standard Development, Certification, Metrology and Testing. Besides the standards and certification council established based on proclamation No.413/2004 whose members the Government appoints deliberates on national quality and standardization policy and issue directives necessary for implementation (Public Relation Service A.A 2009).

QSAE has more than 300 professional and support staff, headed by a director General, and comprises different Directors and service. It has ten Branches and

representative office operation inspection; product certification and verification services within their area of jurisdiction as well as acting as customer enquiry point on the broad range of QSAE services (Public Relation Service A.A 2009).

Among them Addis Ababa Lagar branch consist of five offices, those are import goods inspection office (IIO) export products inspection office (EIO) Bank Permit Inspection Office (BPIO) and factory surveillance office (FSO).

Import inspection office (IIO) has thirty professionals and supportive staffs, it provides service for import good, based on the Ethiopian standard that mandatory standard. The Addis Ababa Lagar import office is found within Kality sub city within side comet transport office and Addis Ababa Custom office.(Administration Service A.A.B).

1.3 Statement of the problem

Currently the inspection service system of QSAE operates using manual operating systems. This system hampers the process of inspection and become tedious to accommodate the increasing number of inspection request presented from customers. Most of the common causes of the problem associated with the current system are:-

- Unnecessary duplication of documents
- Lack of standard order receipt system.
- The data may not be record correctly because of redundancy of inputs.
- Hard to find errors committed for immediate correction and exposed for record attrition and loss.
- Inconvenient to store recorded material & damaged or worn out form frequent use.
- Poor handling & exchange of information

In the presence of the above mentioned problems it is hard to expect any smooth operation of the purpose for which the centre ideas established. Thus the

researcher emphasizes the problems associated with the already existing manual system to find out possible remedies.

1.4. Basic Research Questions

To elaborate the above mentioned problems, the researcher intends to answer the following basic research questions,

- What does the degree of duplication of unnecessary documents look like?
- What are the major factors contributing to the duplication of documentation and solutions to the problems?
- How to shorten the service delivery process?
- What measures should be taken to improve the current situation in poor handling?

1.5. Objectives of the study

1.5.1 General objective

The general objective of the study will be therefore, to investigate or distinguish the main problem or obstacles of service delivery a system on the inspection service system and come up with solutions.

1.5.2 Specific objectives

In line with the above mentioned in general objectives, there will be some specific objectives as follows:-

- To identify why unnecessary duplication of documents are there.
- To point out factors that contributes to poor handling.
- To investigate the extent of data may not be recorded correctly.

1.6 Significance of the study

Primarily, the researcher believes that the out come of the study would help to Quality and Standards Athority on the inspection department to understand the

strength and weakness of its quality inspection delivery in customer satisfaction though:

- Provides simple and manageable system and update the required data's.
- The data will be recorded correctly and it avoids un necessary duplication of documents.

1.7 Delimitation of the study

Quality and Standard Authority is big organization having many branches in all the country including Djibouti.

To make the research complete, it is good to have the necessary information from all branches. However, due to some constraints like cost & time the research was restricted to focus on one of the biggest branch that is Addis Ababa branch office in the sub division of import inspection office located on Kality sub city within side comet inspector office and Addis Ababa custom Authority.

1.8 Research Design and Methodology

To collect the data that were needed and to address the above mentioned problems descriptive research method was used. Because the purpose of this study is to identify the current QSAE ,import goods inspection customers over all level satisfaction and quality service delivery.

1.8.1 Population and sampling techniques

QSAE has more than three hundred permanent employees but, the researcher was focused on the import inspection service delivery section which has thirty employees in total. Therefore, this research was use available sampling method. Because the number of population was limited and the sample respondents' were clearly identified.

1.8.2 Type of data collected

Both primary and secondary data were used in order to make the study complete and accomplish its stated objectives. Primary data were collected by using

questionnaraire and interview, While secondary data were obtained from the organization reports, websites and reference books.

1.8.3 Data source and collection method

The primary data were collected through questionnaire and interview. The questionnaire were distributed to employees of import goods inspection division and the interview was conducted with the branch office head.

1.8.4 Data analysis method

Quantitative and qualitative data analysis technique were used in this study. Quantitative data analysis technique specially, descriptive data analysis technique were used. To summarize the findings, percentages was computed to get the total picture of the data that collected from sample respondents. Then, the summarized data were presented in the form of table. Qualitative data analysis technique were used to analyze the interview response.

1.9 Organization of the study

This study was composed of four chapters. The first chapter consists of the introduction part which consists of:-

- Back ground of the study
- Statement of the problem
- Objectives of the study
- Methodology
- Scope of the study
- Limitation of the study
- Organization of the study

The second chapter deals with review of related literature. The third chapter deals with analysis and interpretation of the data collected. The final chapter contains summary of the findings of study, conclusion and recommendation drawn based on the findings. Finally, list of bibliography, sample questionnaire and interview forms are attached to the research work.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Definition of system

A system is an intercalated set of business for proponents used within one business unit, working together for come suppose. A system has nine characteristic and a system takes input from outside, processes it, and seedy the resulting out pay back to its environment.

1. Components
2. Intercalated components
3. Boundary
4. Purpose
5. Environment
6. Interfaces
7. In put
8. Out put
9. Constraints

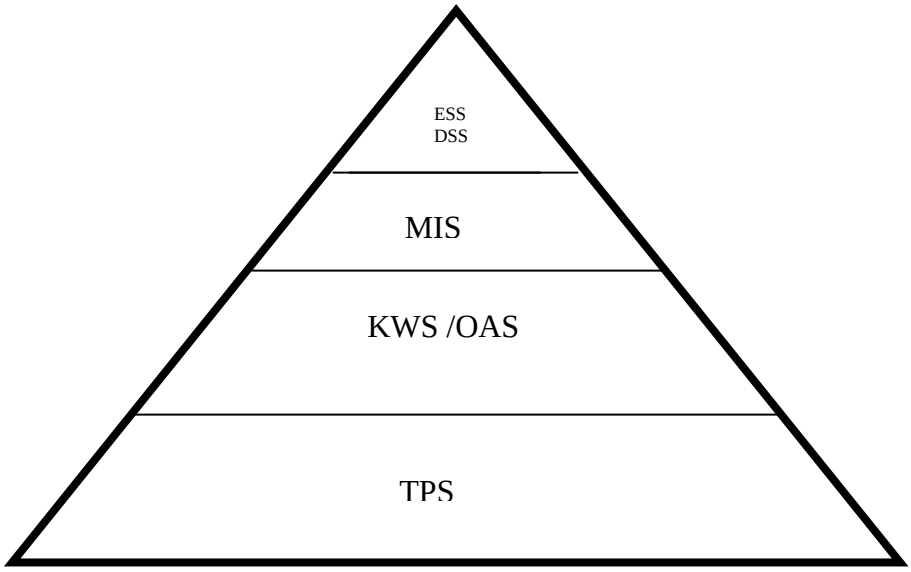
A system is made up of components. A component is either an irreducible part or an aggregate of parts, also called a subsystem. The simple concept of a component is very power full. The components are interrelated, that is the function of nine somehow tied to the faction of the other. A system has a boundary, with in which all of its components are contained and which establish the limits of a system, separating it from other system. Components within the boundary can be charged whereas system outside the boundary cannot be changed all the components work to go there to achieve some over all propose for the larger system(I gor H, 2004 P.P7)

A system exists within an environment everything out side of the boundary that influences the system. Usually the system interacts with its environment. An information system interacts with its environment by receiving data (Row facts) and information (Data processed in use full format). The points at which the system mutes its environment are called interface and there are also interface between sub systems (I gor H, 2004 P.P7)

A System must face constraints in its functioning because there are limits to what it can do and how it can achieve its purpose within its environment. A system is imposed inside the system and others are imposed by environment. A system takes input from its environment in other to function. Finally, a system returns output to its environment as a result of its functioning and thus achieves its purpose.

2.2. Types of systems

Information system is developed for different purpose, depending on the needs of business. Transaction processing system (TPS) function at the operational level of the organization, office automation system (OAS) and knowledge work system (KWS) support work at the knowledge level. Higher level system include management information system (MIS) and decision support system (DSS)



Expert system applies the expertise of decision makers to solve specific structured problems. On the strategic level of management we find executive support system (ESS). Group decision support system (GDSS) and the more generally described computer support collaborative work system (CSCWS) aid group level decision making of a semi structured or un structured variety (kandall, K 1994 P.P.2)

2.3 Objectives of system analysis and design

System analysis and design, as performed by system analysis, seeks to analyses data input or data flow systematically, processing or transforming data, data storage and information out put within the context of a particular business. Further, system analysis and design used to analyze, design and implement improvements in the functioning of business that can be accomplished through the use of computerized information system. (Kandall, K 1994

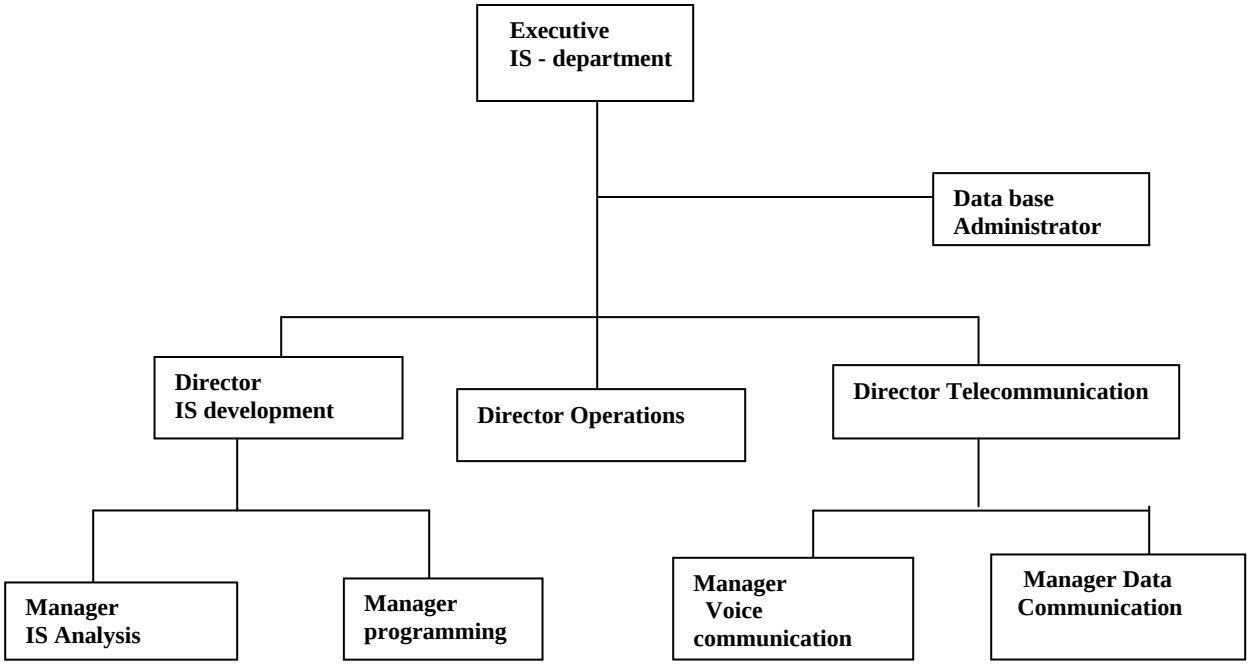
P.P.7)Installing a system without proper planning leads to great dissatisfaction and frequently causes the system to fall into disuse system analysis and designing leads structure to the analysis and design of information system a costly endeavor that might otherwise has been done in a haphazard way. It can be thought the used of computerized information system. A large part of system analysis and design involves working with current and eventual users of information system.

2.4 Roles of the System analyst

The system analyst systematically assesses how business function by a examining the imputing and processing of data and the out putting of information with the intent of improving organizational process. Many improvements involve betel support of business function through the use of computerized information system. This definition emphasizes a systematic, methodical approach to the analyses and positional improving what is occurring in the specific context crated by a business. ((Kandall, K 1994 P.P.8)

The IS department may be an independent department, reporting to the organization top manager, or it may be part of another functional department, such as finance. There may even be IS department is involved in systems development. If the department is large enough, there is a separate division for system development which would be home bases for system analysis and another division for programming, where programmers would be based.

The figure below highlights of an organization chart for a typical information system department. A system ate design to help people in functional department do there are jobs. These people are called end users.

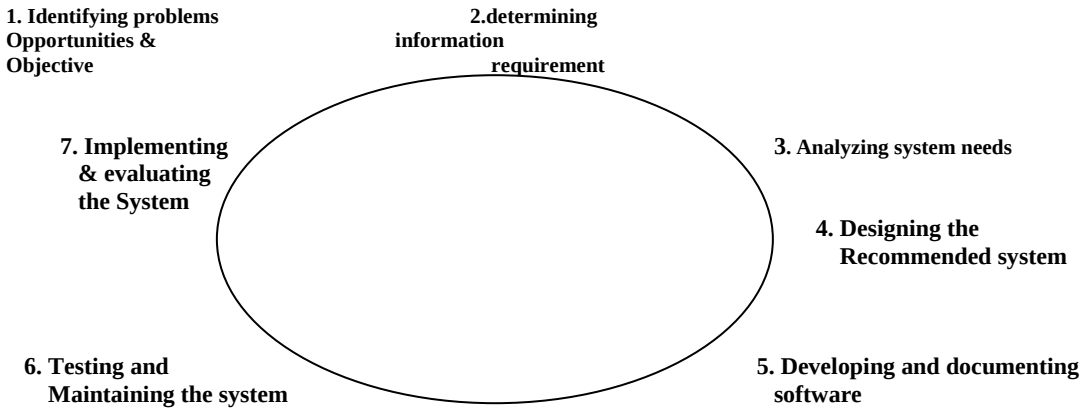


(An organizational chart for a typical information system department)

2.5 System development life cycle

System life cycle is an organizational process of developing and maintaining system. It helps in establishing a system project plan. Because it gives over all list of process and sub – process required developing a system. Analysis divided the cycle into seven phases as shown in figure below. Each phase is presented discretely; it is never accomplished as a separated step.

Instead, several activities can occur simultaneously and activities may be repeated it is more use full to think of the SDLC as accomplished in phases and not in separate steps.



2.5.1 Identifying problems, opportunities, and objectives

In this first phase of the systems development life cycle, the analyst is concerned with identifying problems, opportunities, and objectives, this stage is critical to the success of the rest of the project, because no one wants subsequent time addressing the wrong problem.

The first phase requires that the analyst look honestly at what is occurring in a business. Then, together with other organizational members, the analyst pinpoints problems often, these problems will be brought up by others, and they are the reason the analyst was initially called in. opportunities are situation that the analyst believes can be improved upon thought the use of computerized information system. Seizing opportunities may allow the business to gain a competitive edge or set an industry standard.

Identifying objectives is also an important component of the first phase. First, the analyst must discover what the business is trying do. Then the analyst will be able to see if some aspect of information systems application can help the business reach its objectives by addressing specific problems or opportunities.

The people involved in the first phase are the users, analysis, and system managers coordinating the project. Activities in this phase consist of interviewing user management, summarizing the knowledge abstained, estimating the scope of the project, and documenting the results. The output of this phase is a feasibility report containing a problem definition and summarizing the objective management must then make a decision on whether to proceed with the proposed project. If the user group does not have sufficient funds in its badger or wishers to tackle unrelated problems, or if the problems do not require a computer system, a manual solution may recommend, and the systems project does not proceed any further.

2.5.2 Determining Information Requirements

The next phase that the analyst enters is that of determining information requirements for the particular users involved. Among the tools used to define information requirements in the business are sampling and investigation hard data, inter viewing questionnaires, observing decision maker's behavior and office environments, and even prototyping.

Rapid application development (RAD) is an object oriented approach to systems development that includes a method of development (including the generating of information requirements) as well as software tools.

In the information requirements phase of the SDLC, the analyst striving to understand what information users need to perform their jobs. You can see that several of the methods for determining information requirements involve interacting directly with users. This phase serves to fill in the picture that the analyst has of the organization and its objectives. Sometimes only the first two phases of the systems development life cycle are completed. This kind of study may have a different purpose and it typically carried out by a specialist called an information analyst (1A).

The people involved in this phase are the analysis and users, typically operations managers and operation workers. The systems analyst needs to know the details of current system functions who (the people who are involved), what (the business activity), where (the environment in which the work takes place) when (the timing), and how (how the current procedures are

performed) of the business under study. The analysis must than ask why the business uses the current system. There may be good reasons for doing business using the current methods, and these should be considered when designing any new system.

If the reason for current operations is that it's always been done that why however, the analyst may wish to improve on the procedures. Business process reengineering way be of help in framing an approach for rethinking the business in a creative way. At the completion of this phase, the analyst should understand how the business functions and have competed information on the people, goals, data and procedures involved.

2.5.3 Analyzing system needs

The next phase that the systems analyst undertakes involves analyzing system needs. Again, special tools and techniques help the analyst make requirement determinations. One such tool is the use of data flow diagrams to chart the input, processes, and output of the business's function in a structured graphical form. From the data – flow diagrams, a data diagrams, a data dictionary is developed that lists all the data items used in the system, as well as their specifications whether they are alphanumeric or next and how much space they take up when printed.

During this phase the systems analyst also analyzes the structured decisions made structured decisions are those for which the conditions, condition alternatives, analysis of structured decisions, structured English, decision tables, and decision trees.

Not all decisions in organizations are structured, but it is still important for the systems analyst to understand them. Semi structured decisions (decisions made under risk) are often supported by decision support systems. When analyzing semi structured decisions, the analyst examines the decisions based on the degree of decision making skill required, the decision is made.

Analysis of multiple criteria decisions (decisions where many factors must be balance) is also part of this phase. Many techniques are available for analyzing multiple criteria decisions, including the trade off process and the use of weighting methods.
At this point in the systems development life cycle, the system analyst prepares a systems proposal that summarizes what has been found, provides cost benefit analyses of alternatives,

and makes recommendation on what (if anything) should be done. If one of the recommendations is acceptable to management, the analyst proceeds along that course. Each systems problem is unique, and there is never just one correct solution. The manner in which a recommendation or solution is formulated depends on the individual qualities and professional training of each analyst.

2.5.4 Designing the recommended system

In the design phase of the systems development life cycle, the systems analyst uses the information collected earlier to accomplish the logical design of the information system. The analyst designs accurate data – entry procedures so that data going into the information system are correct. In addition, the analyst provides for effective input to the information system by using technique of good form and screen design.

Part of the logical design of the information system us devising the user interface. The interface connects the withy the system and is this extremely important.

The design phase also includes designing files or databases that will store much of the data needed by decision makers in the organization. A will organized data base is the basis for all information systems. In this phase the analyst also works with users to design output (either onscreen or printed) that meets their information needs.

Finally, the analyst must design controls and backup procedures to protect the system and the data and to produce program specification packets for programmers. Each packet should contain input and output layouts, file specific flow diagrams, a system flowchart and the names and function of any prewritten code routines.

2.5.5 Developing and documenting software

In the fifth phase of the systems development life cycle, the analyst works with programmers to develop any original software that is needed. Some of the structured techniques for designing and documenting software include structure chart Nassi–shneiderman charts, and pseudocode.

The system analyst uses one or more of these devices to communicate to the programmer what need to be programmed.

During this phase the analyst also works with users to develop effective documentation for software, including procedure manuals, online help, and web sites featuring frequently asked questions (FQS), on “read me” files shipped with new software. Documentation tells users how to use software and what to do if software problems occur.

Programmers have a key role in this phase because they design, code, and recmosynatical errors from computer program if the program is to run in a mainframe environment, job control language (JCL) must be created. To ensure quality, a programmer may conduct either a design or a code walkthrough explaining complex portions of the program to a team of other programmers

2.5.6 Testing and maintaining the system

Before the information system can be used, it is much less costly to catch problems before the system is signed over to users. Some of the testing is completed by programmers alone, some of it by systems analysis in conjunction with programmers. A series of tests to pinpoint problems is run first with sample data and eventually with actual data from the current system.

Maintenance of the system and its documentation begins in this phase and is carried out routinely throughout the life of the information system. Much of the programmer’s routine work consists of maintenance, such as program updates, can be done automatically via a vendor site on the World Wide Web. Many of the systematic procedures the analyst employs throughout the systems development life cycle can help ensure that maintenance is kept to a minimum.

2.5.7 Implementing and evaluating the system

In this last phase of system development, the analyst helps implement the information system. This phase involves training users to handle the system. Some training is done by vendors, but oversight of training is the responsibility of the systems analyst. In addition, the analyst needs to plan for a smooth conversion from the old system to the new one. This process includes

converting files from old formats to new ones or building a database, installing equipment, and bringing the new system into production.

Evaluation is shown as part this final phase of the systems development life cycle mostly for the sake of discussion. Actually, evaluation takes place during every phase. A key criterion that must be satisfied is whether the intended users are indeed using the system.

It should be noted that system work often cyclical. When an analyst finishes one phase of system development and proceeds to the next, the discovery of a problem may force the analyst to return to the previous phase and modify the work done there. For example, during the testing phase, the programmer may discover that the program does not work correctly; either because code was not written to support certain program does not work correctly, either because code was not written to support certain portions of the system design or the design was incomplete.

In either event the programs must be modified, the analyst may have to change some of the system design materials in turn, it may be necessary for the analyst to meet with the user and reinvestigate how a specific business activity functions.

2.6 Transaction processing system (TPS)

A transaction processing system (TPS) automates the handling of data about business activates or transactions. For example, a bank's TPS would capture information about withdrawals from and deposits to customer accounts. Data about each transaction are stored. Reports may be produces immediately to provide summaries of transactions and transaction may be moved from process to process in order to handle all aspects of the business activity. (Joseph.s.v. 2003 PP18)

The analysis and design of a TPS requires you to focus on the firm's current procedures for processing transactions. How does the organization track capture, process and output data? The goal of TPS development is to improve transition processing by speeding it up, using fewer people, improving efficiency and accuracy, integrating it with other organizational information systems or providing information not previously availably.(Joseph.s.v. 2003 PP18)

2.7 Management information system

A management information system (MIS) is a computer based system that takes the raw data available through a TPS and converts them into a meaningful aggregated from. For example , whereas a transaction processing system keeps track of sales a management information system can pinpoint which items are selling slowly and which are selling quickly, the MIS system can therefore direct the manufacturing department on what to produce and when . Developing an MIS calls for a good understanding of what kind of information managers require and how manageress use information. Thus, the analyst must also develop a good understanding of the business and the transaction processing systems that providing data for an MIS (Joseph.s.v. 2003 PP19)

2.8 Decision Support Systems

A decision support system (DSS) is designed to help decision makers with decision. Whereas an MIS produces a report, a DAA provides an interactive environment in which decision makers can quickly manipulates date and models of business operations. A DSS has three parts. The first part is composed of a database (which may be extracted from a TPS or MIS). The second part consists of mathematical or graphical models of business. The third part is made up of a user interface (or dialogue module) that provides a way for the decision makers to communicator with the DSS, A DSS may use both historical data as well as judgments (or what if analysis 0 about alternatives histories or possible futures. An executive information system (EIS) is a DSS that allows senior management to explore data starting at high level of aggregation and selectively drill down into specific areas where more detailed information is required. A DSS is characters certain decision – making actives (from problem finding to choosing a course of action. (Joseph.s.v. 2003 PP19)

The system analysis and design for a DSS often concentrates on the three main DSS components. Database models base and user dialogue. As with an MIS, a data orientations database, model base and user dialoged. As with an MIS, a data orientation is most often used for understanding user requirements. The systems analysis and design project will carefully document the mathematical rules that define interrelationships among different data. These

relationships are used to predict future data or to find the best solutions to decision problems. Decision logic must be carefully understood and documented. Also, because a decision maker typically interacts with a DSS, the design of easy-to – use yet through user dialogues and screens is important. (Joseph.s.v. 2003 PP19)

2.9 Expert Systems

An expert system (ES) is different from any of the other classes of systems we have discussed so far. The ES replicates the decision –making process rather than manipulating information. If – then –else rules or other knowledge representation forms describe the way an expert would approach situations in a specific domain of problems. Typically, users communicate with an ES through an interactive dialogue. The ES asks questions (Which an expert would ask) and the end the end user supplies the answers. The answers are then used to determine which rules apply, and the ES provides a recommendation based on the rules.

The focus on developing an ES is acquiring the knowledge of the expert in the particular problem domain. Knowledge engineers perform knowledge acquisition; they are similar to systems analysts but are trained to use different techniques, as determining knowledge is considered more difficult than determining data. . (Joseph.s.v. 2003 PP20)

2.10 Approaches to Development

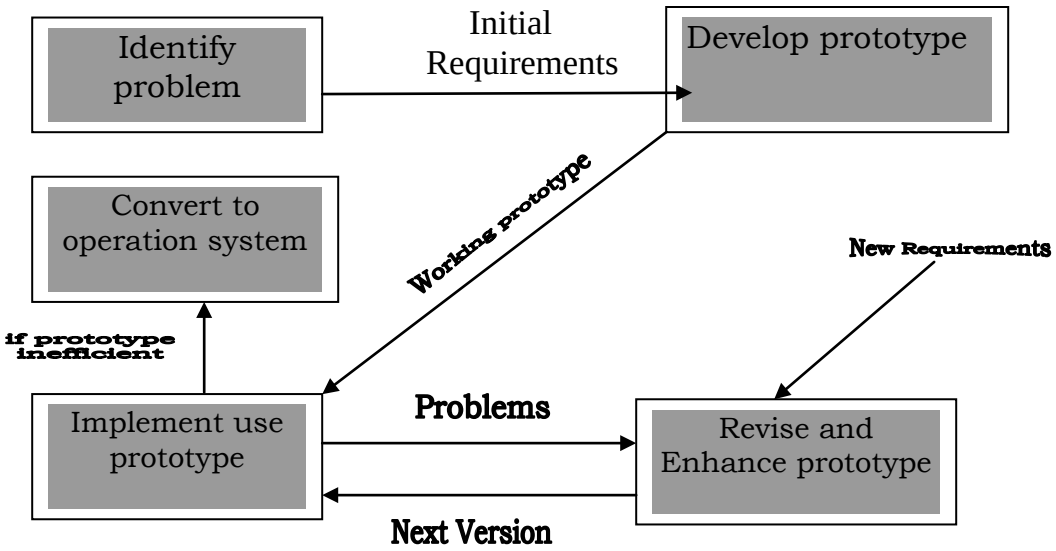
Prototyping rapid application development (RAD), Joint application designs (JAD) and participatory design (PD) is four approaches that streamline and improve the systems analysis and design process. (Joseph.s.v. 2003 PP26)

2.10.1 Prototyping

Designing and building a scaled – down but working version of a desired system is known as prototyping. A prototype can be developed with a computer –aided software engineering (CASE) tool, a software product that automates the systems development life cycle steps. CASE tools make prototyping easier and more creative by supporting the design of screens and reports

and other parts of a system interface. CASE tools also support many of the diagramming techniques you will learn, such as data flow diagrams and entity- relationship diagrams.

The analyst works with users to determine the initial or basic requirements for the system. The analyst then quickly builds a prototype. When the prototype is completed, the users work with it and tell the analyst what they like and do not like about it. The analyst uses this feed-back to improve the prototype and takes the new version back to the users. This iterative process continues until the users are relatively satisfied with what they have seen. The key advantages of the prototyping technique are (1) it involves the user in analysis and design, and (2) it captures requirements in concrete, rather than verbal or abstract, from. In addition to being used as a standalone, prototyping may also be used to augment the SDLC.



Prototyping is a key tool that supports rapid application development (RAD). The fundamental principle of any RAD methodology is to delay producing detailed system design documents until after user requirements are clear. The prototype serves as the working description of needs. RAD involves gaining user acceptance of the interface and developing key system capabilities as quickly as possible. RAD is widely used by consulting firms. It is also used as an in – house methodology by firms like Hughes Electronics corporation, RAD sacrifices computer efficiency for gains in human efficiency in rapidly building are rebuilding working systems. On the other

hand, RAD methodologies can overlook important systems development principles, which may result in problems with systems development. (Joseph.s.v. 2003 PP27)

2.10.2 Joint Application Design

In the late 1970s, systems development personnel at IBM developed a new process for collecting information system requirements and reviewing system designs. The process is called Joint Application Design (JAD) .The idea behind JAD is to structure the requirements determination phase of analysis and the reviews that occur as part of design. Users, managers, and systems developers are brought together for a series of intensive structured meetings run by a JAD session leader. By gathering the people directly affected by an IS in one room at the same time to work together to agree on system requirements and design details, time and organizational resources are better managed.(Joseph.s.v. 2003 PP27)

2.10.3 Participatory Design

Participatory Design (PD) represents a viable alternative approach to the SDLC. PD emphasizes the role of the user much more than traditional North American techniques such as structured analysis and structured design do. In some cases, PD may involve the entire user community in the development process. Each user has an equal voice in determining system requirements and in approving system design (Joseph.s.v. 2003 PP26)

2.11 Initiating and planning system Development projects

Many activities performed during initiation and planning could also be completed during the next phase of the SDLC- system analysis, proper and insightful project initiation and planning, including determining project scope and identifying project activities, can reduce the time needed to complete later project phases, including systems analysis. For Example, a careful feasibility analysis conducted during initiation and planning could lead to rejecting a project and saving a considerable expenditure of resource. The actual amount of time expended will be affected by the size and complexity of the project as well as by the experience of your organization in building similar systems. A rule of thumb is that between 10 and 20 percent of the entire development effort should be expended on initiation and planning. In other words, you

should not be reluctant to spend considerable time and energy early in the project's life in order to fully understand the motivation for the requested system. . (Joseph.s.v. 2003 PP84)

Most organizations assign an experienced systems analyst, or team of analysts for large projects, to perform project initiation and planning .The analyst will work with the proposed customers-mangers and users in a business unit- of the system and other technical development staff in preparing the final plan. Experienced analysts working with customers who well understand their information services need should be able to perform a detailed analysis with relatively little effort. Less experienced analysts with customers who only vaguely understand their needs will likely expend more effort in order to be certain that the project scope and work plan are feasible. (Joseph.s.v. 2003 PP84)

The objective of project initiation and planning is to transform a vague system request document into a tangible project description. Effective communication among the systems analyst, users, and management is crucial to the creation of a meaningful project plan. Getting all parties to agree on the direction of a project may be difficult for cross- department projects when different parties have different business objectives. Projects at large, complex organizations require systems analysts to take more time to analyze both the current and proposed systems.

2.11.1 The process of initiating and planning systems Development Projects

As its name implies, two major activities occur during project initiation and project planning project initiation focuses on activities that will help organize a team to conduct project planning. During initiation, one or more analysts are assigned to work with a customer to establish work standards and communication procedures. . (Joseph.s.v. 2003 PP84)

The second activity, project planning, focuses on defining clear, discrete tasks and the work needed to complete each task. The objective of the project planning process to produce two documents: a Baseline Project Plan (BPP) and the statement of work (SOW) .The BPP becomes the foundation for the remainder of the development project. It is an internal document used by the development team but not shared with customers. The SOW outlines the objectives and constraints of the project for the customer. Both the BPP and SOW are discussed below. As with

the project initiation process, the size, scope, and complexity of a project dictate the comprehensiveness of the project planning process and resulting documents. Further, numerous assumptions about resource availability and potential problems will have to be made. Analysis of these assumptions and system costs and benefits forms a business case.

- Establishing the project initiation team
- Establishing a relationship with the customer
- Establishing the project initiation plan
- Establishing management procedure
- Establishing the project management environment and project workbook

2.11.2 Deliverables and outcomes

The major outcomes and deliverables from project initiation and planning are the Baseline project plan and the Statement of Work. **The Baseline Project Plan (BPP)** contains all information collected and analyzed during the project initiation and planning activity. The plan reflects the best estimate of the project's scope, benefits, costs, risks, and resource requirements given the current understanding of the project. The BPP specifies detailed project activities for the next phases (because these depend on the results of the analysis phase). Similarly, benefits, costs, risks, and resource requirements will become more specific and quantifiable as the project progresses. The project selection committee uses the BPP to help decide whether to continue, redirect, or cancel a project. If selected, the BPP becomes the foundation document for all subsequent SDLC activities; however, it is updated as new information is learned during subsequent SDLC activities (Joseph.s.v. 2003 PP85)

The statement of Work (SOW) is a short document prepared for the customer that describes what the project will deliver and outlines all work required to complete the project. The SOW is a useful communication tool that assures that both you and your customer have a common understating of the project. The SOW is an easy document to create because it typically consists of a high level summary of the BPP information. Depending upon your relationship with your customer, the role of the SOW may vary. At one extreme, the SOW can simply be used as a communication vehicle to outline the current estimates of what the project will deliver, when it

will be completed and the resources it may consume. A contract programming or consulting firm, for example, may establish a very formal relationship with a customer and use an extensive and formal SOW.

2.12 Structured Systems Analysis and Design Method

SSADM techniques

The three most important techniques that are used in SSADM are:

Logical Data Modeling

This is the process of identifying, modeling and documenting the data requirements of the system being designed. The data are separated into entities (things about which a business needs to record information) and relationships (the associations between the entities). ://www.modelsys.com/msssadm.htm. Retrieved 2010-12-17.

Data Flow Modeling

This is the process of identifying, modeling and documenting how data moves around an information system. Data Flow Modeling examines processes (activities that transform data from one form to another), data stores (the holding areas for data), external entities (what sends data into a system or receives data from a system), and data flows (routes by which data can flow).

Entity Behavior Modeling

This is the process of identifying, modeling and documenting the events that affect each entity and the sequence in which these events occur.

Stages

The SSADM method involves the application of a sequence of analysis, documentation a design tasks concerned with the following.

(SSADM) S*tructured* ***S****ystems* *A**nalysis and* ***D****esign* ***M****ethod*, **a set of standards developed in the early 1980s for systems analysis a**nd design widely used for government computing

projects in the United Kingdom. SSADM uses a combination of text and diagrams throughout the whole life cycle of a design, from the initial design idea to the actual physical design of the application. ://www.modelsys.com/msssadm.htm. Retrieved 2010-12-17.

2.12.1 Stage 0 - Feasibility study

In order to determine whether or not a given project is feasible, there must be some form of investigation into the goals and implications of the project. For very small scale projects this may not be necessary at all as the scope of the project is easily understood. In larger projects, the feasibility may be done but in an informal sense, either because there is not time for a formal study or because the project is a "must-have and will have to be done one way or the other. ://www.modelsys.com/msssadm.htm Retrieved 2010 -12-17.

When a feasibility study is carried out, there are four main areas of consideration:

- Technical - is the project technically possible?
- Financial - can the business afford to carry out the project?
- Organizational - will the new system be compatible with existing practices?
- Ethical - is the impact of the new system socially acceptable?

To answer these questions, the feasibility study is effectively a condensed version of a fully-blown systems analysis and design. The requirements and users are analyzed to some extent, some business options are drawn up and even some details of the technical implementation. The product of this stage is a formal feasibility study document. SSADM specifies the sections that the study should contain including any preliminary models that have been constructed and also details of rejected options and the reasons for their rejection.

2.12.2 Stage 1 - Investigation of the current environment

This is one of the most important stages of SSADM. The developers of SSADM understood that though the tasks and objectives of a new system may be radically different from the old system, the underlying data will probably change very little. By coming to a full understanding of the data requirements at an early stage, the remaining analysis and design stages can be built up on a firm foundation.

In almost all cases there is some form of current system even if it is entirely composed of people and paper. Through a combination of interviewing employees, circulating questionnaires, observations and existing documentation, the analyst comes to full understanding of the system as it is at the start of the project. This serves many purposes:

- the analyst learns the terminology of the business, what users do and how they do it
- the old system provides the core requirements for the new system
- faults, errors and areas of inefficiency are highlighted and their correction added to the requirements
- the data model can be constructed
- the users become involved and learn the techniques and models of the analyst
- the boundaries of the system can be defined

The products of this stage are:

- Users Catalog describing all the users of the system and how they interact with it
- Requirements Catalogs detailing all the requirements of the new system
- Current Services Description further composed of
- Current environment logical data structure (ERD)
- Context diagram (DFD)
- Leveled set of DFDs for current logical system
- Full data dictionary including relationship between data stores and entities

To produce the models, the analyst works through the construction of the models as we have described. However, the first set of data-flow diagrams (DFDs) are the current physical model, that is, with full details of how the old system is implemented. The final version is the current logical model which is essentially the same as the current physical but with all reference to implementation removed together with any redundancies such as repetition of process or data. In the process of preparing the models, the analyst will discover the information that makes up the users and requirement catalogs.. ://www.modelsys.com/msssadm.htm. Retrieved 2010-12-17.

2.12.3 Stage 2 - Business system options

Having investigated the current system, the analyst must decide on the overall design of the new system. To do this, he or she, using the outputs of the previous stage, develops a set of business system options. These are different ways in which the new system could be produced varying from doing nothing to throwing out the old system entirely and building an entirely new one. The analyst may hold a brainstorming session so that as many and various ideas as possible are generated.

The ideas are then collected to form a set of two or three different options which are presented to the user. The options consider the following:

- the degree of automation
- the boundary between the system and the users
- the distribution of the system, for example, is it centralized to one office or spread out across several?
- cost/benefit
- impact of the new system

Where necessary, the option will be documented with a logical data structure and a level 1 data-flow diagram.

The users and analyst together choose a single business option. This may be one of the ones already defined or may be a synthesis of different aspects of the existing options the output of ://www.modelsys.com/msssadm.htm. Retrieved, 2010-12-17.

2.12.4 Stage 3 - Requirements specification

This is probably the most complex stage in SSADM. Using the requirements developed in stage 1 and working within the framework of the selected business option, the analyst must develop a full logical specification of what the new system must do. The specification must be free from error, ambiguity and inconsistency. By logical, we mean that the specification does not say how the system will be implemented but rather describes what the system will do.

To produce the logical specification, the analyst builds the required logical models for both the -flow diagrams (DFDs) and the relationship diagrams (ERDs). These are used to produce function

definitions of every function which the users will require of the system, entity life-histories (ELHs) and effect correspondence diagrams, these are models of The product of this stage is a complete Requirements Specification document which is made up of?

- the updated Data Catalog
- the updated Requirements Catalog
- the Processing Specification which in turn is made up of
  - user role/function matrix
  - function definitions
  - required logical data model
  - entity life-histories
  - effect correspondence diagrams

Though some of these items may be unfamiliar to you, it is beyond the scope of this unit to go ://www.modelsys.com/msssadm.htm.Retrieved 2010-12-17.

2.12.5 Stage 4 - Technical system options

This stage is the first towards a physical implementation of the new system. Like the Business System Options, in this stage a large number of options for the implementation of the new system are generated. This is honed down to two or three to present to the user from which the final option is chosen or synthesized.

However, the considerations are quite different being:

- the hardware architectures
- the software to use
- the cost of the implementation
- the staffing required
- the physical limitations such as a space occupied by the system
- the distribution including any networks which that may require
- the overall format of the human computer interface

All of these aspects must also conform to any constraints imposed by the business such as available money and standardization of hardware and software.

The output of this stage is a chosen technical system option. ://www.modelsys.com/msssadm.htm. Retrieved 2010 -12-17.

2.12.6 Stage 5 - Logical design

Though the previous level specifies details of the implementation, the outputs of this stage are implementation-independent and concentrate on the requirements for the human computer interface. The logical design specifies the main methods of interaction in terms of menu structures and command structures.

One area of activity is the definition of the user dialogues. These are the main interfaces with which the users will interact with the system. Other activities are concerned with analyzing both the effects of events in updating the system and the need to make inquiries about the data on the system. Both of these uses the events, function descriptions and effect correspondence diagrams produced in stage 3 to determine precisely how to update and read data in a consistent and secure way.

The product of this stage is the logical design which is made up of:

- Data catalog
- Required logical data structure

Logical process model -- includes dialogues and model for the update and inquiry processes ://www.modelsys.com/msssadm.htm.Retrieved 2010-12-17.

2.12.7 Stage 6 - Physical design

This is the final stage where all the logical specifications of the system are converted to descriptions of the system in terms of real hardware and software. This is a very technical stage and a simple *overview* is presented here.

The logical data structure is converted into a physical architecture in terms of database structures. The exact structure of the functions and how they are implemented is specified. The physical data structure is optimized where necessary to meet size and performance requirements. The product is a complete Physical Design which could tell software engineers how to build the system in specific details of hardware and software and to the appropriate standards. ://www.modelsys.com/msssadm.htm. Retrieved 2010-12-17.

Advantages and disadvantages

Using this methodology involves a significant undertaking which may not be suitable to all projects

The main advantages of SSADM are:

- Three different views of the system
- Mature
- Separation of logical and physical aspects of the system
- Well-defined techniques and documentation
- User involvement

The size of SSADM is a big hindrance to using it in all circumstances. There is a large investment in cost and time in training people to use the techniques. ://www.modelsys.com/msssadm.htm. Retrieved 2010-12-17.

CHAPTER THREE

DATA PRESENTAION, ANALYSIS AND INTERPRETATION

3.1 Introduction

This part of the paper presents the findings regarding system analysis and designing on Quality and Standards of Ethiopian on Addis-Ababa Branch Office, import goods inspection service division. The data were collected through questionnaire, accordingly questionnaire were designed and distributed to 28 employees (quality inspector) of which, 27 employee responded to the questionnaire making the response rate 96.4%. One of the 28 distributed questionnaire was not returned which is 3.57%. Additionally, interview was conducted with the head of Addis Ababa Branch.

3.1 General Characteristics of Respondents

Table 1 General Characteristics of the Respondents

No.	Item	Response	Respondent	
			requency	**%**
	Sex	**Male**	21	77.78%
		Female	6	22.22%
		Total	**27**	**100**%
	Age	Below 25 Years	9	33.33%
		25 – 35 Years	3	11.11%
		36 – 45 Years	15	55.56%
		46 years and above	0	0
		Total	**27**	**100**%
	Education Level	12/10 High School	0	0
		Diploma	3	11.11%

		BSc./BA Degree	24	88.89%
		Others	0	0
		Total	**27**	**100**%
	Year of Service in the Organization	Below 1 year	9	33.33%
		1 – 3 years	3	11.11%
		4 – 5 years	0	0
		Above 5 years	15	55.56%
		Total	**27**	**100**%

Source: survey 2011

As it can be seen in No. 1 of the table 1 above (77.78%) of the respondents were male and 6 (22.22%) of them were female. According to the above figure it looks that the majority of the respondents are male. The possible explanation why the number of male inspectors is grater than female inspectors was the nature of the import goods inspection and taking samples from containers and trucks is difficult to female inspectors.

In relation to age category as shown in No. 2 of the same table respondents from below 25 years comprise 9 (33.33 %) from age of 25 – 35 years comprise 3 (11.11%) from 36 – 45 years comprise of 15 |(55.56%) of the total respondents. Therefore the finding from the age profile of the respondents indicates that the majority of the respondents were between the ages of 36 – 45 years, and this indicates that majority of the staffs are matured to provide valuable response to the question raised and there by reducing possibility of biasness.

Regarding educational back ground of the respondents 3 (11.11%) of them are diploma holders 24 (88.89%) of them are first degree holders. The figure tells us that all the respondents can respond to the questions properly.

Concerning the service years of the respondents in the organization shown in the No. 4 of the same table 9(33.33%) below one year 3(11.11%) are between one year

and three years the rest 15(55.56%) years are above 5 years service experience in the organization. Hence with greater degree of confidence respondent can say something about system analysis and designing of the study.

3.3 Analysis of issued of direct relevance to the study

This research s investigates or distinguishes the main problem or obstacles of service delivery system on the inspection service system, and to identify whether there is or not unnecessary duplication of documents and various questions were posed to the respondents, focused in system analysis and designing of the import inspection service giving.

Table 2. Unnecessary duplication of documents in the inspection service

Item	esponses	requency	%
The pre valence of unnecessary duplication of documents	Yes	15	55.56%
	No	12	44.44%
	Total	**27**	**100%**
Do you think that this unnecessary duplication affect on giving service to the customers?	Yes	15	100%
	No	0	0%
	Total	**15**	**100%**

Source: survey; 2011

As can be observed in the above table 2, (55.56%) of the respondents clam that there is unnecessary duplication of documents in import inspection service giving and (44.44%) of them confirm that there is no unnecessary duplication of documents in the service giving system. However, we can say majority 55.56% of the respondent argue that there was unnecessary duplication of documents delivery the inspection period.

Table 3. Reasons for the problems and Responsible body for the mentioned problems.

Item	Response	Frequency	Percentage
Reasons for the problems	Lack of facilities	3	20%
	Lack of procedures and system	12	80%
	Total	**15**	**100%**
Responsible body for the mentioned problems?	The branch Head	3	20%
	Management of the organization	9	60%
	I don't know	3	20%
	Total	**15**	**100%**

Source: survey; 2011

As shown on Table 3 among the respondents who said that the import goods inspection service giving there is unnecessary duplication of documents, the main reason for this is 20% claim that it is lack of facilities, 80% conform that it is lack of procedures and systems. Therefore we can says that inspection service has lack of procedure system in performing their duties that is why there is unnecessary duplication of documents. Regarding the responsibility of the above mentioned problems 20% of the respondents believe that the responsibility is the branch office head, 60% of the respondent believe the responsibilities is the management of the organization and the rest 20% of the respondents claims that they don't know the responsible body.

Table 4. The support given to employees to improve

their skills

Item	Responses	Frequency	Percentage
Type of support given to the employees	Material support	3	11.11%
	Training	9	33.33%
	No support	15	55.56%
	Total	**27**	**100%**

Source: survey; 2011

According to the above Table 4. 11.11% of the respondents replied that they are supported by giving materials, 33.33% of the respondents replied that they are getting training to improve or up grade their skills and the rest 55.56% of the respondent are replied that they do not getting support by the organization. Hence, the majority of the employees do not gate any materials support or training to improve or upgrade their skills .

Table 5. Time Taking practice in Inspection Service and Delivery Process

Item	Responses	Frequency	Percentage
Does the process of inspection service is short?	Yes	9	33.33%
	No	18	66.67%
	Total	**27**	**100%**
If the service deliver process is long, how to shorten the process?	By avoiding unnecessary duplication of documents	3	16.67%
	By providing simple and manageable system	9	50.00%
	By upgrading the	6	33.33%

	efficiency & performance of the workers		
	Total	**18**	**100%**

Source: survey; 2011

As revised on the Table 5. 66.67% of the respondents claim that the inspection service delivery not short process and this affects the performance of the organization, 33.33% of the respondents are supporting that the process is short. Among the respondents that the process of delivery is not short process gives solution for the long process are 50% of the respondents are gives solution by providing simple and manageable system 33.33% of the respondents are says, by upgrading the efficiency and performance of the workers and the rest16.67% of the respondents are saying by avoiding the unnecessary duplication of documents.

Table 6. Customers' satisfaction from your Service Delivery

Item	Responses	Frequency	Percentage
How do you rate the extent of customer's satisfied	Highly satisfied	3	11.11%
	Satisfied	3	11.11%
	Moderate satisfied	18	66.67%
	Dissatisfied	3	11.11%
	Total	**27**	**100%**
Reason for dissatisfaction	Due to lengthening process	2	66.67%
	Application and inspection result will be filled manually	1	33.33%
	Total	**3**	**100%**

Source: Survey; 2011

According to the finding presented in table 6 above, the respondents employees are rated highly satisfied, satisfied and dissatisfied (11.11%) respectively. On the other hand, (66.67%) of the respondents are moderately satisfied by their service delivered to customers. Regarding to those who are dissatisfied (66.67%) of the respondents are dissatisfied due to lengthening of the process and the rest (33%) replies they are dissatisfied due to the application and inspection results will be filled manually, so that it takes more time.

Table 7.Employees discussion with Section or Branch Office Head about general inspection process

Item	Responses	Frequency	Percentage
The extent of discussed with your section or branch office head about the problem faced on inspection process.	Yes	15	55.56%
	No	12	44.44%
	Total	**27**	**100%**
The extent of satisfaction with your organization structures system, layout and facilities.	Yes	3	11.11%
	No	24	88.89%
	Total	**27**	**100%**
Reason for not satisfaction with the organizational	Because the system is not connected with other section	15	62.5%
	Because the structure of branch has not connection horizontally with section.	6	25%
	I don't know	3	12.5%
	Total	**24**	**100%**

Source: Survey, 2011

As presented on Table 7. 55.56% of the respondents said that they have discussion time with their section head or branch office head about the general problems on the inspection process the rest 44.44% are not argue about the discussion with their section or branch head during or about general problems with inspection process. Regarding the organizational structure, system layout and facilities 88.89% of the respondents were not satisfied and 11.11% of the respondents are satisfied with over all the structure system layout an facilities of the organization. Those who are not satisfied by their organization structure, system layout and facilities gives reason 62.5% because the system is not connected with other sections 25% gives reason because the structure of branches has not connection each other or horizontally and the rest 12.5% claim that they don't know the reason why they are not satisfied with their organizational structure, system layout and facilities.

Table 8. The data recording and handling system of the office

Item	Responses	Frequency	Percentage
How do you rate the way data are recorded?	Very good recording system	3	11.11%
	Moderate recording system	6	22.22%
	Poor	18	66.67%
	Total	**27**	**100%**
If your answer is"poor" what is your suggestion?	Upgrade the required data's and use simple manageable system	3	16.67%
	Make the data recorded correctly and avoid unnecessary duplication and use simple manageable system	15	83.33%
	Total	18	100%

Source: Survey, 2011

3.3.4

Regarding ways of recording and handling system 3 or 11.11% of the respondents gives responses with very good data recording system; 6 or 22.22% of the respondents response with moderate data recording system and the majority

respondents 18 or 66.67% responses poor data recording and handling system and they suggests 3 or 16.67% of them are to upgrade the required data's and use simple manageable system and the rest 15 or 83.33% suggests that the organization should make the data's recorded correctly and avoid unnecessary duplication and use simple manageable system.

Table 9. The Need of Improving the System of the Inspection Service

Item	Responses	Frequency	Percentage
The reason of improving the system of the inspection service?	Because system shall provide an easy access to any information needed.	3	11.11%
	Because the system shall help to identify operation, which are not finalized and system shall help easily to correct errors and fast to prepare reports.	24	88.89%
	Total	**27**	**100%**
Does the organization provide training and development in relation to system analysis?	Yes	9	33.34%
	No	12	44.44%
	I don't know	6	22.22%
	Total	**27**	**100%**

Source: Survey, 2011

As shown on the table 9 among the respondent who said that the need of improving the system of inspection service 11.11% response system shall provide on easy access to any information needed and 88.89% response system shall help to identify operations which are not finalized and system shall help easily to correct errors and fast to prepare reports.

Regarding training and development in relation to the system analysis 33.34% of the respondents are accepts that their organization provides training and development in relation to system analysis 22.22% of the respondents responses

that they don't know whether the organization provides training and development in relation to the system analysis the majority of the respondents 44.44% responses that their organization does not provided any training and development in relation to the system analysis.

3.4 Analysis of Interview Results

For the question that asked to the Branch Head about their method of measuring their service delivery, customer satisfaction and complain handling procedure or authorized person, the interviewee replied as follows.

- "At the beginning of every year we have put a detail plan that has to be worked with in a year and at every quarter of the year the branch evaluates their quality work or report and identifies their efficiency in that how much of the work is successfully completed and how much is not. Therefore, the branch believes the higher the efficiency, the better delivery of service for customer and vise-versa. In addition to there is one body which accepts all the customer complaints and analyzes" all these complaint. After these the steering committee put a proper solution for the complaints and makes solution after approved by the management. At the end of the year the committee writes a detail report on the rate of that customer satisfaction by referring to the complaints given by the customer and corrective action given by the organization".

  The other point was asked for the branch head is to tell what kind of activities the branch under takes in developing employees dealing with service delivery and it there is any training or motivation that are given for employees and what kind of measure is taken to shorten the service delivery process and how data and documents are recorded.

- The branch head strongly underline that they believe on trained and to use new technology, and replied as follows. "The basic objectives of QSAE to provide qualified certification service for import goods, which are ordered on the basis of technical regulations or national continental and international

standards. Therefore, to achieve these objectives our branch needs skilled inspectors and to use new technology. But, at this time our document handling system is poor, do not have sufficient workers and trainings and work is done manually but, nearly we do have plan to computerized the data and provide simple manageable process and measures will be taken to improve the current situation in poor handling".

The last question was asked for the branch head is to tell the solution for the major problems of import inspection office and to give as any suggestion about the import inspection over all physical structure, system and activities. The interviewee replies as follows.

- "Information about the service delivered must be gathered formal concerned parties to know the problem activities, update the system accordingly, train the employees for new system and technology, supply the necessary facilities and inputs and update the input data, forms and documents in accordance the new system".

The branch head summarized the interview by giving the following suggestion.

- "Our branch office co-ordinate the divisions and sections to create a good relation among them. Hence, the branch works without rest to develop a well structural net work between other branches and our head office and develop a new service delivery structure that everybody hopes that make a satisfied customer with a process Re-engineering (BPR). Today our organization becomes on implementing and exercising this new working culture process and its beginning shows a better progress on the better service delivery and good custom satisfaction".

CHAPTER FOUR

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATION

In this chapter the researcher focused to summarize the data that were -presented in the chapter three and also provide conclusion and recommendation. The conclusion is based on the theories, concepts and assumptions which are used in the previous chapter. Lastly, recommendation will be forwarded on the basis of the conclusions.

4.1 Summary of findings

The study attempted to address the major research questions posed in the first chapter. As the result the major findings of the study are therefore summarized as follows;

- With regard to sex and age, the study show, (77.18%) of the respondents are male and their age shows that majority of the employees are between 36-45 years. degree lead.
- Regarding their level of education, majority of them (88.88%) are first degree holders. Similarly, greater number of employees (55.56%) have above 5 years service experience in the organization.
- Concerning the unnecessary duplication of document in the inspection serving majority of the respondents (55.56%) argue that there was unnecessary duplication of documents in inspection delivery period.
- Regarding getting support from the organization (55.56%) of the respondents replied that they do not getting any support from the organization.
- According to general views of the respondents on the factors that are affecting in the quality inspection services, (66%) of the employees responded that the inspection service delivered by the Addis Ababa, branch (import goods inspection division) is low.
- (66.67%) of the employees respond moderately satisfied by their service delivered to customers.
- Regarding level of discussion and communication with branch or with the management (55.56%) of the respondents argue that they have discussion time with their section head about the problem faced on inspection process.

- In relation to the data recording system (66.67) of the employees or respondents replied that the data recording and handling system is poor and gives suggestion or reasons, the data should be recorded correctly and avoid unnecessary duplication and use simple manageable system.
- Concerning the factors that build good relationship with employees of the branch, form the view point of the branch head, the branch works without rest to develop a well structural net work between branches and head office and develop a new service delivery structure that everybody hopes and makes a new customer relations ship.
- In addition to the above the branch head also responded that to increase or encourage the relationship between the customers and employees of the branch through giving training and derail concepts of service delivery which helps the customer satisfaction.

4.2 Conclusion

The following conclusion are made on the basis of the major findings and analysis part of this paper. Most of customers face problem when they are going to the import good inspection division for getting service delivered by the branch. Among these problems the unnecessary duplication of documents, lack of standard order receipt system and poor handing of data and exchange of information. Therefore, from this the researcher can conclude that the customer were not getting clear and fast service and the branch is not able to perform the promised service when the customer comes with complaints to the branch office.

- Based on the finding, there is no well designed (arranged) office layout and there is unnecessary duplication of documents in the inspection delivery service. The study pointed out that the service delivery process is lengthen time taken process. Therefore, the management of the organization is responsible for the unnecessary duplication of documents.
- According to the finding on the impact of getting support to employees, lack of technology and inconvenient to store recording materials or data's are the major limitations for the inspection service delivery division. As a result of this, the branch needs to carefully look the current service delivery process and give support and training to employees to improve or upgrade their skills for better service delivery and customers satisfaction.

- The findings indicates that, in quality and standard authority in input goods inspection service operates using manual operation system and poor handing & exchange of information. This system hampers the process inspection and become tedious to accommodate the increases number of inspection request presented from customers.

4.3 Recommendation

- On the basis of the findings made and conclusion drawn with regard to the system analysis and designing assessment on Quality and standards Authority of Ethiopia on Addis Ababa, branch office on import goods inspection service delivery process the following recommendation are given;
- One can observe form the previous three chapter that the import goods inspection service delivery towards employee's commitment as less correlated issue. This may be due to different factors that presented in the previous chapter like of unnecessary duplication of documents, lack of support and training given to employees to improve or upgrade their skills and the like. So, in order to maintain the situation the organization should must be changed in accordance to the service rooms of paper work testing, sample store must be arranged and equipped the office with trained personnel's and stated work procedure and responsibilities
- One of the problem indicated that lack of standard order receipt system and inconvenient to store recording material and damage or worn out from frequent use. This can be solved by introducing computerized system to facilitate and rode reduce redundancy of paper work, the format used in the system must be updated, supporting documents like standards must be updated with the technology of materials imported.
- To increase responsiveness and assurance, employees at front line (import goods inspection service) should be trained, motivated, initiated and empowered .They are the one who exhibit the organization favorable image to the public.
- General speaking, Most scholars agreed on the issue of "well motivated employees can contribute more for the fulfillment of organization goal". To achieve this result Addis Ababa, branch should see the case of inspection service delivery from scratch and study the case in deeper. Not only that looking the case in detail and also making corrective actions that the inspection service delivery can put in a better conditions.

THE CANDIDATE'S DECLARATION

I the under signed, declare that this senior essay is my original work, prepared under the guidance of Ato Mergia Mekuria. All source of materials used for manuscript have been duly acknowledged.

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Date of submission: _____

ADVISOR'S DECLARATION

This paper has been exanimate with my approval as the university college advisor.

Name: _____

Signature: _____

Date:_____