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**Information Flow Management in Port Agency for Final
Disbursement Accounts (FDA)**

Case Study: Supermaritime Company Limited, Ghana

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Thesis abstract

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Information flow management in the shipping industry can be very challenging since the operations in the industry deals with dozens of chartering operations, heavy volume of data, documentations and several paperwork which cuts across various functional departments and also within the internal and external network chain in the industry. The process of a Final Disbursement Account is one such area of operation in the industry that though little attention has been given to it, is a daunting task that requires professionalism and integrity in the performance of duties. However, the process can be time consuming, paper intensive and involve various stakeholders in the industry, which promotes the need for effective management of information.

The main aim of this paper is to analyse the information process and work flow of a third-party ship management agency '*Supermaritime Ghana*' in the making of FDA and develop a suitable and functional information flow and work process system aiming at improving quality of work and value in customer service. Theories discussed will point out the activities of ship management agencies, information flow and its role in supporting the functions and operations within an organization.

Keywords: Management, Information Flow, Ship Agency, Final Disbursement Account

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Abbreviations

ADB	African Development Bank
BIMCO	Baltic and International Maritime Council
C & F	Clearing and Forwarding
DA	Disbursement Account
ETA	Expected Time of Arrival
ETD	Expected Time of Departure
EU	European Union
ERP	Enterprise Resource Planning
FDA	Final Disbursement Account
GDP	Gross Domestic Product
HO	Head Office
IMO	International Maritime Organization
ISMA	International Ship Managers Association
ISM	International Safety Management Code
LTD.	Limited
OCED	Organization for Economic Cooperation and Development
PFDA	Pro-forma Disbursement Account
PSD	Parcel Size Distribution
RO/RO	Roll on Roll Off
SPM	Supermaritime Ghana Limited
UNCTAD	United Nations Conference on Trade and Development
WTO	World Trade Organization

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1 INTRODUCTION

The era of today's business environment has created the need and search for new markets and growth opportunities for most companies and industries to ensure sustainability in a competitive business environment and increased economic growth. The need to fulfil this sustainable growth in the business environment and national economies has increased the process of internationalization and globalization of most industries, firms, businesses and national economies. This internationalization strategies adopted by these institutions has also paved a way for increased export and import activities in the world today. According to McNicholas (2007, 1), what used to be known in the past as a simple seagoing trade across rivers where goods were taken to locations along river banks to enable traders "trade their items for the items of others" has now formed the foundation of what is known in present day as "SHIPPING INDUSTRY".

The shipping industry involves a series of numerous processes, activities and planning. It is an industry that involves huge financial resources due to heavy use of equipment and man-hours (McNicholas, 2007, 2). Comparing the ship industry to the human body, McNicholas, (2007, 2), states that though there are some periods of rest in the industry, the flow of cargo rarely stops and vessels arrive at all hours of day and night and therefore requires manpower to be ready and service the vessels.

Due to the various complexities and many activities involved in the industry, the desire for growth and expansion has necessitated the in-depth knowledge of ship management services making it a critical component to the daily business activities of most companies especially those companies operating in the logistics and shipping industry with respect to cargo and commercial vessels. In view of this, there is the need to establish an intermediary (ship management agents) relationship at various commercial seaports between owners/charterers of vessels and importers/exporters of goods. This is to ensure the safe and effective management of vessel calls with respect to port management and security, documentations, financial transactions and cargo delivery. The effective control and balance of all these activities rest on good coordination and flow of information

between parties to ensure trust building between vessel owners/charterers, ship management companies/agents and clients/customers in cross border transactions.

The activities entailed in ship management sector have over the years seen an enormous growth since the 1950's, making the industry a very competitive one.

By definition Mitroussi, (2003) defines ship management companies as independent organizations that have no shareholdings relationship with their clients but are employed to solely perform the functions of managing vessels of which they do not have any financial stake but work for a contracted fee.

The activities involved in managing vessels are numerous, one of which is the provision of voyage estimates and accounting duties in which the thesis is based upon. Obtaining a final disbursement account per voyage involves countless communication and coordination across the organization. Poor miscommunication or loss of data can lead to inconsistencies and terrible delays in the preparation of an FDA. This brings us to the researcher's view point of how the flow of information within an organization is vital to the development of team work, a participatory management style of operations and gaining a competitive advantage in the industry.

1.1 General Background

The topic of the thesis was motivated as a result of the author's working experience in the shipping industry (Supermaritime Company Limited) in Ghana, West-Africa. Supermaritime is a company that constantly seeks to develop its internal operations and possess a great desire for growth and expansion in the industry. However much emphasis and the development have been concentrated on developing only a part/section of the company, which is the part of vessel operations and ship management. Leaving a very vital engine in the company, being the accounting and administrative aspect, specifically the Final Disbursement Account section.

Though there has been some level of development with the introduction of ERP systems in the company, it still does not eliminate or even reduce the poor level of inter-relations and communication among departments with respect to the flow of information and hard copy documentation handling in the company. This brings us to the point of considering further development in processes and communication within and among departments.

The idea of attempting to improve information flow and hard copy documentation handling is not only to improve customer/client relationships but also to improve job satisfaction and harmonised working environment. Employees will better work in a well organised working environment when processes and systems in place are running smoothly. This will enhance maximum concentration and reduction of mistakes and having to correct those mistakes at all times. It will also reduce the perception of incompetence perceived by clients and customers.

1.2 Purpose of the Study

The aim of the thesis is to analyze the current practice involved in the information flow of ship management agency services for the purpose of making an FDA within Supermaritime Ghana Limited. This flow of information includes activities undertaken by companies serving as agents of ships when attending to a vessel call. These services provided by ship management agents include:

1. Port Agency- This involves all activities related to port conditions, berthing restrictions, local port, regulations, cargo operations (loading and discharging), estimated duration of the port call (ETA) and estimation of port and cargo expenses (Pro-forma Disbursement Accounts).
2. Husbandry Agency- The management of vessels and crew requirements
3. Ship Cargo Services- Involving stevedoring, warehousing, storage and delivery activities.

The preparation of final disbursement accounts for international clients in Supermaritime Ghana has long had the problem of delays and overdue dates of submission of FDAs which arise out of poor cooperation, poor information flow and poor working attitudes of departments and units within the organization. The thesis

hopes to solve the problem of the inadequate flow of information among departments in relation to agency appointments of vessels for the timely and accurate preparation of final disbursement accounts. It also hopes to solve the problem of archiving and storage of final disbursement accounts per agency appointments, referred to as vessel project accounts in the company.

Pending the above analysis, the author will then seek to analyze the best practice and develop a model that can be used to enhance the operations, information flow management and working attitude of staff among the various departments within the company to enhance the preparation of Final Disbursement Accounts.

1.3 Research Problem

The case company is a growing company that has seen a series of evolutions in the past years and a great force to reckon with in ship management agency in the near future. Though it has seen a couple of developments in processes and operations, it still falls short in its internal operations especially with the flow of information and documentation handling. For this reason, this final thesis hopes to answer the question of “how to manage information flow and documentation processes to improve the preparation and efficiency of final disbursement accounts in Supermaritime Ghana Limited”.

1.4 Research Methodology

In view of the research topic, the best methodological approach to the study is the use of qualitative research. This is because qualitative broadens the knowledge of the causes and effects in a given situation. It is usually considered as an indication of the approach in which theories emerge out of the collection of data. The aim of the study is to be able to evaluate and implement changes in the process of preparing an FDA and work process in the organization with respect to documentation handling and information sharing on vessel call operations. The method was also chosen due to the nature of the business and the writer’s experience with working with SPM. The main objective of using this form of

research analysis is to be able to point out the main problems that presently exist in Supermaritime which hinders the process and delays of final disbursement accounts and the effective operation of the disbursement unit in the company. This would consequently help to identify the changes that need to take place in the working practices and methods of operation and information flow within the company.

By definition, Qualitative Research is considered to be a research technique that mostly places emphasis on words other than figures or numbers in the process of data collection and analysis Bryman and Bell (2011, 386). Again, Cassell et al, (2006, 162) also defines this research approach as a data collection and analytic technique that relies on “non-numerical data” thereby focusing on textual data or visual images while excluding data requiring quantitative techniques. Bryman and Bell (2011) states that over the years, “Qualitative research has become an increasingly established approach to business research”. Supporting this statement Cassell et al, (2006, 162) adds that qualitative research has had a rooted history in social science and has greatly contributed to the field of management research.

In the implementation of this thesis approach, Bryman and Bell (2011, 390) provides a methodological outline in the process of qualitative research which constitute less codification as compared to a quantitative research approach (Bryman and Bell 2011). Based on the steps provided by Bryman and Bell (2011, 390), the process of the thesis will follow the steps indicated in figure 1 below:

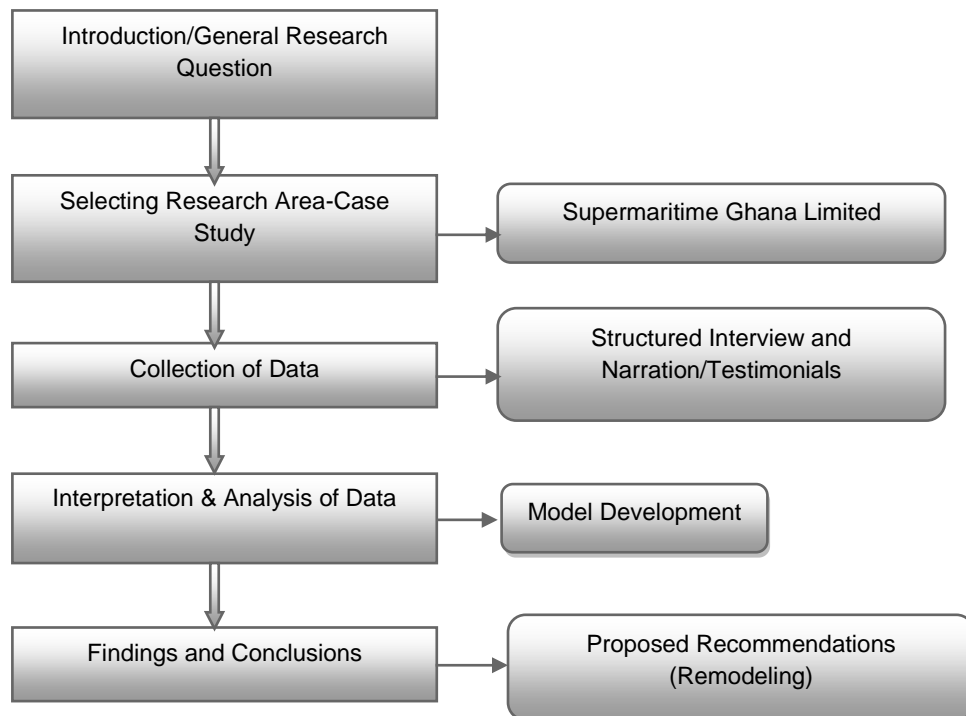


Figure 1 Outline of the Main Steps in Qualitative Research based on Bryman and Bell (2011, 390)

1.4.1 Target Group

The target group of the study is mainly for the case company (Supermaritime Ghana Limited) and other ship management agencies. It is also hopeful that, the developed communication model, conclusions drawn and recommendations given for this thesis work could also be applied to other industries or companies since effective flow of information is important and promotes a healthy working environment and employee/customer relationships.

1.4.2 Limitations of the Study

The writer deems the research topic as interesting and an area that needs more studies to better understand the world of logistics and its growing need in today's business environment and the global economy. In view of this desire, the writer will

try to prove the credibility, reliability, validity and dependability of the study, however, the thesis is bound to face the following listed challenges.

- In terms of using a structured interviewing technique, there is the great likelihood of a conflict of meaning to terms and use of words in the interview. This is because the interviewer and the respondent may apply different meanings to questions asked and answers obtained from the interview questions which may lead to the implication of different things.
- The thesis would have been more enlightening if the writer had travelled to Ghana to personally observe the current situation in the company but due to lack of monetary resources interview questions would have to be conducted through the use of the telephone which limits the ability of the researcher to probe further and observe bodily gestures making the gathering of primary data a bit difficult and expensive (phone communication).
- Conclusions drawn on this thesis work (emphasizing only on Supermaritime-Ghana) cannot be wholly used to generally characterize all shipping firms since different corporate cultures exist in different market situations and cultural environments.
- There is the likelihood of some form of biasness in the result of the interview. This is because each interviewee would understand and answer the questions according to how they each see and perceive the existing problems in the organization which could be as a result of personal “ethical behaviour and managerial decision-making” (Bryman and Bell 2011).
- Secondary data collection was proved to be a challenge in terms of review of literature since not much research and publications have been conducted in the fields of shipping and related activities involved in the industry.

2 MANAGEMENT, SHIPPING, INFORMATION AND DOCUMENTS

Though there has been various studies and contributions conducted and made respectively in the area of management and administrative research in various industries, very little research has been done in the shipping industry to broaden public knowledge about ship management and port agency agreements most importantly in the area of final reporting on vessel operations and expenses (Final Disbursement Accounts) which is highly influenced by the role of effective information flow and document management systems which goes a long way to impact company performance and profitability.

In view of this, review of this thesis work is intended to focus on aspects of ship management agency and its components, information flows in organizations and the role of information technology for managing information and an understanding of document management system, archiving and retrieval in organizations which also plays a crucial role in FDAs.

The strategy therefore adopted for this literature review is in four sections. The first part will review literature on the concept of management. This is to help better understand the use of the term “management” which is so much used in this thesis work.

The second section will then begin to examine the general shipping and shipping management agency and what it entails. This will review various pieces of literature on areas of characteristics, port functions and management in FDAs. This is to enable a better understanding of the section of operation that this thesis is based upon and how to optimally develop and propose solutions for a better information flow system.

Third, there will be a review of research and literature already conducted in the field of information flow in organizations, the flow management system and communication and its associated problems and challenges that has been pointed out by these previous researches. It will also seek to examine the role of

information technology in companies today and how it is being effectively utilized and embraced in administrative processes.

Finally, data storage and archiving is a big part in the shipping industry since it deals with volumes of paperwork and documentation. This part will attempt to highlight various storage and archiving procedures and documentation handling processes. This is intended to assist in the development of a system suitable for the case company.

2.1 Management

The concept of management is used in many disciplines and in many forms since it is considered as a major contributing factor to the improvement and total productivity of an organization. Management according to (Sutton, 1996, 7) is defined as a “design and maintenance of an environment in which resources and organized groups can attain common objectives through efficient and effective performance”. According to Taylor (2007, 11), the two leading objective of management is to ensure “maximum prosperity for the employer coupled with the maximum prosperity for each employee”.

Taylor (2007, 11) describes the use of “maximum prosperity” for the employer as not only ensuring huge profits for the company and owners of a business but also developing every sector and branch of the business to achieve a lasting state of excellent performance and prosperity. Again, “maximum prosperity” for each employee is more importantly being able to ensure that each employee is developed to a level of maximum efficiency to enable him or her to, in a generalized sense, produce the best quality of work that he or she is naturally able to accomplish and will not only concern itself with paying much higher wages to employees as compared with his or her colleagues in the same level or class (Taylor 2007, 11).

Lussier (2008, 6), explains that effective and efficient management system is largely based on the converging resources of human, financial, physical and informational resources as indicated in the diagram in figure 2 on the next page. He further describes that in order for people in management positions to achieve

their objectives, their performance is largely based on their ability to achieve efficiency and effectiveness in the work places through the available resources they have. Lussier (2008, 6) further goes on to describe human resources as the most valuable resource and the ability to treat them well will result in accomplished organizational objectives.

Secondly, available financial resources ensure the smooth running of departments and sections with the help of adequate budgeting (Lussier 2008, 6). He further points out that physical and informational resource are vital to the management of a business and the ability to get a job done requires the efficient and effective control of physical structures and equipments and as well as information systems, knowledge sharing respectively (Lussier 2008, 6).

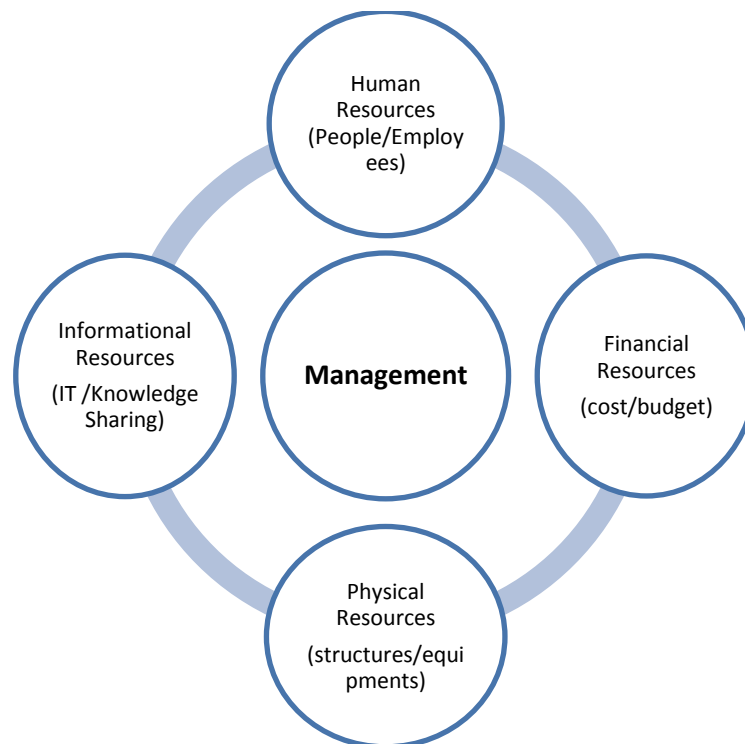


Figure 2 The Manager's Resources, [SOURCE: Lussier, (2008, 6)]

Drucker, (1999, 38), describes three tasks of management, one of which he states that management has the responsibility of making the "work productive and the worker achieving". He argues that any organization's one true resource is "people" and the performance of any organization is dependent on the productivity or output

of work by the people. In other words, Drucker, (1999, 38) states that making “work productive” is a very important function in business but making the “worker achieving” is becoming more essential and is a measure of the performance of an organization. Drucker, (1999, 39) describes in figure 3 that to achieve maximum performance and productivity in the company, the task of management must first be to organize work in a reasonable manner. Secondly it must be able to recognize the people’s capabilities, needs and limitations and assign the right job to the right person to ensure that they have control over what they do. Third, is to ensure that the workers have a sense of satisfaction, responsibility and motivation to ensure high organizational productivity and efficiency at the work place Drucker, (1999, 39).



Figure 3 High Productivity of Workers and Organization [SOURCE: Drucker (1999, 39)]

2.2 Shipping

Shipping, according to Lun, Lai & Cheng, (2010, 1) could be interpreted in two different ways; one to mean ships and seaborne trade and the other to indicate as a mode of transportation for the transfer of goods from one port to the other. Lun et al., (2010, 1) therefore simply defines shipping as an activity that transports goods and cargo from one seaport to the other on a ship. Shipping is considered very important to international trade since it provides a cost effective way of transporting heavy volumes of goods and cargo between and among countries which has resulted in the creation of an integrated global environment (Lun et al.,

2010, 2). Lun et al., (2010, 2) further describes that demand for shipping is as a result of the demand for products by customers which has also resulted in the movement of cargo and goods through a trade relationships between the consignor (seller) and the consignee (buyer).

The shipping business performs various activities in the transportation of goods and cargo. (Lun et al., 2010, 8) describes these activities with the use of a concept known as parcel size distribution (PSD). He describes “parcel” as the “individual consignment of cargo for shipment”. According to (Lun et al., 2010, 8) PSD is used to determine “which cargo goes into which ship” that is classifying cargo into bulk cargo and general cargo. The use of PSD is illustrated in the below diagram in figure 4. He describes that cargo is packed according to the size, volume and the type of ship. For example, transport of bulk cargo such as, iron ore, coal, and manganese will require the use of bulk carriers since it will fill the whole ship and goods such as watches and radio would require container liner services (Lun et al., 2010, 8).

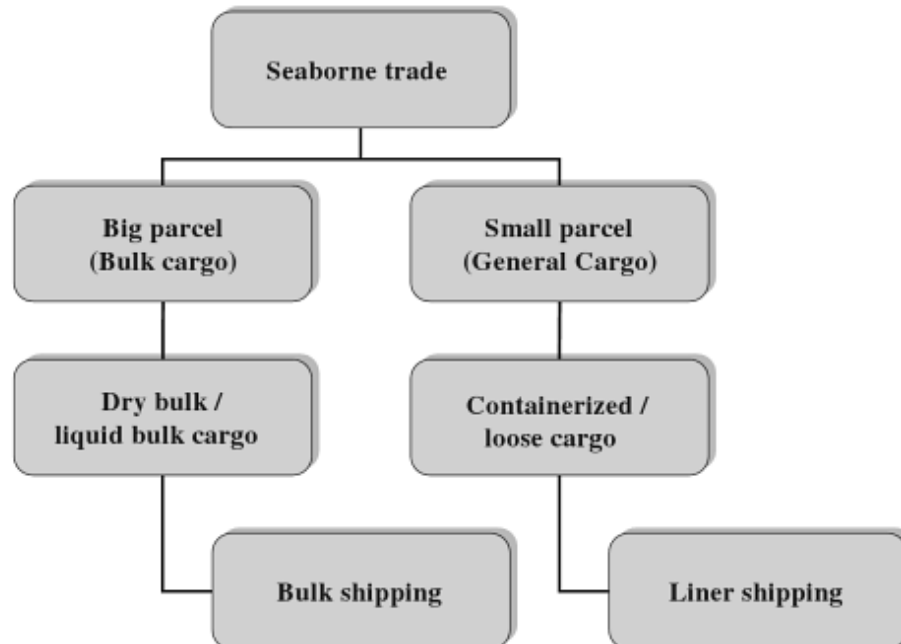


Figure 4 PSD-Transport of Bulk and General Cargo [SOURCE: Lun et al. (2010, 8)]

Shippers require a lot of services to aid in the transport of goods from one port to the other and therefore require a lot of intermediary roles to help in this movement process, one of which are known as the ship agents (Lun et al., 2010, 3).

2.2.1 Ship Management Agency

Ship management has long since the history of the industry been existent in vessel operations. Ships had in the past been managed and taken care of by the crew of the ship specifically the Master of the ship until in recent years where the ship management function of the vessel has been handed over to third party (Bajpae, 2013). The third-party ship management business began to boom in the early 1980's due to the fact that ship owners were facing the challenges of high overhead cost which was brought about as a result of economic depression in the freight market (Bajpae, 2013).

In view of this, outsourcing vessel operation to third-party ship managers seemed very acceptable to ship owners since it reduced the operational cost of managing the vessels themselves (Bajpae, 2013). Ship management according to Knight (2013) is basically involves technical and consultancy services as well as crew management and comprise of the management of a vessel within stated objectives and with regard to its legal environment. Appendix 1 shows an example of an agency agreement contract of which the ship agent is bound to operate and deliver his responsibilities within those limits.

The shipping industry involves a co-ordination of intermediary roles which constitutes certain key persons in the industry who form an intermediary between the two main parties involved in the industry, namely the shipper and the ship owner (Muthiah, 2010, 72.) thereby establishing a form of agency relationship with a defining role as Ship Agents. Lun et al., (2010, 3) simply describes a ship agent as "companies that represent the owners of vessels, and are engaged in the routine business related to the vessel arrival, operations and departure of ships".

Muthiah (2010, 72) defines agency as "a legal relationship that is created when two parties enter into an agreement; where the agent represents the principal, subject to the principal's right to control the agent's conduct concerning the

matters entrusted to him". He further describes that the agent in a ship agency agreement must clearly express in his duties as an agent, as acting on the authority of a named and known principal with respect to all correspondences, contracts, documents, emails, telexes and faxes.

Duties of a Ship Agent: The main aim and duty of a ship's agent according Knight (2013) is to protect the vessel's interest at all times especially with regards to the arrival and departure (ETA and ETD) of the ship in the port at the lowest possible cost. The following table points out the details of some duties and responsibilities generally performed by ship agents of a vessel. Table 1 below was formed on the basis of Muthiah's (2010, 73) stated functions of a ship agent.

Table 1. Duties of Ship Agents [SOURCE: Muthiah (2010, 73)]

	Duties	Specific Detailed Activities
1.	Advice on port details	port charges, depth of water, any possible strikes,
2.	Make preparation before the vessel ETA.	Reservation for berthing, liaise with stevedores for cargo work, ordering of tugs and pilots to berth the ship, ordering stores and all other matters concerning a particular voyage or shipment.
3.	Notification	Inform the shippers and consignees of ETA of vessel
4.	After Departure of Vessel arrangements	Issuing of DO, signing of B/OL, preparation of FDA, collect freight, charge and remit any surplus freight, advice principal(ship owners) and port authorities.

2.2.2 Port Management Functions in Vessel Operations and Charges

The term *ports* are used all the time in the shipping industry and also for geographical demarcations or descriptions. To use the industry term, *seaports* are known to be places that have the facilities, equipments and capabilities for berthing and anchoring ships, for the discharging and loading of goods from ships to shore and vice versa respectively or for the transfer of goods between ships (Alderton 2008, 1). Alderton (2008, 2) puts forward that ports are considered to be a very vital part of maritime activity due to factors he points out as been the result for the performance of many activities at port locations. One of such resulting

factors is the fact that seaports are the locations where most costs for vessels are incurred citing the fact that cost and delays are unavoidable and crucial activities of a port (Alderton 2008, 2).

Ports have various performing functions which have been group into two (2) parts by Alderton (2008, 5) namely the administrative and operational functions which will be highlighted upon. The administrative functions of the ports consists of activities such as environmental controls, control of vehicles to and from the ports, safety and security within the port area, control of dangerous cargo and customs, health, immigration and commercial documentary controls while the operational functions deals with activities such as the use of berths and sheds, pilotage, tugging and mooring activities, loading, discharging, storage and distribution of cargo (Alderton 2008, 5). Table 4 below highlights into details the most essential activities and services provided by the ports.

Table 2. Main Facilities and Services Provided by a Port [SOURCE: Alderton (2008, 5)]

Services and Facilities for Ships	Services and Facilities for Cargo
<i>Arrival and departure</i>	<i>Basic</i>
Navigation aids and VTS	Cargo handling on ship and on quay
Approach channel	Transport to/from storage
Pilotage, tugs and mooring gangs	Storage/warehousing
Locks (if tidal)	Tallying, marking, weighing, surveying
Berths	Surveillance, protection, sanitary measures
Administrative formalities	Dangerous cargo segregation
Police, immigration, customs, health	Customs and documentary control
Supplies, water, bunkers	Receiving and delivery
Telephone, repairs, medical, waste disposal	Additional "added value" services
Port state control	Repackaging, labelling, sorting, assembling
Cargo transfer	Cleaning and preparing cargo
Opening/closing of hatches	Setting up a logistic network
Breaking out/stowing	Setting up a marketing package

In view of the various performing activities at the seaports, vessels/ships that arrive at their destinations or port of discharge or loading encounter various documentation and operational costs which evolve into one category of expenses on the vessels known as port charges.

Alderton (2008, 5) classifies the definition of ports into two parts namely the operational definition and the legal definition.

Operational definition states that a port is “a town with a harbour and facilities for a ship/shore interface and customs facilities” (Alderton 2008, 5).

The legal definition states that a port is “an area within which ships are loaded with and/or discharged of cargo and includes the usual places where ships wait for their turn or are ordered or obliged to wait for their turn no matter the distance from that area” (Alderton 2008, 6).

2.2.3 Disbursement Account

The vessel call of a cargo or merchant ship at a port is subject to incur various forms of expenses in the performance of its operations at the port. Therefore upon the completion of an operation and departure of the vessel from the port these expenses and documentations need to be accounted and paid for by the owner or charterer of the vessels. This process of accountability is done with the use of a Final Disbursement Account.

Brodie (2013, 142) defines disbursements as amounts paid out on behalf of the ship owner or charterer by the ship agents for future recovery from the ship owner or charterer by means of an account statement known as a disbursement account. Hence a disbursement account is made out by the ship agent to the owner or charterer of the vessel.

The disbursement account process though may sound simple, is a daunting task that involves “dozens of people in chartering operations and accounting, several agents and suppliers and each has its own pricing models depending on the cargo to be handled, vessel requirements and logistics within the port area” (DA-Desk, 2012). Again, (DA-Desk, 2012) explains that there is a further task of how invoices are handled and payments are made because transactions are conducted in different time zones, cultures, languages and currencies making the whole process and task of a disbursement account very challenging.

Brodie (2013) in his dictionary of shipping terms, defines disbursement account as *“an account rendered by a ship agent at a port to a ship owner for all sums paid out in respect of the ships call at the port such as pilotage, towage, port charges, any cash advance to the master, supply of provisions and stores and agency fees”*.

In view of the vessels' departure from the ports, Register, O. o. t. F. (2012, 274) describes that the agent is required to submit all certified paid invoices and documents to the ship owner for refund of amounts paid or as evidence of payments for prefunding provided by the ship owner to cover any operational expenses incurred in respect of the vessel call. Prefunding by the ship owner in this case is done by the use of a Pro-Forma Disbursement Account which according to (Brodie 2013, 142), is an account made by the ship's agent in advance of the ship's call at the port to the ship owner showing the estimated expenses and viability of the voyage and also to advance payment to the ship agent for any operational expenses and invoices to be incurred.

According to (Brodie, 2013, 142) a disbursement account statement is mostly divided into three (3) category expenses which are indicated in figure 5 on the next page.

Expenses included in the FDA thus include:

Port Charges = harbour dues, light dues, pilotage, towage, mooring and unmooring and shifting, custom charges launch hire, car hire, agency remuneration and communication.

Cargo Charges = stevedoring expenses, tally charges, overtime, and etcetera.

Ship Charges = cash to master, water, stores, crew expenses, repairs, provisions, and etc. Appendix 2 gives an overview of a standard final disbursement account format provided by BIMCO.



Figure 5 Composition of FDA expenses [SOURCE: Based on Brodie (2013, 142)]

Disbursement Documentation

Documents supporting the FDA statement must provide evidence that an activity indeed took place on behalf of the ship owner or charter. McNicholas (2007, 60) simply defines documents as “proof of evidence in support of something”.

Supporting documents of an FDA should include proof from contractors and suppliers which shows the delivery of supplies by the submission of “delivery receipts, performance of service or the use of facilities in furnishing the vessel” (Register, O. o. t. F. 2012, 274). According to the Register, O. o. t. F. (2012, 274), evidence of these stated documents must indicate the following:

- The name of the vessel
- The name of the port at which the services were provided
- Date of delivery or service provided
- All necessary details as to the nature of supplies, services, facilities provided, quantity, prices, rate and total amount.

Appendix 5 which shows an example of copy of a certified supporting document from a supplier is to be attached by the ship agent among other documents to the FDA as required.

The Register, O. o. t. F. (2012, 274) indicates that upon the immediate departure of the vessel, the agent must render appropriate account to the owner or charterer for any advance funds supported by the invoices bearing the evidence of payment and accompanied by any remittances of unexpended balance of the funds advanced to the agent.

2.3 Information Flow Management

Information is deemed very important in every facet of our lives as humans; be it in our homes, schools, businesses and organizations and even in our daily interactions and relationships with each other. The effective flow of information in any organization is very essential to its survival because of the daily use of information by people in organizations. Stair and Reynolds (2011, 3) describe information as being “powerful” but then argues that the power that information has, depends on its ability to serve a particular purpose, at a particular time and with very minimum effort or work. Information is most powerful when it is able to provide support and enabling conditions for strategic decision making in an organization (Stair and Reynolds 2011, 3).

Again, to buttress this point, Teubner (2003, according to Eom, 2005, 185) describes that information and communication are an essential resource that aids in the achievement of a company’s goals and objectives. This can therefore be achieved when there are adequate infrastructure and systems put in place to ensure that the “development and deployment” of information and communication are professionally managed to enable maximum utilization and processing capabilities in the company (Teubner 2003, according to Eom, 2005, 185).

This brings us to the knowledge of how important it is for an organization to have an effective and efficient flow of information. The success or failure of a business largely lies on the ability of that business to effectively and efficiently manage strategic information within the organization (Stair and Reynolds 2011, 37). Information as described by Dretske, (1981) can evolve into knowledge provided it is transmitted to the correct recipient thereby stating that our learning processes and acquisition of knowledge can only be limited by the available information we have at hand. This statement therefore supports the fact that the performance of a business and personnel/staff is largely reliant on the available and type of processes established in the organization to ensure the effective flow of information.

The process of sharing of knowledge, communicating and managing the flow of information within organizations has been made easy in today’s era of business by the introduction of information systems and technology. However, Picot et al,

(2008) points out there is no definite and easy recommended process of deploying information within an organization. Picot et al, (2008) further describes the performing task of information management as “the effective (goal-oriented) and efficient (economic) deployment of information” within an organization which he argues, can be accomplished on “three differing but connected levels” as indicated in the figure 6 below.

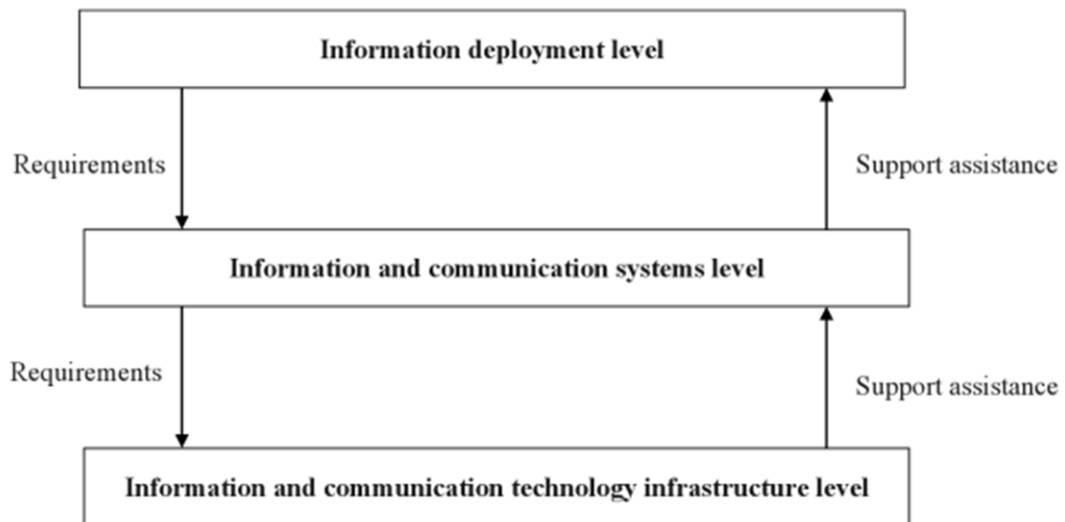


Figure 6 The three-level model of information management [SOURCE: Picot et al, (2008)]

Level 1 → This first level concerns its self on the demand and supply of information. It involves the planning, organizing and controlling of all organizational task and operations both within and outside the company . Picot et al, (2008) defines this level as the “firm’s leadership specific task” because this level establishes the important aspects of planning and controlling of information and documentation processes.

Level 2 → After establishing the first level, the next question is what resources are required to support these plans and actions. This brings us to the ability of the company to harmoniously merge information and communication systems to support the various functions in the company (such as; accounting, production, marketing and customer/client information systems). The ability to effectively

manage information and communication system is largely dependent on the requirements indicated in the first level (Picot et al, 2008).

Level 3 → Finally, Picot et al, (2008) explains that this level where information and communication infrastructure exists is not beneficial unless it is able to accomplish the “goal-direction” of established infrastructure and their ability to accomplish the task purposes.

Information management therefore has a specific task of ensuring that all organizational or functional units are effectively and efficiently supplied with information they each require to accomplish and perform task (Picot et al, 2008). Information and communication is used and integrated in all aspects and elements of the organization making them interdependent on each other. Wiggins, (2000, 12 and 25) depicts into detail the interdependence of information sharing and communication in the four elements that makes up the organizational model.

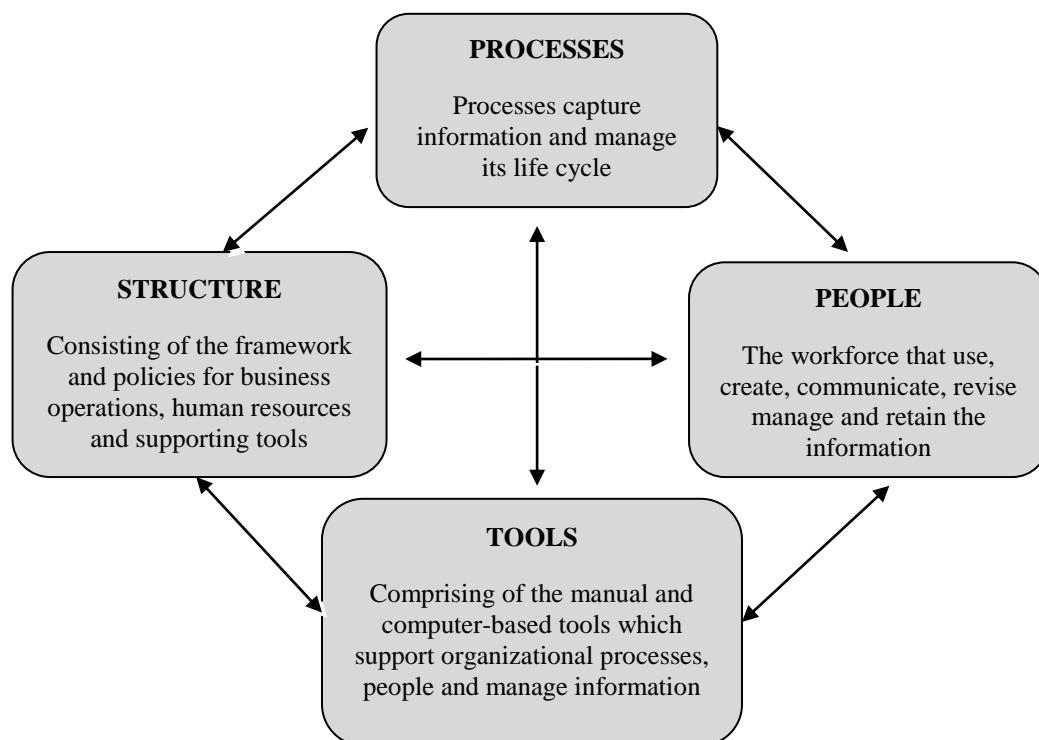


Figure 7 Elements of the Organizational Model [SOURCE: Wiggins (2000, 12 and 24)]

2.3.1 The Role of Information & Communication Technologies in Organizations

Information and communication play a vital role in the day to day running of the company due to current business needs of gaining a competitive edge by gaining a market advantage over its competitors. This need has driven companies to invest more in information systems, formulate communication strategies and their performing role in organizations has proven to be the height of success and efficiency in the workplaces in today's business environment.

In view of this, information technology has gained a supporting role of ensuring the effective and efficient running of processes in organizations (Davenport, 1993). The supporting role of information in itself discussed by Davenport (1993), explains the impact it has on the basic nature of performance improvement in work processes in the organization. The existence of the flow of information in work processes offers a myriad of advantages such as providing the ability to measure and monitor performance, the effective integration of activities within and among processes and provide the ability to design certain processes to suit the needs of particular customers or suppliers (Davenport, 1993).

Davenport (1993), further states that the management process of information needs to portray the entire "value chain" process of information. Value Chain of information in this regard firstly consists of starting the process with defining the information required by the user which according to Davenport (1993) is mostly neglected by most companies. The initial stage is further followed by other requirements of collection, the storage, distribution, receiving and the use of information (Davenport, 1993).

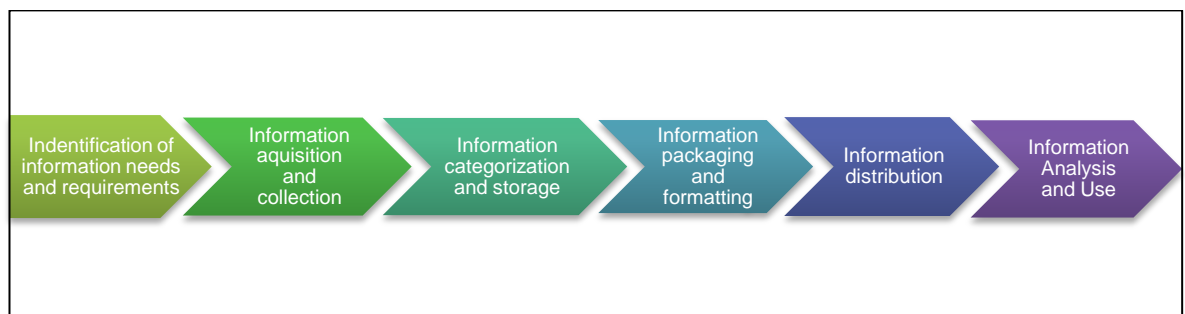


Figure 8 Process of Information Management [SOURCE: Davenport (1993)]

The above diagram in figure 8 summarizes the value chain process of managing information which Davenport (1993) states that when this process is done without giving much attention or thought the result will only yield poor-quality information and unless the information is seen as part of the process, relationship between the information provided and the decisions and actions taken on that information can never be understood or utilized to cause improvements (Davenport, 1993). Picot et al, (2008) adds that the intention behind the use of information technology to coordinate organization structures and business processes is aimed at adding or increasing value but if this added value cannot be realized, then the entire process should be deemed questionable.

Again (Wiggins, 2000,15), describes information as being the “life blood of the organization” further stating that information enhances the use of technology to “increase an organization’s thinking or intellectual capacity”. Wiggins, (2000,15) explains that information generated internally assist in the management and control aspect of the business whiles information generated externally assist in the planning and strategic decision making in the organization as can be seen in figure 9 below.

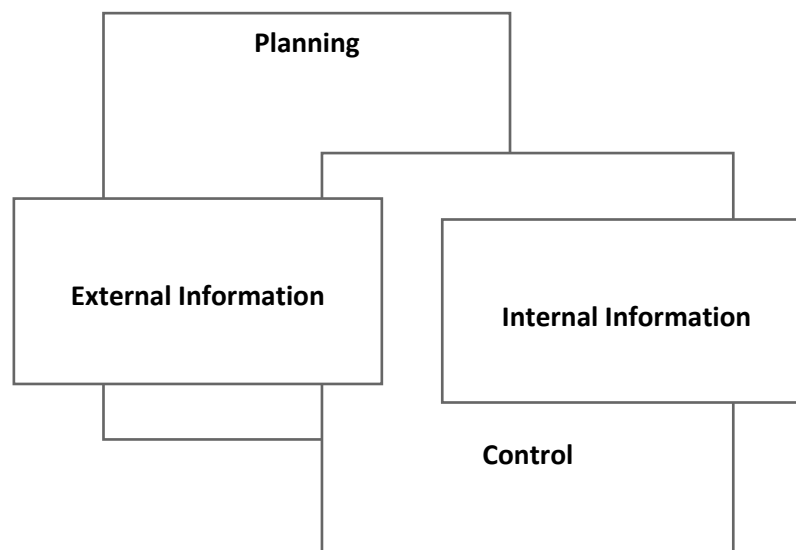


Figure 9 Information needs of planning and control [SOURCE: Wiggins (2000, p.15)]

2.3.2 Problems/Barriers to Information Flow & Effective Communication

Managing the flow of information as discussed in the preceding paragraphs has enlightened our understating of the role of effective information flow management. Though all these systems exist in companies to ensure effective performance, companies strive to manage the flow of information within and outside the company as best as they can and we therefore cannot go without discussing the problems and challenges faced by organizations and managers in trying to achieve an ineffective flow of information within and among organizational/functional units of a company.

According to the article by Eroke, (2013), barriers and problems to effective flow of information are inevitable occurrences within an organization irrespective of the size of the organization. The article further defines communication barrier as “any breakdown or impediment that concerns relaying information and such barriers in communication may occur between *workers* or within a *structural system* (Eroke, 2013).

There are a number of reasons why effective information flow and communication management becomes a challenge in most organizations. Weihrich, (2007, 396) suggest that one of the factors related to the problem of communication in an organization is that of information overload. He argues that unlimited information could lead to too much information which yields different responses and actions from the people who use such information. Weihrich, (2007, 396) cites examples that a person receiving too much email/mail may easily overlook and leave the mail unanswered.

Again too much information may lead to many errors, delays or procrastination of duties, they may also filter the information by prioritizing and taking action on those information that they deem or consider as more important than others and finally they may totally ignore the “task of communication (that is ignoring the information and not communicate it)” all of which leads to poor performance of duties. (Weihrich, 2007, 396.)

Also, information flow can be hindered by the organization’s own structures, systems, procedures, organizational environment, policies and rules. (Sahni and

Vayunandan 2009, 445.) He argues that quality of information becomes compromised if it has to travel through many hierarchical levels within the organization. In addition the flow of communication will not run smoothly if the company's policies do not support the flow of information in different directions, moreover, rigid rules and regulations could also prevent the flow of information to the right department or sections and this can cause delays in actions to be taken in solving issues or handling of cases. (Sahni and Vayunandan 2009, 445.) Sahni and Vayunandan (2009, 445) points out again that, unfavourable organizational environment is another problem that hinders the flow of communication in organizations.

Transmission of information in an environment where there is trust and openness have a much better chance of positive response than an environment where there is so much "distrust and defensiveness". In addition, an environment where the company focuses more on formal orders and lacks a recognizable path of communication is likely to face problems in the flow of information through formal and informal channel (Sahni and Vayunandan 2009, 445).

2.4 Documents Management in Organizations

A great number of businesses and companies deal with numerous forms of documentations which float around in their work environment on a daily basis. Though most of these companies are striving for a paperless working environment, we cannot totally eliminate the use of paperwork be it hardcopy documentation or electronic form of documentation. Indeed papers have a number of negatives which are mostly costly to companies, involve high level of labour for handling, it has the probability of being misfiled or misplaced or completely lost and a large volume can be heavy to carry around (Wiggins, 2000, 3).

Sutton (1996, 6) describes documents as "things that represent organized packages of data within an organization", which consist of such things as invoices (vendor/customer), e-mails messages, memorandums, various correspondence, etcetera. The success of managing information in an organization is largely dependent on the effective management of paperwork, its movement among

departments within the organization and outside of the organization and the proper integration of this paperwork with other information sources in the organization (Wiggins, 2000, 3).

Therefore an effective documents management in an organization is a system that is able to ensure an enhanced collaboration, decision making and the enabling ability to build upon the work of others within an organization. The need for proper documentation management in any organization has driven many organizations to eliminate the challenges of poor documents management. Sutton (1996) points out various reasons for the need to have a proper document management system.

Firstly, organizations are likely to experience negative drawbacks because it is unable to determine who filed a document at a particular point in time (Sutton 1996, 26). In this regard, Sutton (1996, 26) points out that it is only at the point when documents are needed again that it is discovered that they were not filed properly or has gone missing which leads to drawbacks that will continue to occur unless a solution is found. Again, staffs in many organizations are negligent or lack the knowledge and “discipline” in the aspects of document management and information storage (Sutton 1996, 27). He further points out that precious time and resources are therefore wasted in making copies of documents due to the fact that the organization lacks an adequate system for sharing and distributing documents within and outside the organization (Sutton 1996, 27). Finally, due to the changing circumstance in an organization, such as staff leaving or organizational remodelling and reorganization, existing users of these documents are more likely to face problems in locating original documents if the company lacks an effective record management system which can create “discontinuity” in the company (Sutton 1996, 27).

2.4.1 Records Management

Wiggins, (2000, 66) defines records as “pieces of recorded information that provides evidence related to business activities and actions”. Wiggins, (2000, 64) describes records in three major aspects as shown in figure 10; it could be in any form and may contain any type of information, it could be in a form of a manual or

a computerized system to aid transaction processes, provide information to managers and help in decision making and it may be active or inactive, that is frequent use of the information or less frequent use of the information which will no longer be subject to any changes.

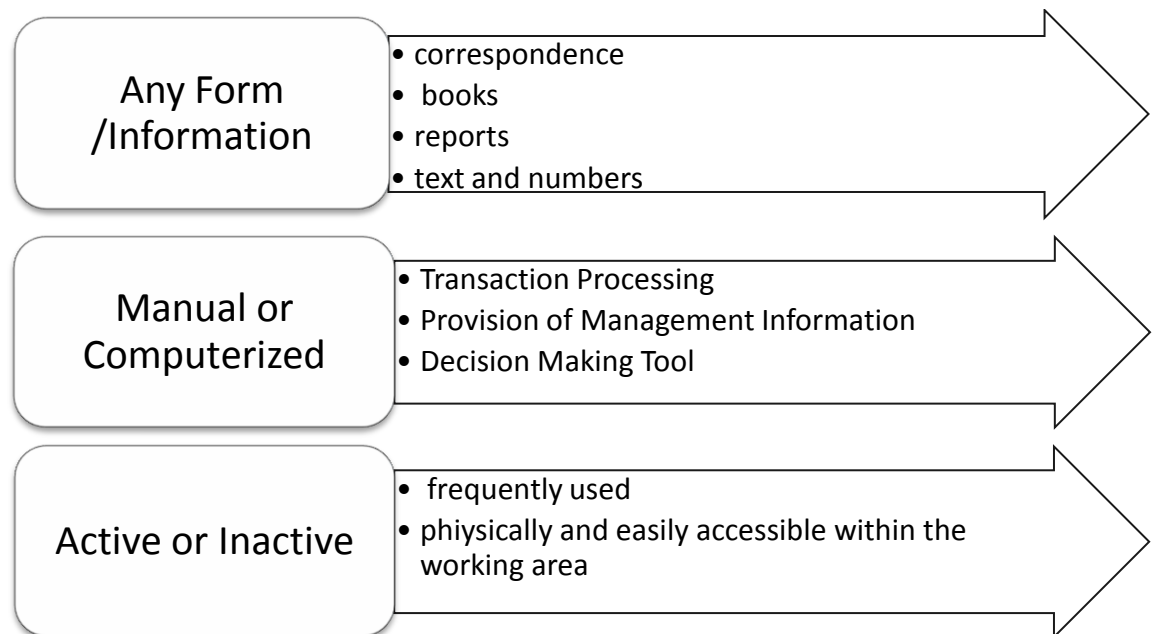


Figure 10 Description of Records [SOURCE: Wiggins (2000, 64)]

According to Wiggins, (2000, 65), records management is therefore the management and control of intangible form of information throughout the lifecycle of the information within the organization. Wiggins, (2000, 66) argues that the main point of records management is to organize and protect recorded information throughout its lifecycle. The information life cycle is indicated as the processes in below diagram in figure 11;

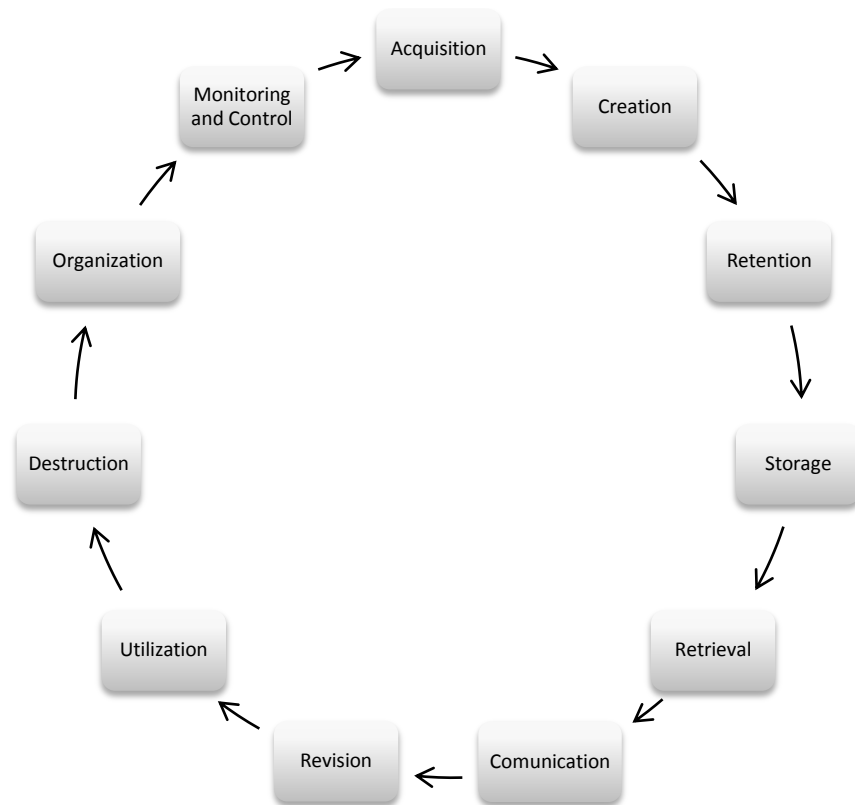


Figure 11 Information Lifecycle Practices [SOURCE: Wiggins (2000, 67 and 68)]

The benefits of records management according to Wiggins, (2000, 66) enhances the efficient transaction of the company by providing

- A faster system for retrieving information
- A reduction in the loss or misplacement of information
- Helps to minimize storage space and equipment cost
- Protects important information
- An improvement in the general control of an information life cycle
- Helps to manage the creation of new records

2.4.2 Comparison of Records/ Document Storage

Many a time, records and document could well be misunderstood for the other since they seem to be very closely related and one cannot exist without the other. Hence in respect of this fact, Wiggins (2000, 66) views the importance to distinguish between records and documents. He points out that records

management emphasis on protecting the organization's recorded information throughout its existence whiles documents management looks more to the "transactional nature" and the application of systematic recorded information by relevant or correct users in the organization (Wiggins 2000, 66). The main focused aspects which determine the difference between the two is indicated in table 3 below:

Table 3. Distinction between Records and Document Management [SOURCE: Wiggins (2000, 66)]

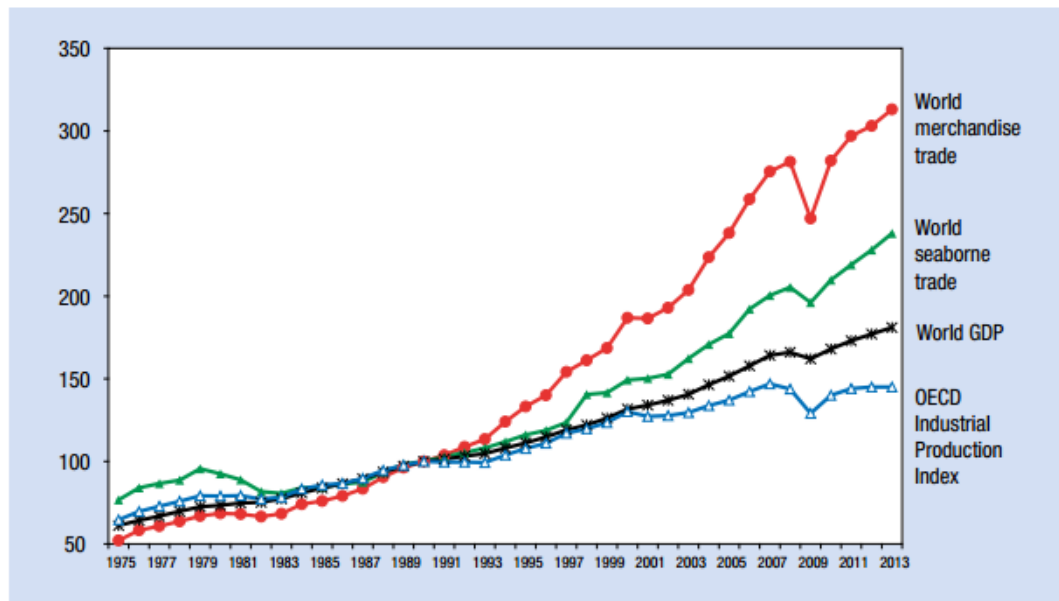
Records Management	Document Management
Administrative Control	Operational Use
Physical Storage	Workflow
File Classification	Indexing
Retention	Revision and Version Control
Statutory and Legal Requirements	Operational Needs
Storage Media	Information Content
Integrated Series	Individual Items

3 ENVIRONMENTAL ANALYSIS AND STATISTICS

This chapter will inform about the growth of the merchandise and seaborne trade in the world and maritime transport in Africa. This is to help better understand the industry and growth potential of shipping in the world and most especially in Africa. It will also seek to discuss the case company and the main activities and operations of the company.

3.1 Industry Analysis and Overview

The increased economic activities mainly in the mining and manufacturing sectors in the world today have driven the increase in the development of the shipping industry (UNCTAD, 2013, 3). In view of the survey report by UNCTAD (2013, 3), the worlds GDP, merchandise trade and seaborne shipment are continuously moving in unison. Hence the performance of maritime transportation and seaborne trade are mainly dependent on the performance of the world economy and international trade (UNCTAD, 2013, 3). Figure 12 shows the relationship and growth pattern of merchandise trade and seaborne trade which has grown almost twice as much as the growth of the world GDP and this continuous rate of increase over the years has been factored by “the globalization of production processes, increased trade in intermediate goods and components, and extension of global supply chains” (UNCTAD, 2013, 3-4).



Sources: UNCTAD secretariat, on the basis of OECD *Main Economic Indicators*, May 2013; UNCTAD, *The Trade and Development Report 2013*; UNCTAD *Review of Maritime Transport*, various issues; World Trade Organization (WTO) (table A1a); the WTO press release 688, 10 April 2013, "World trade 2012, prospects for 2013". The value of the index measuring growth in world seaborne trade for 2013 is calculated on the basis of the growth rate forecast by Clarkson Research Services in *Shipping Review and Outlook*, spring 2013 (Clarkson Research Services, 2013a).

Figure 12 OECD industrial production index and indices for GDP, merchandise trade and seaborne shipments (1975-2013) (1990 =100)

3.1.1 Maritime Transport in Africa

The African continent has in the past decade been a centre of attraction for many international trade investments. According to UNCTAD, (2013, 9), the region has attracted magnificent potential for maritime transport and seaborne trade. UNCTAD, (2013, 9) further states that though the continent's share in the shipping industry is less, it is bound to increase in the future due to the continuous tapping and development of its natural resources and increases in consumer demand which is affected by increase in income levels.

Statistics by Fairplay (2013a according to UNCTAD, 2013, 9) indicates that in as much as the European Union (EU) is Africa's largest trading partner, Asia most especially China has over the years overtaken the United States of America (USA) to become Africa's single largest trading partner (UNCTAD, 2013, 9). Trade flows between the USA and Africa recorded a total value of \$123 billion in 2011 while trade flow between China and Africa recorded a total value of \$133 billion dollars in the same year (Fairplay 2013a according to UNCTAD, 2013, 9). Again, Fairplay,

(2013b, according to UNCTAD, 2013, 9), African maritime business will survive upon increased developmental projects in the aspects of building major ports and industrial zones and the development of its resources. African Development Bank (ADB), has predicted that ports throughput in Africa will increase from 265 million tons in 2009 to more than 2 billion tons in 2040 with transportation volume increases of six- to eightfold, especially in landlocked countries where it is supposed to gain a significant increase of up to 14 times (Fairplay, 2013a according to UNCTAD, 2013, 9).

3.1.2 Merchandise Trade

The area of world merchandise trade has seen a slow development in global trade and total growth in international trade at an average rate of 1.8% in reference to table 4 below (UNCTAD, 2013, 4). Significant effect has been in the area of merchandise exports which went up by only 0.2% in 2012 at a value of \$18.3 trillion (UNCTAD, 2013, 4). The report by UNCTAD (2013, 4) states that this value is almost an unchanged value from previous performance due to falling commodity prices such as coffee, iron ore, cotton and coal (WTO 2013 according to UNCTAD, 2013, 4).

On the other hand, import demand also went down in both developed and developing economies. This was largely brought on by the austerity measures and growing high unemployment in the European region. (UNCTAD, 2013, 4.) Apart from Africa, export and import demand decreased globally in 2012. (UNCTAD, 2013, 9.) With reference to table 4, Africa recorded the highest growth of 5.7% amongst all the regions. (UNCTAD, 2013, 4.) In totality, growth in merchandise trade is forecasted to increase with the help of developing countries such as China, Africa, Asia and developing America. (UNCTAD, 2013, 6.)

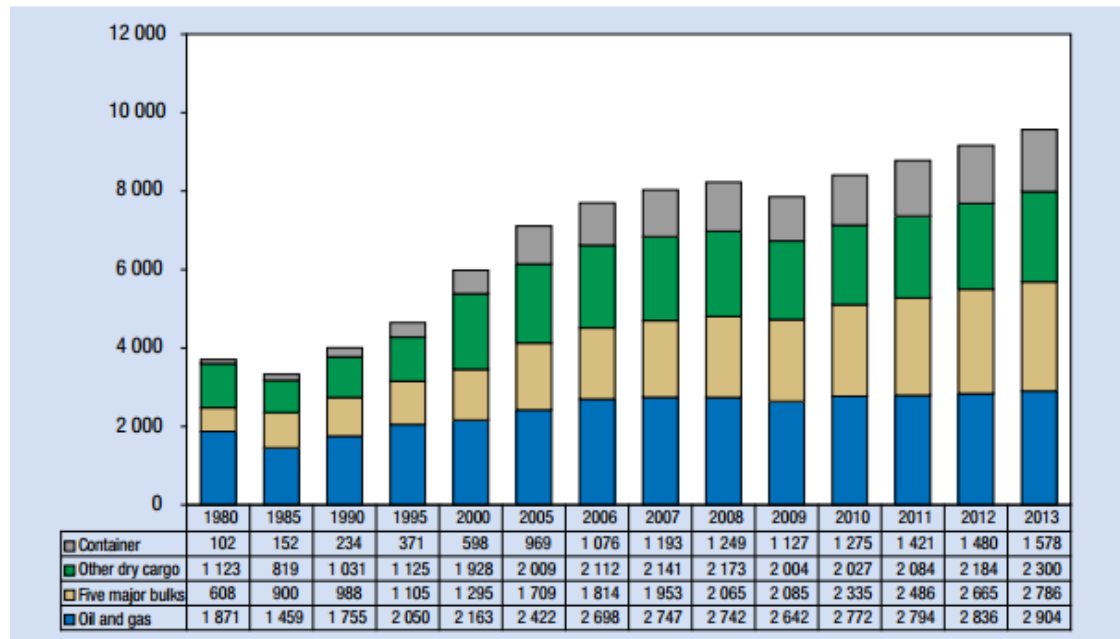
Table 4. Growth in the volume of Merchandise Trade by country group and geographical region 2009-2012 (Annual percentage change)

Exports				Countries/regions	Imports			
2009	2010	2011	2012		2009	2010	2011	2012
-13.3	13.9	5.2	1.8	WORLD	-13.6	13.8	5.3	1.6
-15.5	13.0	4.9	0.4	Developed economies	-14.6	10.8	3.4	-0.5
				of which:				
-24.8	27.5	-0.6	-1.0	Japan	-12.2	10.1	4.2	3.7
-14.0	15.4	7.2	4.1	United States	-16.4	14.8	3.8	2.8
-14.9	11.6	5.5	-0.2	European Union (27)	-14.5	9.6	2.8	-2.8
-9.7	16.0	6.0	3.6	Developing economies	-10.2	18.8	7.4	4.5
				of which:				
-9.5	8.8	-8.3	5.7	Africa	-6.2	8.4	2.8	8.0
-7.4	8.3	4.6	2.2	Developing America	-17.9	22.5	10.8	2.5
-9.9	18.3	7.8	3.7	Asia	-9.1	19.3	3.5	4.6
				of which:				
-14.1	29.1	13.0	7.2	China	-1.1	25.4	10.3	5.9
-6.8	14.0	14.2	-2.5	India	-0.9	13.8	9.1	5.8
3.2	14.7	9.7	1.5	Republic of Korea	-2.3	17.3	4.1	1.2
-4.8	5.7	6.5	6.9	Western Asia	-14.2	8.4	8.1	5.8
-14.4	11.3	4.2	1.0	Transition economies	-28.2	15.9	15.7	3.9

Sources: UNCTAD secretariat calculations, based on UNCTADstat.

3.1.3 Seaborne Shipment

According to UNCTAD, (2013, 7), global seaborne trade has seen a significant increase over the years. With reference to figure 13, a total of 9.2 billion tons of goods were loaded in ports worldwide, with tanker trade comprising of crude oil, petroleum products and gas comprising of less than one third of the total and dry cargo comprising of the remaining share of the total goods loaded. (UNCTAD, 2013, 7.) This growth has been as a result of fast growth in import demand which was brought on by industrialization processes and growing increase in consumer demand, a growth which is soon likely to bring about an increased proportion of goods unloaded to goods loaded in developing countries. (UNCTAD, 2013, 7.)



Sources: UNCTAD Review of Maritime Transport, various issues. For 2006–2013, the breakdown by type of dry cargo is based on Clarkson Research Services' Shipping Review and Outlook, various issues. Data for 2013 are based on a forecast by Clarkson Research Services (2013a).

Figure 13 International Seaborne Trade, selected years (millions of tons loaded)

3.2 Supermaritime Ghana Limited

Supermaritime is an international ship management agency located in 16 countries in Africa, Latin America and Europe. The headquarters (Supermaritime International BV) is located in Rotterdam, the Netherlands. The company's ship management functions include; port agency, husbandry and charters agency, local stevedoring, clearing, forwarding, airfreight, warehousing, cargo and ship brokering services. The company's over 3000 yearly port calls comprise of tankers and bulkers, reefers and Ro/Ros, project and general cargo carriers, tuna clippers and offshore supply boats (NABC, 2014).

In Ghana, Supermaritime is considered as one of the most thriving ship tramp and liner shipping agents in the country. It has two major offices in Tema and Takoradi which are the main harbour and port operation locations in Ghana. The two offices work closely together and not as separate entities. The main Head Office in Tema and sub-branch is in Takoradi (SPM, 2013).

The company, established about 24 years ago in Ghana has seen a tremendous growth pattern over the years (Performance Reporting Solutions, 2014). Due to its

extensive worldwide experience in the shipping industry, its main activities have been in the field of ship tramp and liner agency. During the past decade, the company has had an increasing growth in business and increased line of operations. These operations include:

1. Tramp Agency Operations
2. Oil and Gas Agency Operations
3. Crew Management Agency Operations
4. Liner Management Agency Operations
5. Ship Protection Agency
6. Road Transport and Logistics

The fast growing rate of business activities in the company has resulted in the heavy handling and control of huge volume of accounts' payable (supplier invoices) and related documentation, heavy volume of information sharing and communication within and among departments, head/branch offices and clients of the company which is of vital importance to the preparation of Final Disbursement Accounts upon agency appointments. This therefore motivated the author's decision of researching into the methods of improving the company's information flow and documentation handling at all levels within the organization to improve efficiency and effectiveness in final disbursement accounts.

The author worked with Supermaritime Ghana in the accounts department where she served as the Head of Disbursement Accounts unit in the department which involved duties related to the preparation of final disbursement accounts for various port calls and vessel operation for each client. Working in the previously stated capacity within the organization has offered the author with an in-depth knowledge and experience on the activities involved in ship management services and activities within Supermaritime Ghana and a fair knowledge in the industry as a whole. It is therefore of the hope that this thesis work will produce a result which could be easily adopted by Supermaritime Ghana Limited for better controlling and efficiency of final disbursement account processes and working practices.

4 RESULTS OF THE CASE STUDY

The aim of this chapter is to present the process to be employed in data collection and interpretation, a narration of the detail overview of the existing procedure for FDA, interview process, results and analysis and suggested recommendations by the writer of this thesis paper.

4.1 Data Collection, Interpretation and Analysis

First of all, the methodology for obtaining the primary data for this work was through a structured interview process which was conducted by telephone calls and a narration approach.

Primary Data according to Krishnaswami and Satyaprasad (2010, 86) explains that primary data source is non-existing or previously collected data. The data is therefore personally or directly obtained or collected by the writer for the purpose of her research work. Data from the use of an interview process will involve interviewing the disbursement account unit and other heads of departments in SPM as indicated in below table 5. On the other hand, information will be personally supplied the writer through the narration of the current process involved in the FDA process during her period of employment in SPM. This knowledge was obtained, as stated in chapter 1 of this thesis paper, as a result of the writer's experience in the position of the Head of Disbursement Account Unit in SPM and therefore has direct prior knowledge of the actual events, problems and shortfalls being faced.

Table 5. Sample Size for Structured Interview in Case Company

DEPARTMENT	PERSONS INTERVIEWED
Disbursement Account Unit	3 employees
Accounts Department (Tema/Takoradi Branch)	Chief Accountant
Account Payables	Unit Head
Account Receivables	Unit Head
Shipping Department	Shipping Manager
Operations Department	Operations Manager
Clearing and Forwarding Department	C & F Manager
Assistant General Manager	Project Head

Secondly, the Interpretation and data analysis of this thesis paper will be presented through the use of modelling techniques. The model structure will be developed from results of interview and information given from the narration of work events by the writer. The idea of a model presentation is to enable a general overview and better understanding of the existing structure and problems in the flow of information and documentation handling which is the basis of extreme delays in the FDA preparation at SPM.

The model structure will also consider the existing structure and problems involved in traditional archiving of completed project files and future referencing of these files in the company.

4.2 Development of Models

The use of models in this thesis work is to enable the researcher introduce a visual understanding of the structure and operations in the company. In general, models are a form of tool that represents or gives a visual view or guidance of describing something. Kühne, (2006) describes a model as a generalized concept which is developed from a “real or language-based system” which gives room for forming an opinion or drawing conclusions out of evidences. Again, one of the definitions given by Webster’s new encyclopedic dictionary defines a model as “a description or analogy used to help visualize something that cannot be directly observed”.

Further to these definitions, Kühne, (2006) continues to argue that models are a representation of an existing original system.

In support of this argument raised by Kühne, Stachowiak (1973 according to modelpractice.wordpress.com, 2013), developed a theory whereby he argues that a model may possess the following three features as indicated in the table 6 below;

Table 6. Model Features [SOURCE: Stachowiak (1973 according to modelpractice.wordpress.com, 2013)]

Mapping Features	A model is based on an original, where those original in this case could be based on a reflection of symbols, ideas or the physical world.
Reduction Features	A model should reflect the relevant knowledge of all the attributes of an original's properties.
Pragmatic Features	A model needs to fulfil the function of an original with respect to a certain purpose. Satisfying the questions; What Of? For Whom? When? and For What?

Based on the previous paragraph, the diagram below indicates the process to be followed in using the process remodelling as a tool in this thesis work. With reference to below in figure 14, the initial step will be to explain and point out the current situation and all related problems hindering the effective and timely preparation of an FDA. The second step will be to analyze the appropriate steps and solutions to be taken in creating an effective working environment, worker efficiency and effective information flow based on the review of literature in earlier chapter. This will take into consideration the information requirement aspects of; E-mails, vessel's name, vessel's eta, last port or place of call, cargo to be loaded/discharged in port, transit cargo on board if any, Next port or place of call, actual loading port and other relevant details for the vessel's call. Name and full address of vessel owners or charterers in a particular voyage Port and Cargo Expenses (E.g. Supplier invoices, Customs, Port Authorities, Port Health Documentation and invoices, VAT charges, Agency fees, etc.) Advance payments received for vessel calls or voyages. The final step will be to attempt to incorporate

and develop solutions based on some similar best practices and results obtained from the research and integrate it with the review of literature results to improve performance of the company.

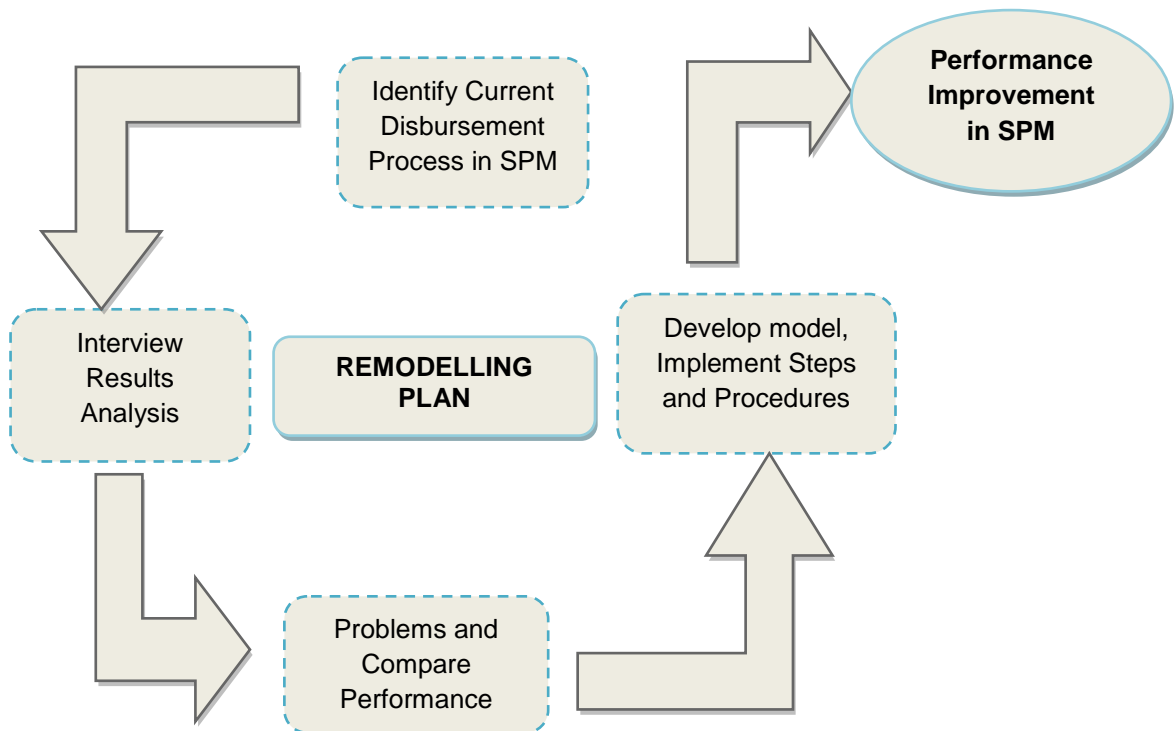


Figure 14 Remodelling Plan for SPM

4.3 Current FDA Process in Case Company / Information Retrieval

The FDA process in SPM involves a series of processes, activities and enormous amount of information sharing and documentation handling by different people and departments in the company. Detailed picture of the process can be seen in the model of figure 15. The whole process of a Final Disbursement Account based on the accounts of the writer from her work experience with the company and current system starts from;

Step 1: Acceptance of agency appointment

Step 2: Preparation of PFDA by the shipping manager after which copies are sent to the Client, Head Office, FDA unit and all other related departments.

Step 3: The Company waits for prefunding by the client based on the cost estimate of the voyage in the PFDA, of which he/she must prefund at least half of the total cost estimate. Appendix 3 shows a format example of a PFDA to the client.

Step 4: Upon acceptance of the PFDA, the client pays the prefunding amount to the Head Office in Rotterdam and the Office in turn sends email advice on funds received to FDA unit, shipping department, project manager and managing director before commencement of the project.

Step 5: The operations department then assigns a number to the new project and all other detail information on the project on an excel database sheet after upon the advice from the shipping department after which accounts again inputs all of such data into the ERP system.

Step 6: Work and operations begin upon the arrival of the vessel. 2 physical files (financial and operational file) are opened for the respective projects where all invoices, records of communication and information are stored until the departure of the vessel.

Step 7: Invoices and Vouchers related to the vessel call are received at the FDA unit from all directions as illustrated in figure 15 and the respective project numbers assigned to each invoice.

Step 8: Invoices are sent for approval by personnel in the FDA unit. First to the project manager and then to the managing director, but most times receiving signed invoices from the office of managing director without first going through the FDA unit.

Step 9: 3 copies each of invoices received are made. A stamped copy given to account payables for booking, another stamped copy kept as an attachment to the FDA to be sent to the client and the last copy kept on the vessel files.

Step 10: Upon the departure of the vessel, FDA are prepared and all necessary attachments are included and sent for approval again by the project manager and managing director.

Step 11: Copies are made of the signed FDA. Original FDA plus attached invoices and other documents are sent to the Head Office (HO) via courier and the copy attached to the originals of the invoices and filed and archived.

Step 12: Upon receipt of the FDA documents at the Head Office, a final invoice is issued from the ERP system and then forwarded to the client for.

Step 13: Any unexpended amounts are returned and any balance owing to the company are also paid by the client.

Step 14: The project account is finally closed.

Figure 15 on the next page is a model description of the current system of information and work flow process for making an FDA in SPM. The aim of the diagram is to visually and further describe FDA steps outlined in the previous pages. It further describes the current system of communication among the departments, vendors and branch offices (HO and the sub- branches in Ghana) and also shows the documentation flow processes in the case company.

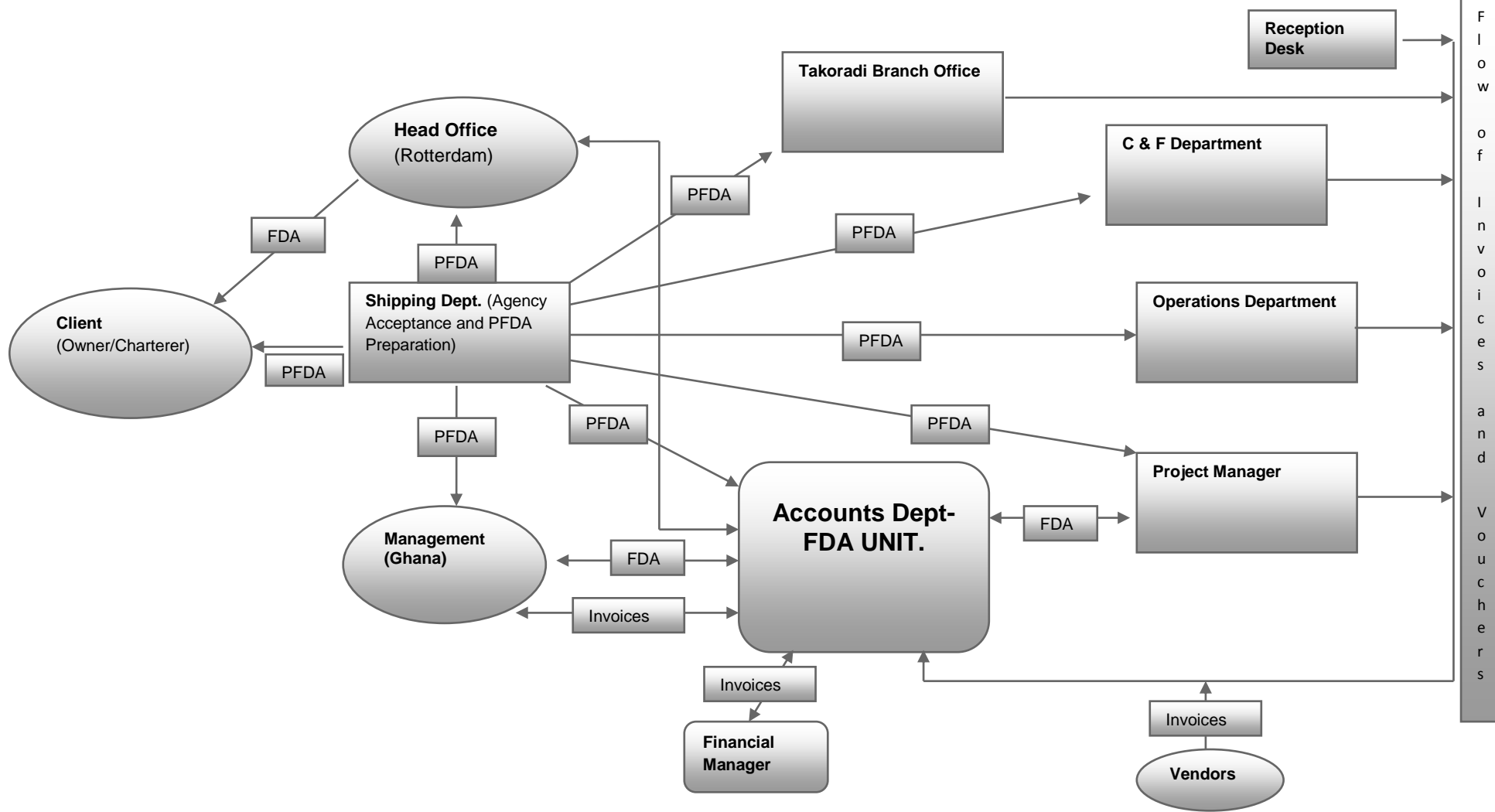


Figure 15 Current Final Disbursement Accounts Process and Documentation Flow in SPM

4.4 Structured Interview Process

The results of the interviews were conducted in order to gather data relating to work flow processes and information sharing in the case company and were obtained from a cross section of the functional departments that directly or indirectly affect the preparation of FDAs in the company. The interview was mainly conducted to obtain the view points of staff in problematic areas that hinder work processes, flow of communication, information sharing and the causes of delays in FDA preparation in the company.

As mentioned in the early pages of this chapter, the interview involved the heads of various functional departments in the company. A total of ten (10) interviewees were targeted for the interview but received results from nine (9) interviewees with the exception of the project head/assistant general manager who had travelled out of the country at the time of the interview.

The interview process started with the design the design and structure of the questions to be asked. Since the interview was conducted via telephone calls the questions needed to be designed in a way that would help obtain direct answers and reduce any complications and misunderstanding as much as possible.



Figure 16 Step by Step process of the interview

Second step was to contact the assistant general manager and project head of my intension to conduct an interview with the various departmental heads. Pending his approval, he informed the various heads of department of the intension to conduct the interview. He then advised that I need to send emails to the various heads of department to schedule a suitable time and appointments for the interview.

The third process involved was then to send emails to the various departmental heads in order to schedule an agreeable time for them. Due to the various schedules, the interview times were different but ranged between the period of December 2013 and January 2014.

Following this stage, a time table was developed to conduct the interviews through phone calls (Skype). During each interview, the structured interview questions developed in the first stage of the process was printed out. Based on this the answers of the interviewees were documented and comments were made on the sheets where necessary. After interviewing all the interviewees, the results were collated, compiled and analyzed.

4.4.1 Interview Results

The questions of the interview conducted were divided into three (3) sections with reference to appendix 6.

- The first section was to gather information about the employee and how well they are able execute their various task in an efficient and effective manner.
- The second section was to find out the process of information flow in the preparation of FDA within the company and also identify the company's documentation and archiving procedures.
- Lastly, the writer of this thesis wanted to know the general employee's view point and reactions to the development and implementation of change procedures within the company since the end result of this thesis work is to try and develop a better process and system for FDA in the case company.

4.4.2 Employee and Work Efficiency

Answers obtained to the first section of the interview were very similar across all the departments interviewed. They each shared similar views which indicated a number of flaws that hinders the effective performance of duties, effective work processes and efficiency of workers in the case company. In the interview with the Accounts department which comprised of the Chief Finance Officer, Account Payables /Credit Controller, Account receivables and DA unit, Shipping, Operations and C & F departments the results indicated that low productivity of staff in the performance of their duties is largely due to the following main factors:

- A clear workflow pattern does not exist; each of the interviewee indicated that it is difficult to follow a regular work process or pattern since there are unofficial constant changes in the flow of work. This inconsistency causes confusion and frustrations which results in each person performing his duties in the best way they deem fit in order to complete their task.
- Too many flow of papers and invoices between departments and units; they each also expressed their dissatisfaction about how original invoices and vouchers, copy invoices and vouchers and other documents are handled by so many different people even making it difficult to trace their current location. They also point out the issue of forgetfulness about the fact that the invoices or documents have even been received or handled by them.
- Poor flow of information between departments and branches was considered an important factor to low productivity at the work place. When the right or correct information needed is not received by the correct user, the user then spends time trying to trace the location of that information and this causes extreme delays according to the accounts department. The disbursement unit head quoted that “sometimes people have the information you require to do your work (be it invoices, vouchers, receipts, or even data entry, etcetera), but because it is not so important to him or her, they may forget or may not just care to pass on the information or enter the data in the ERP system”
- Different receiving points of incoming vendor invoices, this according to the interviewees causes a lot of problems because invoices get missing or stays on someone’s desk for a very long time making the user of

information waste time looking and searching for those invoices and also causes unnecessary misunderstanding between vendors and accounts department when the invoice is due for payment.

- Inadequate number of qualified personnel. The chief accountant pointed out that the number of qualified staff needed to perform the various work functions is not enough. When staffs are under qualified to take up certain positions in the company, quality of output is poor and much more pressure is put on the few qualified ones to correct mistakes and handle the huge workload. This according to him as quoted “you get very tired and you have to handle so many things at the same time so you also end up making mistakes due to tiredness and stress”.
- Adequate attention is not given to the quality of work by staff. In the opinions expressed by the accounts department. No one actually pays much attention to the quality of work they do. Quoting the chief accountant “most people do what they think is correct without giving attention to details and correctness and they don’t care about the next user of that information”.

In addition to determining the level of efficiency of workers in the company, the results also indicated that low productivity of workers in the company was also largely due to unclear defined roles of some of the staff. Responses obtained from the interviewees indicated that, to a large extent, workers are distracted from their duties when additional task is given to them. These tasks may not be in their job descriptions but once one is capable of doing it, you are asked to do so. In quoting the Operations manager, he said “people in my department could be working on their daily schedule and there is a sudden request from the managing director or from the port on a task that needs to be taken care off immediately example the early arrival of a vessel due to a change in its ETA; you have no choice but to stop and attend to that task”.

Similar responses were received from the Disbursement unit and other heads of departments interviewed. Though these sudden additional tasks assigned to them may require their urgent attention because a little time wasting in the ship business could cost a lot of money, it also distracts them from their duties resulting in

confusion, forgetfulness to pass on information or input a data into a system and possibly misfiling or misplacement of documents.

4.4.3 Information Flow, FDA Preparation, Documentation and Archiving

In this section of the interview, the writer most importantly wanted to find out how information is shared, retrieved, documentation handling and archiving processes in the case company since it is the basis of this thesis work. Below details the results of the communication from conducting the interviews and the opinions obtained from the various departments;

The Shipping Department

The department head was of the view that the most important source of information for FDA is email backups. He was of the opinion that emails contain most of the communication related to the operations of a vessel call and the constant follow up of email correspondence will give enough information and knowledge about the activities on the vessel. However and unfortunately some vital users of these various email communications are not copied. This hinders the flow of information which most of the time causes confusion and unavoidable delays. When asked about some of the causes of FDA delays, he pointed out that these delays are caused by a number of factors such as late approval of vendor invoices, misfiled documents and the lack of information sharing.

The Operations department

The opinions expressed by the operations department from the interview result were not far from the concerns raised by the shipping department. According to the operations manager, the most important source of information for the preparation of FDAs is the full style addresses of charterers and ship owners and third party invoices (vendor invoices and any other relevant documents serving as evidence for an operation or activity). He pointed out that improper communication of this information causes delays in FDA preparation since the user of such information will not be able to forward the final invoice – FDA to the right recipient.

He stated that it can cause low productivity in which he quoted as saying “when you don’t get the information you want, example a full style address of the owner or charterer, one will have to spend more time making enquiries and sending emails to various people and departments which in turn causes delays and thereby also lead to work piling up on your desk”. The time that could have been used to perform more tasks on your desk is rather used to chase for information which should have been readily available to you.

The Accounts Department

From the perspective of the accounts department, the most important source of information for FDA preparation is vendor invoices. The Chief finance officer argued that vendor invoices provides the main evidence of activities and operations on a vessel call. When information does not flow as required it can lead to so many inconsistencies and mistakes in the work processes. First of all it can lead to wrong data entry by the accounts department. Secondly it also results in wrong booking and posting of invoices which leads to a lot of reversals and adjustments in the ledgers and on the project accounts.

Mistakes made by account payables or account receivables affect the quality of information retrieved on the project accounts in the ERP system for the FDA. When asked about some of the significant causes of delays in FDA preparation he pointed out that the delays are caused by late approval of vendor invoices, misfiled documents, wrong or late ledger booking of vendor invoices and waste of time in making photocopy duplicates of invoices and vouchers.

Disbursement Unit

The disbursement account unit which is central to this thesis work expressed vital opinions in respect to the flow of information in the case company. According to the head of DA unit, every little bit of information is very crucial to the preparation of the FDA. She pointed out a few such as the contractual agreement between the principal and the agent at the time of agency appointment. This clearly spells out detailed instructions and requirements needed for the FDA of a particular voyage.

Again she stated that it is very important to obtain a copy of the PFDA, emails, invoices and advice on advance of funds received per vessel voyage or project. Lack or a break in the flow of information or improper documentation handling can cause wrong parties being invoiced; wrong FDA balances and the project accounts could read losses or overestimated profits.

According to the disbursement unit, in view of all the information and documents they require to complete an FDA, not much information is communicated to the unit by other departments and branches in the form email correspondence or paper work and it makes their work very tedious and tiresome. This results in serious delays in completing the FDA on most of the project accounts. They attributed such delays to late approval of vendor invoices, lack of information sharing, misfiled documents, wrong ledger bookings, too much time wasted in making photocopies of FDAs and invoices (mostly taking over 30 minutes to an hour) and finally there are sometime some delays on the part of management in approving FDAs.

Clearing and Forwarding Department

The influence of the clearing and forwarding department on the process of making FDA, according to the disbursement head may only be about 20% percent but that percentage could to a large extent influence the smooth process of FDA. In an interview with the head of the C & F department, the most important source of information to them is from the accounts department, the ports and logistics companies. Though they may not have much control over the ports and logistics delays, the accounts departments (account receivables) can cause delays if they are late in booking vouchers and invoices onto the C & F project files in the ERP system. The manager stated “the job is a cycle, if accounts do not book invoices and vouchers on time, then we are late in raising the final invoices to be charged on the vessel project account for FDA, therefore causing the delays in submitting the C & F invoices to the disbursement unit”. She pointed out that some of these delays can be over a month which of course is not only from the accounts but also from the ports and logistic agencies employed.

4.4.4 Developing and Implementing Change

This final section of the interview was to determine the level of acceptability to changes by the employees and organization as a whole as a result of the proposed or recommended remodelling and restructure of the FDA process in the case company. Again, the view points and opinions expressed by the various departments were very similar. The results indicated that generally, employees in SPM do not welcome change very well. People are more comfortable behaving and doing things the same way it has been done for several years.

Others were also of the belief that change could be made effective if management and the employee's attitude could change. Quoting the shipping manager "the staff do not really welcome change but maybe with effective management and control, it should be possible". Almost all the interviewees recommended that staff training is very essential if there can be any changes in the current system and procedure. Again, they pointed out that employees may not change "overnight" but it needs a gradual process. Also the attitudes of employees are a big hindrance for changes to occur.

The disbursement head was quoted as saying "even when you have made a new rule or procedure for something, it can possibly work for a week or at most 3 weeks and people will just go back to the old ways again because management's control is not effective enough". When asked whether if staff training is solely enough for implementing change, answers received revealed that staff attitude must change, management control should be more effective, there should be more stringent internal control measures, management should be able to employ other performance measurement tools and lastly management must ensure better facilities such as access to software and equipment and employee motivation.

4.5 Interpretation and Data Analysis

Following the results obtained from the interview, the main aim was to be able to identify the problems in information flow and its effect on the disbursement account unit. According to the results of the interview it can be concluded that there is insufficient flow of information among the departments, branches and units

within the company. This problem has arisen due to the current in-house work procedures and as a result, yielded to the low productivity of the workers. Work comes to a halt when people hold back information that needed to be communicated to other department. Thereby the users of such information do not have enough to work with and must always go around from department to department or from desk to desk looking for such information which causes huge delays in task accomplishments.

Again, documents handling was also seen to be of great concern which was also seen to be related to the document approval processes that exist for the treatment of vendor invoices. The results revealed that vendor invoices, correspondences and duplicate copies of these documents float unnecessarily around many departments and branches which results in misfiling, misappropriation and even loss of documents. These results indicate that documentation handling is directly related to the result of work output performed by the staff and thereby largely resulting in wrong communication or misinterpretation of information to other users.

With regards to the effectiveness and efficiency of the disbursement account unit performing its task, the head of disbursement, pointed out that there are too many people involved in the preparation of FDA so that the quality of work and information sharing is not given the adequate attention that it deserves. This indicated that the actions of everyone within the company directly affect the work output of the disbursement account unit. Staff's productivity was also linked to inadequate resources and facilities, under qualified personnel, lack of motivation and poor management internal control systems and procedures. This revealed that in order for a smooth work process in the company and most especially an improvement in FDA preparation, management must be able understand the interdependence of each department, branch and unit and the people that perform these functions.

4.6 Proposed Solutions

The basis for the development of a model structure is intended to produce a desirable beneficial outcome. A "desirable beneficial outcome" in this context

means; substantial improvements in SPM's information flow system and documentation handling for the benefit of preparing an FDA without disruption to the operational activities or employee work schedules. The recommendations and proposals made is not only intended to improve final disbursement account preparation, but also to improve the performance and working relations between and among employees and departments, customers and vendors to improve the working environment and workflow in the organization.

4.6.1 Work Process and Information Flow Remodelling

With reference to Stachowiak (1973 according to modelpractice.wordpress.com, 2013), one of the proposed features of a model is its pragmatic features which he described as been able to fulfil the function of an original with respect to a certain purpose by satisfying such questions as what is the model of, for what is the purpose or specific function of the model, for whom it is meant for and when is it needed.

In view of this, the idea of creating an efficient and effective work process and sharing of information for the case company is to reduce the amount of delays, time wasting, fully utilize material, monetary and labour resources without wastage and improve client goodwill for Supermaritime Ghana Limited. Hence the basic concept of the remodelling structure will be to:

- a) Remove Process and Activity Steps** - Work flow processes and activities that do not benefit the production of services must be eliminated. This will in turn reduce delays, save time and cause an effective and efficient process.

- b) Reduce Process Levels within the Company** – There is the great likelihood of errors, mistakes and omissions occurring when there are so many production levels involved in the delivery of a service. The resulting effect are extreme delays, confusion and low productivity since one will have wait for another to supply them with the required information or will have to consult with another department or branch before continuing his or her job.

- c) Initial Involvement of Direct Users of the Information** - When people who directly need or require information, are from the onset involved in the production process, this will reduce the need to make corrections and consultations with other departments, sections or branches.

- d) Central Information Retrieval:** The main idea is for each person to be able to perform his or her task without disruption to a colleague, department or section. Whether or not one task needs to be finished before another can start needs to be conducted in way as to avoid confusion and obtain on time information.

Figure 17 on the next page is an illustration of the suggested new information and work flow process for SPM. The model structure is aimed at establishing effective information sharing system, increasing transparency in final disbursement account preparation and creating an efficient and effective work flow process. The structure is envisioned to combine and collect all information (port cost, contracts, PFDA's, remittances, etcetera) from every department, branch and section, relating to a voyage into one central storage and retrieval system (ERP) for the sole purpose of handling, managing and controlling the operations and activities of the disbursement account department and the company as a whole.

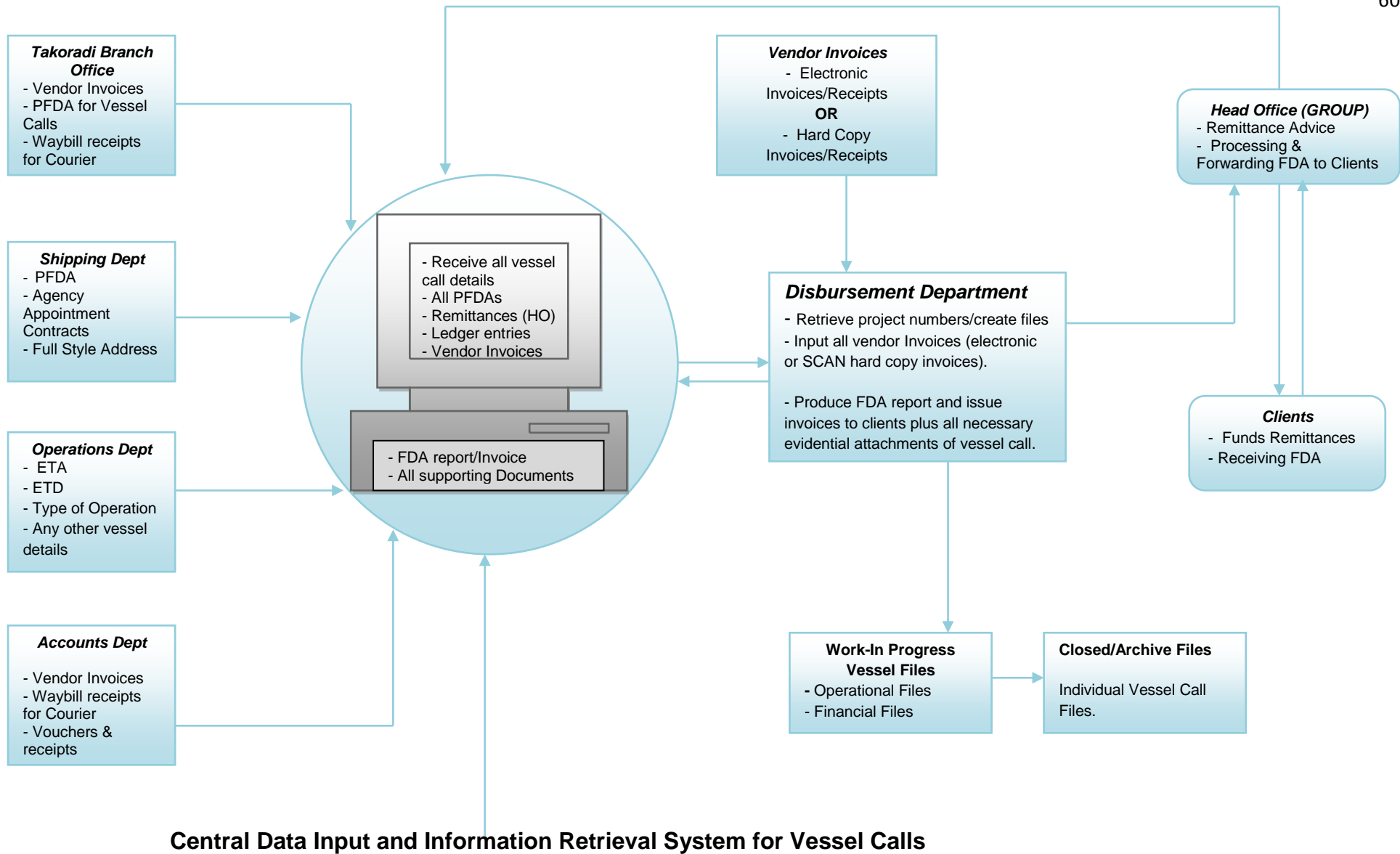


Figure 17 SPM FDA Process - Remodelled Work Process and Information Sharing Flow Chart

In view of the results of the interview where the outcome was due to the current and existing in-house system of documentation handling and information management system within the company, which according to the disbursement account unit and heads of department causes delays, poor information flow and poor document handling results in low productivity of workers and delay in FDA. In order to solve this problem the structure in figure... aims to daily process vessel call information and incoming invoices into a software system by all parties involved after obtaining all necessary approvals and also minimize document handling processes and photocopying of invoices.

Step 1: Agency Appointment / PFDA

The new process of making an FDA will start from the shipping departments in both Tema and Takoradi offices. The departments will act as the “initial data input provider”. They will be required to input information and copy of the general agency agreement (appendix 1) and the “specific and detail instructions” for making the PFDA and FDA provided by the ship owner, charterer or its agent, example as shown in appendix 7. A copy of the PFDA after acceptance by the client needs to be inputted in the system as well. Once this is done, the system will automatically assign a unique reference number to each vessel call indicating the start up of a new project in the company and would be used throughout the lifecycle of the vessel until the FDA is dispatched and project is closed. This will from the beginning of the vessel call inform everyone in the company and the head office, most especially the disbursement department on all the initial details they require for the FDA.

Step 2: Advance Remittances

Advance remittances needs to be received by the company before any work can start on the vessel. These advances are forwarded to the head office who intern send email advices to all related departments and managers. With the introduction of this new system, the conception is to directly enter the funds received into the respective vessel calls with the use of their reference numbers. This will eliminate the need to send emails to everybody within the company of which some do not even receive these advices due to omissions and forgetfulness.

Step 3: Vessel Operations

The next step will involve the input of all correspondence and other relevant information such as the vessel ETA and ETD, full style addresses and any other operations at the port by the operations and the shipping departments. This process will beforehand inform the disbursement account department on the type of invoices to be expected and from which vendor. It will also inform the activities that has been undertaken on the vessel which will make the preparation of the FDA much easier without having to go around from department to department or from desk to desk to make certain enquiries.

Step 4: Documents /Vendor Invoice Approval and Data Entry

In view of the large volume of crushing paper work that is involved in the preparation of FDA, the new system of work flow aims to eliminate some steps and reduce the current complexity in documentation handling and approval system in the company. The aim is to collect all invoices at one central location to avoid floating of invoices among the departments and also to reduce duplication of invoices and time wasting through photocopies. The system will encourage vendors to submit electronic invoices instead of hard copy invoices. They would then be required to submit all vessel related invoices, be it electronic or hard copy invoices to the disbursement account department only. Electronic invoices are immediately assigned the appropriate vessel reference numbers and forwarded for approval while hard copy invoices are processed and assigned the appropriate vessel reference numbers and also sent for approval. Upon their return all hard copy invoices are scanned into the system to their respective vessel call reference numbers and so are electronic invoices also attached to their respective vessel call reference numbers. All invoices are then electronically forwarded to the accounts department for booking.

Step 5: Disbursement Department / FDA Reporting

Upon the completion of operations and departure of the vessel, the next stage is for the disbursement account department to send the FDA to the clients through

the Head Office. With the help of this new system, it is hopeful that invoices can be sent within two (2) after the vessel departure. A time of two weeks is estimated because some vendor invoices are quite late in arriving of which the company does not have much control over except to encourage vendors for the early submission of invoices. At this stage, the disbursement account department is able to perform its task of entering all information required into the FDA sheet. They are able to perform active reconciliation of all expenses (invoices, vouchers, air waybills, etc) with the existing ERP ledger system. The final report is then printed together with all necessary attachments as per vessel call references numbers.

The new system totally eliminates the manual process of reconciliations, time wasting on photocopies, loss of documents, movement from department to department making enquiries, etc. The final bulk FDA document is sent to the project manager for approval and forwarded to the HO. A single copy of the *signed* FDA report sheet is made; the attachments are also printed and attached to the copy and also kept in a physical filing system and archived after the project is closed. This is to ensure an extra back-up for future referencing in the event of a system failure.

Step 6: FDA to Client

Upon receipt of the FDA documents by the HO, the responsible personnel only makes and prints out the final invoice which will correspond with the balance on the FDA report from SPM ERP system. This is then attached to the bulk FDA documents received and forwarded to the client. In totality, the client will receive FDA within 30 days after the vessel departure from the port as required in the clause “FDA Dispatch” in Appendix 7.

The creation of a central data input and information retrieval system is therefore intended to ensure efficient information sharing process, greater accuracy and efficiency, cost and document handling control and agency regulatory compliance for Final Disbursement Accounts.

4.6.2 FDA, Filing, Storage and Archiving

Another problem that was revealed by the respondents was the ability to retrieve filed and archived information on vessels. This was pointed out as being a problem since documents are not found when they are needed at a later date. In view of this a suggestion has been made to improve the current filing system. With respect to the central data input and retrieval system, documents can be filed by exporting the electronic form of information storage to the physical filing system. A vessel call file is in two parts namely the *operational file* (O) which contains all agency contracts and instructions, email correspondences and all other information on the vessel operation and the *financial file* (F) which contains all invoices and vouchers and any accounting information.

Though information can now be sourced electronically with the help the new work flow process, the filing system could also be made a lot simpler with reference to figure 18 below. The files could be named using the unique reference number raised by the system, followed by the vessel name and an indication of whether it is a financial file or an operational file and filed closely together and not separated to different cabinets as indicated in figure 18 Invoices and documents can then be filed by just printing from the data input system by the DA department. This could be done as data and information is received into the system to avoid last minute print out when FDA is ready. It would also supply information to those users of information that do not have rights or have limitations to the new data input system.

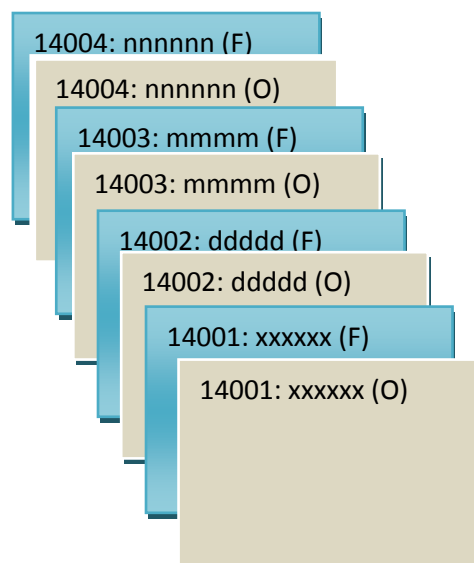


Figure 18 Proposed SPM Filing and Labelling System

Upon the departure and closure of a project account (vessel call), the financial and operational folders are put together in one arch file as indicated in figure 19 and stored away in the sequence of the reference numbers and the cabinets labelled with respect to the years it relates to.

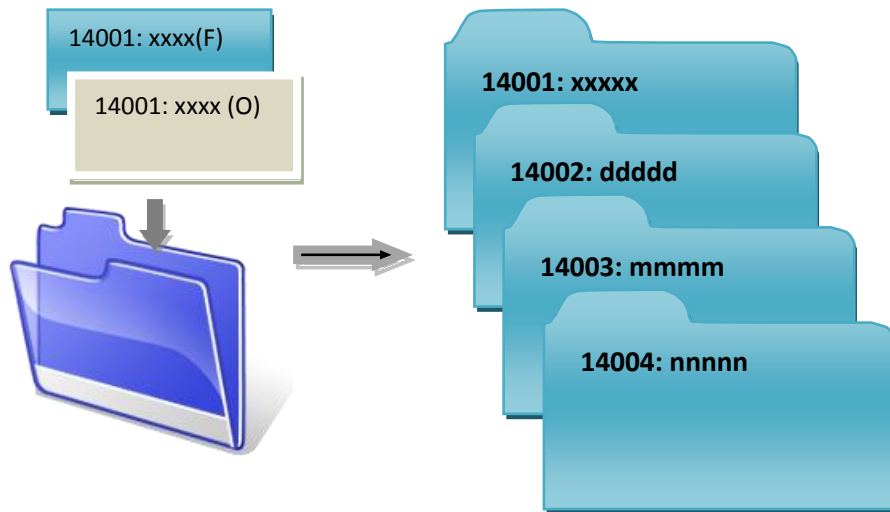


Figure 19 SPM Vessel Archive Filing System

In this case future referencing of information and data on a vessel call is made very easy by all users of the information.

5 DISCUSSIONS AND CONCLUSION

In the face of increasing global relations amongst nations through trade across borders, there has been an exorbitant increase in the world's oceangoing fleet. This increase in oceangoing fleet has equally increased the management of vessels under third-party ship management. Ship owners employ ship management services for varying reasons, one most important reason being able to reduce its overhead cost as pointed out in chapter 2. As a result, growth in the number of ship management agencies around the world has promoted competition and hence the need to offer quality managerial services to ship owners.

The need for effective management in various functional areas of vessel operations by ship managers prompted the need to ensure quality, professionalism and integrity in all aspects of ship management agency by the ISMA. These circumstances of growth in volume of ship management agencies, competition and execution of duties, responsibilities and excellent performance to ship owners motivated the need for improved productivity in work flow processes. In view of these issues raised this thesis paper sort to investigate one functional aspect of ship management services known as final disbursement account (FDA) and the impact of information flow management on work flow processes in a ship management agency.

The aim of this thesis work was to use a qualitative research approach, specifically with the aid of a structured interview technique to investigate the FDA process in the case company, identify the factors which causes delays and the information flow challenges in work flow processes in the organization, based on which the writer sort to develop a proposed recommendation for a better process, effectiveness and efficiency.

The structure of this thesis took the form of clearly defining the research problem and objective of the study in chapter 1. It then moved on to enlightening and broadening our understanding by a review of literature in the field of management, the shipping industry, ship management and information flow management. Chapter 3 informed about industry analysis, trends, growth and statistics in the shipping industry. The objective of chapter 4 was to analyse and interpret the data

collected from the interviewees in order to develop suggested solutions for the defined problems. The final chapter gives a holistic overview of the study and points out reasonable factors to support the claims and theories discussed in earlier chapters.

The key findings obtained from the interviews conducted presented a number of causes for the delays in FDA and the problematic areas for improvement was formed on the basis of establishing a proposed recommendation for SPM. The result therefore showed that the exchange of information among the departments, branches and units within and outside the company is not easy because of the existence of a poor systematic procedure. Again, there was no single or central information retrieval system where everyone could obtain information on a vessel. Information is gathered from several mini sources to enable the FDA preparation. Based on these findings, the writer sort to develop a central information retrieval system and proposed solutions for enhanced work efficiency and improvement in services.

5.1 Integrating Theory into Practice

The process of consolidating practical findings into theories may not always be an easy process (Cosis Brown 1995, according to Watson, Burrows & Player 2002, 126) but it is an essential part to “incorporate the discussion of theory with practice” (Watson et al, 2002, 130). Watson et al, (2002, 130) states, “the finished work is as a good ballet, the dance looks smooth and effortless, as if people are floating on stage, all the sweat and nerves, hard work and blisters are known only to the dancers on stage, as in this case the writer and the finished product reads as if it came naturally”. Hence, by reviewing the literature of this paper and attempting to incorporate it into the practical findings, it was observed that the work flow activities and information flow management of SPM could have been better modelled to ensure worker efficiency and productivity if some of the theories pointed out in this paper had been incorporated. The following discussions highlight a few theoretical points that could have been implemented to better serve the current in-house work flow processes.

It was observed from the interview results that too many people were involved in the preparation of FDA so that the quality of work and information sharing is not given the adequate attention that it deserves. This indicated that the actions of everyone within the company directly affected the output of work in the disbursement account unit. It could therefore be concluded that there was insufficient flow of information among the departments, branches and units within the company which yielded to low productivity workers. Stair and Reynolds (2011, 3) described information as being “powerful” and further argued that the power that information has, depends on its ability to serve a particular purpose, at a particular time and with very minimum effort or work. If the disbursement account unit faced difficulty in acquiring much needed information for the performance of their task then certainly information in SPM loses its value because it is unable to accomplish its purpose (Davenport 1993).

Staff’s level of productivity was also linked to inadequate resources and facilities, under qualified personnel, lack of motivation and poor management and internal control systems and procedures. This proves Lussier’s (2008, 6) point when he argued that effective and efficient management system is largely based on the converging resources of human, financial, physical and informational resources. If the case company had paid attention to its systems and structures and also employed capable personnel, it would have resulted in the efficiency and effectiveness of workers in the department which could have avoided delays in the preparation of FDAs.

According to Wiggins, (2000 p.3) the success of managing information in an organization is dependent on the effective management of paperwork, its movement among departments within the organization and outside of the organization and the proper integration of this paperwork with other information sources in the organization. This argument cannot be overlooked because documents handling and paper work was seen to be of great concern in SPM and proved that documentation handling is directly related to the result of work output performed by the staff and thereby largely resulting in wrong communication or misinterpretation of information to other users.

5.2 Significance and Feasibility of the Study

The process of making FDA is quite a daunting task that requires professionalism and some level of accuracy in the performance of duties. However, the process can be time consuming, paper intensive and involves various stakeholders in the industry; ship owners and charterers, third-party ship management agents, accounting professionals, numerous vendors and numerous port operational activities. All these stakeholders are concerned with various levels of activities such as cargo handling, vessel operations and requirements and logistics within and outside of various ports. All these activities and stakeholders communicating together to bring out a single FDA after the ETD of a vessel from port requires heavy and accurate information management system to be able to synchronize all these activities together in order to give value to the client and increase service productivity to the ship management agent and reduce cost to the ship owner and charterer as discussed in earlier chapters.

The objective of this whole study was to give more insight into the activities involved in the making of FDA and the challenges associated with an ineffective system of operations and also to establish a proposed solution. The research conducted investigated and analyzed the current practice involved in the information flow of ship management agency services (SPM) for the purpose of making an FDA. Though the writer did not personally visit the company at the time of writing this paper, her past experience makes it appropriate to choose this area of research due to the challenges personally faced at the time of her employment.

Again, interviews conducted involved all the key personnel and managers directly involved in the total lifecycle of a vessel call. All interviewees were very willing and upfront with their concerns and opinions on how the information sharing and communication affect their work processes. Taking action on the interview results reflected a new work flow model and process design by incorporating an ERP mechanism detailed in chapter 4.

In an effort to support the ISMA mission and objective of ensuring high quality, professionalism and integrity in all aspects of the ship management agency (Bajpae, 2013) the impact of this area of research to the shipping industry is to increase the high level performance and services provided by ship management

agents to vessel owners and charterers. Again in view of the general change in the global environment with respect to technology, the recommended central information retrieval system hopes to turn around the current in-house system of work processes and disbursement account in SPM and the industry as a whole to promote “B2B e-commerce business model through substitution, scale and structural transformation” (Bajpae, 2013).

5.3 Reliability and Validity

This section describes the degree to which this thesis work can be relied upon and considered relevant to my research area and other future application of results is based on the assessment of reliability and validity of the thesis.

5.3.1 Reliability

Reliability according to Bryman and Bell (2011, 158) is concerned with the “consistency of a measure of a concept”, that is it evaluates the extent to which the outcome of a study can be repeated.

Hence, reliability on this work was formed on the basis of the extent to which recommendations and conclusions drawn could be implemented in the company and possible implementation in other shipping agencies or other industries. The evidence for the reliability of the thesis has therefore been presented based on the personal testimonies and answers given by employees and staff who are *directly* involved in the daily schedules associated with port call activities and the preparation of FDAs in SPM and corroborated by the personal work experiences of the writer in SPM. Based on the qualitative research study conducted, responses were received from all the departments (excluding the administration department) by means of a structured interview technique and also relevant data and analysis from the company.

5.3.2 Validity

On the other hand, the writer's assessment on the validity of this thesis is primarily focused on the extent to which this research was intended to accomplish. For this reason, measurement of validity has been based on the following four (4) dimensions in the collection and purpose of data for the study which is supported by Mason (1996) who simply refers to validity as to whether "you are observing, identifying or measuring what you say you are" which follows my discussion on;

- a) The usefulness of the feedback from the interview conducted: the feedback obtained from the interview questions posed to the sample population served as a confirmation of the writer's own personal testimonies and a description of the shortfalls and processes in SPM in relation to the topic of the thesis work.
- b) The relevance of the feedback obtained in relation to the topic and thesis question: the feedback obtained helped the researcher to develop models which gave a better view and understanding of the system and structure of company in relation to the process of developing and building a model for development and implementation process for FDA preparation in SPM.
- c) How well does it capture the role of managing information flow in an organization (SPM)?: the result from the interviews conducted and literature review analysis in this thesis work confirmed the dysfunctional work processes and low productivity of the company from its inability to integrate all aspects of its organizational resources especially in the area of information resources.
- d) How well does it address the problematic situation of the target area of the study?: Based on points (a) to (c), the theories, the feedback, analysis and suggested solutions covered the entire aspects of a FDA process in the industry and in SPM, involved key personnel, analysis of work processes and environment and theories on best practices in an organization with respect to business resource management, ship management and information management.

Based on these reliability and validity factors, it can be said that this thesis can to a large extent be depended on and applied in the case company because

interview results and proposed solutions stemmed from direct concerns raised by the staff with firsthand knowledge of the field of study. The result of the thesis can also be reasonably applied to other ship management agencies in Africa especially in Ghana because of similar level of country economies and level of developments. Also, though the thesis may have concentrated on SPM, proper information flow management is a challenge in all types of industries and the proposed solution is a flexible ERP solution that can be applied in other industries and economies.

5.4 Proposed Recommendations

The following recommendations were brought about by the outcome of the study, viewpoints expressed by the employees in the interview discussions and the writer's own opinions on performance improvements based on knowledge gathered in course of the study.

- I. **Training and Development of Employees** – In order to effectively implement the new work process; the company needs to place more emphasis on the recruitment, training and development of its human resource. Without it, and the motivational backing from management, though the new process may be implemented, the probability of people slipping back into their old ways is very high since according to the result of the interview, staffs in the company are generally not susceptible to change.
- II. **Establishment of Performance Measurement Tools (Logic Model)** – Management also needs to establish a form of performance measurement tool by incorporating the “Logic Model tool”. A logic model according to Community Tool Box (2014) is a tool that is able present a visual mapping of activities that is expected to bring out change and development. In other words, it spells out the relationship between organizational activities and the impacts by drawing a link between its resources and processes (Performance Reporting Solutions 2014). With the help of this tool, management will be able to see and review, at various points within the implementation process, the progress and incorporate any necessary adjustments to the implementation of the new work process.

- III. **Clearly Defined Roles and Responsibilities** – By clearly defining the roles and responsibilities of each staff member and most importantly establish the disbursement account as a *department* and not a *unit*, will promote healthy communication and work relationships, faster FDA delivery times and improved service production.
- IV. **Establishment of Stricter Internal Control Environment** – Finally, management of the case company needs to establish a much stricter and firmer means of controlling its work procedures to ensure effectiveness and efficiency of operations. This form of control will influence the attitudes and behaviours of staff especially in the area of “organisational ethics and integrity, commitment to competence, authority and responsibility and human resource policies and practices” (CSUS 2014).

5.5 Suggestions for Future Research

The field of research in the shipping industry is wide and broad and therefore many aspects of the industry need to be explored and investigated. Though this research has brought to light more knowledge and understanding of the disbursement account process in the shipping industry and has made some significant contributions to the development of the process, it only discusses the case company in Ghana. The results of the study therefore may have quite some different situational analysis in other ship management agencies in other parts of the world by the influence of factors such as the level of country development, organizational culture, structures, strategies and practices and level of advanced organizational resources.

In view of this fact, it would be interesting to expand this study to other ship management agencies in other parts of the world in order to analyse the different work flow processes of other companies to serve as a benchmark and platform for constant improvement and process development to keep up with the changing pace of development in the industry.

Again, it would be of great advantage if further future research can be conducted in the area of applying advanced technology in ship management to improve the information flow among all the stakeholders in the industry example ERPs, since

traditional information processes are gradually becoming outdated and with consideration to the fact that the world is becoming more and more a “global village” with the rapid increase in international trade relations.

Lastly, in view of the ISMA, IMO and ISM, mission of protecting the interest of ship owners, professionalism and ensuring vessel safety among others, it would be very prudent to investigate more in the future on how to harness the resources in the industry being the people, technology and processes to enable a better service delivery to meet the needs of customers and other relevant stakeholders such as importers, exporters, ship owners, charterers, ship managers and government in the industry.

In addition to the recommended future possible areas of research mentioned in the preceding paragraphs, Re-doing this thesis would be more rewarding to the writer and to the company if the topic of the thesis could have been extended in the other tasks and operations in the company and not only concentrated on the FDA process and disbursement account unit. The writer would therefore in the future consider reviewing the whole administrative process of the case company to better receive a considerable outcome and value creation to the company as a whole.

Again, doing this thesis brought to light the fact that a lot of facts and ideas can be obtained from the staff who directly work on the job and not the top management. Though the structured interview yielded the much needed information for the purpose of writing this work, the writer would consider a different methodological approach by applying the use of a focus group discussion and being present in the company. The focus group (comprising of team members formed from all the departments in the company) would discuss and bring out concrete evidences and solutions to be applied in the case company. The result will be a much better recommended solution created and by the group which can be more feasibly applied to the company.

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APPENDICES

Appendix 1(1): Sample of an Agency Appointment Acceptance Terms

(<http://www.asba.org/wp-content/uploads/2010/09/Agency-Appointment-Acceptance-Terms-Jun09.pdf>)



Agency Appointment Acceptance Terms

Standing provisions for agency acceptance and accounting matters are set forth below. The Principals acknowledge that the information set forth is customary and in line with ASBA's Terms and Conditions of Vessel Agency. Unless otherwise advised within 48 business hours of receipt, these appointment acceptance provisions are deemed to be received, understood and accepted.

I. PRINCIPAL CONTACT DETAILS:

- a. Official company name as our PRINCIPAL
- b. Physical Street Address (for couriering)
- c. General Office Phone, fax, email and website(if available)
- d. Primary Contact for all accounting matters
- e. Banking Details
- f. Name of company which will show on wire remittance

II. FULL FUNDING REQUIRED – 100% of requested funds set forth in our pro-forma previously received, including that portion reserved for owner's matters and all agency charges, are to be received by our bankers 3 days prior to vessel's arrival. Agent must be placed in funds for all unexpected expenses prior to vessel's departure.

III. FEES

- a. **Agency Fee** – Does not include allowances for O/T, postage and petties, bond, communications and auto hire unless expressly agreed to by the parties. Does include ___ berth(s) at load/discharge places and 3 days in port. Additional berths (including bunkering if a separate operation) \$_____ per berth. Additional days after third at \$_____ per day to be billed on Agency Letterhead IN ADDITION to Agency fee.
- b. **Docking Pilots** - Docking/Undocking Pilotage calculated based on Pilotage units.
(Insert local requirements)
- c. **Light Dues** – Includes Tonnage Tax, Customs user fees + APHIS fees USD 929.00 + Overtime charges.
- d. **Pilotage** - Per Pilot Tariff (Insert local Pilot Association)
- e. **Mooring/unmooring** – Estimate of line handling charges based on the terminal and service provider.
- f. **Launch Hire** - Estimated charges towards Launch Hire.
- g. **Port Costs** – Principal to confirm any special arrangements, in particular, tugs.
- h. **Owner's Expenses** – You will be financially responsible for any related expenses which our agency incurs – including owner's requirements.
- i. **Owner's Items rendered separately to a Third Party** – will incur our tariff charge \$ _____ for a separate DA to the third party.
- j. **When Owner's Expenses are not Guaranteed** – To insure the prompt and timely performance of owner's requirements; the responsible party must provide full style as per I. to the agent with detailed instructions regarding requirements, authorization for the agent to act on their behalf, advance pro-forma funding including separate agency charge and rendering instructions.
- k. **Cash To Master (CTM)** – Full style of provider of CTM, as per I., must be provided as well as desired denomination breakdown. Additional fees apply and are based on type of service provided.
- l. **Wire and Mailing Fees** – Bank transfer fees for advances or settlements as well as all special mailing fees are the responsibility of the principal. The account will not be considered settled if these fees are deducted from the final account.

IV. CORRESPONDENCE – Concerned parties must include the vessel's name and agent's reference number on the subject line of all correspondence to include wire remittances, emails, couriers and spares.

Appendix 1 (2):

V. FINAL DISBURSEMENT ACCOUNT (D/A)

- a. Final D/A will be couriered to the physical address as instructed to be shown on our D/A.
- b. Principal must acknowledge receipt of final D/A.
- c. Any outstanding balances are due upon your receipt of the final D/A.
- d. Outstanding balances over 30 days from date of the D/A will be subject to a late fee of ___% per month on unpaid balance. (\$ ___ Minimum Charge).
- e. Remittances of credit amounts will be forwarded following agreement of the D/A balance.
- f. Agent will not be held responsible for any time bar items resulting from late billing to agent.

VI. FINANCIAL RECOURSE PROVISION - It is understood by and between the (*Principal*) and the agent that in the event the Owner does not pay the agent for any or all of their services, supplies and materials provided, the agent has expressly relied on the credit of the Principal's vessel and shall have a valid and enforceable Maritime Lien against the vessel for all unpaid sums.

VII. INTELLECTUAL PROPERTY - The information provided by the agent including their Pro-forma DA and Final DA is considered privileged between the agent and his contracted principal and is the intellectual property of the agent. This information cannot be used for any purpose other than settlement of a particular voyage disbursement account without the agent's permission.

VIII. AGENT BANKING and CONTACT DETAILS

IX. DIRECT ALL CONCERNS (Principal) - Name _____

Telephone _____ **Email** _____

The agent's pro-forma disbursement account is intended to be an estimate of the actual disbursement account and is for guidance purposes only. The agent does take every care to ensure that the figures and information contained in the pro-forma disbursement account are as accurate as possible, the actual disbursement account may, and often does, for various reasons beyond our control, vary from the pro-forma disbursement account. You are required and liable to pay upon demand, the full amount described and shown in the actual disbursement account. This duty exists regardless of any difference between the figures in this pro-forma disbursement account and the actual disbursement account. For the avoidance of doubt, a pro-forma disbursement account is not a contractual document.

Principal shall defend, indemnify and hold harmless (Agent) from and against all expenses, claims and lawsuits of whatsoever nature (including, without limitation, for breach of contract, nonpayment, injury, death, or property damage), alleged to arise out of or relate to operations or conditions connected with the vessel, crew, owners, operators, independent contractors, charterers or cargo. In the event charges/penalties are assessed against bonds provided on behalf of the vessel/cargo by Agent or its sub-contractor, Principal shall promptly arrange U.S. collateral security to cover bonding exposure. Principal shall pay all costs incurred by (Agent) in collection of its fees, costs and enforcement of its indemnity rights including reasonable attorney's fees, and shall pay interest on all unpaid amounts outstanding 30 days after accounts are rendered at 18 percent, compounded annually. In the event of an oil spill or other incident requiring notice to governmental authorities under applicable law, Agent is authorized by Principal and the vessel to make such required notification.

Signed _____ **Date** _____

Company _____ **Title** _____

Appendix 2: Standard Final Disbursement Account Format by BIMCO

(<http://maritimeknowhow.com/wpcontent/uploads/image/Charterparties/Voyage-CP/DISBURSEMENTS%20ACCOUNT%20CP.pdf>)

STANDARD DISBURSEMENTS ACCOUNT



RECOMMENDED BY
THE BALTIC AND INTERNATIONAL MARITIME CONFERENCE (BIMCO)
AND THE FEDERATION OF NATIONAL ASSOCIATIONS
OF SHIP BROKERS AND AGENTS (FONASBA)

Shipagent

Owners/Chartered Owners/Disponent Owners

Port:	Date:	Vessel:	Voy. No.
Arrived from:	Date/Hour:	NRT	GRT
Sailed for:	Date/Hour:	TDW	LOA
Cargo loaded:	Cargo discharged:	<input type="checkbox"/> Repairs	<input type="checkbox"/> Bunkers
		<input type="checkbox"/> Other	
Voucher No.	PORT CHARGES Harbour Dues Light Dues Pilotage Towing Mooring/Unmooring Shifting Customs Charges Launch/Car Hire Agency Remuneration Telex, Postage, Telegrams		Total
	CARGO CHARGES Stevedoring Expenses Winchmen/Cranage Tally Overtime		Total
	SHIP CHARGES Cash to Master Water Stores/Provisions Crew Expenses Repairs		Total
	STATEMENT Credit to Owners' Account Balance due us/you		TOTAL

Appendix 3: Format for a Pro-Forma Disbursement Account of SPM

Supermaritime Ghana Limited**Tema office:**

Akosombo Road
Industrial Area, Comm. 1
PO Box 151, Tema

Tel: +233-(0)303-202874 / 202036
Fax: +233-(0)303-206777
mailghana@supermaritime.net
opsghana@supermaritime.net

Takoradi office:

1st Floor Harbour View
Building
P. O. Box 1154
Takoradi
Tel: +233 (0)312
024642/029314
Fax: +233 (0)312 023006
takoradi@supermaritime.net
mailghana@supermaritime.net

Pro-Forma Disbursement Account

To: *Client Name* **Dated :**
Full Style Address

Attn: *Contact Person*

D/A ref:	GRT:
Vessel:	LOA:
Cargo:	Beam:
Volume:	Draft:
Port:	ETA:
Estimated port stay days:	

1	Harbour Rent	USD	0,00
2	Light Dues	USD	0,00
3	Pilotage in / Out	USD	0,00
4	Towage in / out	USD	0,00
5	Mooring in / out	USD	0,00
6	Watchmen (Compulsory)	USD	0,00
7	Shippers Council Levy	USD	0,00
8	Supervision	USD	0,00
9	Port Dues	USD	0,00
10	Vent Materials (Estimate)	USD	0,00
11	Port Environmental Tax	USD	0,00
12	New GMA Charge	USD	0,00
13	Agency Fee	USD	0,00
	Total Port Cost	USD	0,00

USD

Our Banking Details:**Name of Bank****Account nr.:****IBAN:****BIC:****Beneficiary:****Reference:**

With the above we hope to have replied to your enquiry to your satisfaction. Should you have any further question, please do not hesitate to contact us.

Supermaritime Ghana Ltd, for and on behalf of Supermaritime SA, as Agents only.

Member of the Supermaritime Group - internet: www.supermaritime.com

* All our activities are subject to our general conditions, available on request *

Appendix 4: Format for a Final Disbursement Account of SPM

BREAKDOWN COVERSHEET EXPENSES

Customer:

Date
Vessel Name
Port
Arrived

Dbt/Cdt Note nr
File Nr
Operation
Sailed

Item nr	Description	GH¢	USD
	Port Expenses		
1	GPHA/Marine Charges		
2	GPHA/Shifting Charges		
3	GPHA/Port Dues		
4	GPHA/Hire Of Tug		
5	GPHA/Hire Of Tug		
6	Watchmen Expenses		
	Sub-total		\$ -
	Other Expense		
7	GSA/Export		
8	GMA/Safety Charges		
9	Wiltex/Sealing Of Hatches		
10	Wages For Ventilation Materials		
11	Univid/Wood Supply		
12	Operational Expense JBL Surveyors		
13	Operational Expense/QCD		
14	Operational Expense/Overtime		
15	Operational Expense/CMC		
16	Hotel Bill/New Mexico		
17	Hotel Bill/New Mexico		
18	Hotel Bill/Mensvic		
19	Hotel Bill/Golden		
20	DHL/Courier Expense		
21	COCOBOD/Spraying of Ships Holds		
22	Mary A/Ship Chandelling		
23	Mary A/Ship Chandelling		
24	Domestic Flight/Starbow		
25	Domestic Flight/Antrak		
26	Domestic Flight/Antrak		
27	Crew Change Expense		
28	Supervision Expense		
29	Agency Fee		
	Sub-total		
	Grand-total		\$ -
	advance received value date		
		Balance in Usd	\$ -

Roe 1 Usd =

Cedis

Appendix 5: Sample of a Vessel Invoice from a vendor to a Ship Owner

(<http://itccstory.blogspot.fi/>)

Qty	Description	Unit Price	TOTAL
	M/V "BBC Singapore"		
	Crewing Contract dated 1st January 2008		
	January 2006		
	Wages paid on your behalf		
	Captain - Shalnov		USD 4,000.00
	1st Officer - Rusakov		USD 3,500.00
	2nd Officer - Monakov		USD 3,000.00
	1st Engineer - Kharinov		USD 3,100.00
	1st Engineer - Smol'nyakov		USD 400.00
	2nd Engineer - Biller		USD 3,000.00
	Sub Total		USD 17,000.00
	V.A.T.		
	TOTAL		USD 17,000.00

International Transport Consulting & Crewing Ltd.

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Appendix 6 (1): Structured Interview Questions

Section 1: Employee and Work Efficiency

1. What is your position/role in the company?

Position.....

Role.....

2. What information do you require to enable you perform your duties?

.....

3. What are some of the most common issues related to low productivity in the performance of your duties in relation to the following common reasons;

Possible Reasons:

- Clear and obvious work flow does not exist
- Unnecessary flow of papers/invoices between departments and sections.
- Poor information flow between departments and branch offices.
- Papers travel around sections and departments without being able to trace their current location.
- Different receiving points of incoming supplier invoices
- Inadequate number of qualified personnel
- Lack of consistency in the method of checking expenses/booking of invoices?

Quality of work by individuals is not given adequate attention

4. Are you mostly distracted from a current job in hand by being given additional tasks?

Appendix 6 (2):

Section 2: Information Flow, Preparation of FDA, Documentation and Archiving

5. What do you consider to be the most important source of information concerning the preparation of a Final Disbursement Account (FDA)
.....

6. What are some of the problems that may arise when information does not flow as you would want it to?
.....

7. How much information with respect to FDA do you receive from your colleagues, branch or Head Office as emails, phone calls, paper or word of mouth?

8. How long does it take to complete the FDA of one project account?

9. What are some of the causes of delays in FDA preparation?

10. If photocopying is a reason for delays with respect to question 9, how long does it take to finish one or/ bunch of completed FDA's or invoices?

11. a) How would you rate the retrieval of filed or archived hard copy information?
.....

b) How would you rate the retrieval of information in an electronic archived data?
.....

Appendix 6 (3):

Section 3: Developing and Implementing Change

12. Do you believe staff in the company can easily embrace or welcome change?

.....

13. (a) What opinion do you share about staff training in order to improve the performance and productivity of your section?

.....
.....

(b) Will it be good enough?

.....

(c) In your opinion will it take a gradual process before an improvement process could take place?

.....

(d) Will staff training **be enough** or **not enough** to implement change?



.....

14. Any other comments or thoughts on improving the FDA processes and information flow in Case Company.

.....
.....
.....

Appendix 7(1): General Instructions for PFDA and FDA.

<http://www.nextmaritime.com/the-worldwide-ship-agent/world-shipping-agency-marine/agency-ship-agent/pdf/NEXT%20MARITIME%20PDA%20AND%20FDA%20GENERAL%20INSTRUCTIONS/4/P.pdf>

NEXT MARITIME PDA AND FDA GENERAL INSTRUCTIONS

NEXT MARITIME PDA & FDA GENERAL INSTRUCTIONS

PDA (Proforma Disbursement Account)

Please advise estimated PDA, including any available discounts and/or rebates, in your local currency and USD or EUR. Please state the basis for your calculations of each cost item.

You may be contacted by our agency and/or DA department concerning clarifications of costs. Kindly cooperate and ensure a smooth process.

We hereby request you to kindly support us with latest and updated port, agency & husbandry tariffs.

AGENCY FEES

Please note that your agency fee should include all sundries items as car hire, sundries, agency overtime, communications and postage. No separate charges for these will be considered for payment.

Please quote a competitive all-inclusive lumpsum agency fee covering the intended port operation. We expect that you will provide us with 3rd party invoices for other agency incidentals.

We understand that your agency fee covers the whole time that vessel is at the port. If application is different, this has to be informed in detail and in advance for our approval, otherwise this will not be accepted.

HEAD OWNERS AND/OR SHIP MANAGERS EXPENSES

Head-Owners/Managers expenses will not be pre-funded in the proforma. Please note that ships husbandry costs are only accepted in your final DA provided prior approval is taken. All head owners cost must be accompanied by an original invoice and must be duly signed/stamped by the Master and/or Head Owner's person in charge, failing with such costs will not be accepted by our Disbursements Account Team.


PREFUNDING

Our policy is to remit between 60% and 80% of the proforma



FDA (Final Disbursement Account) DOCUMENTATION

Please ensure that your FDA (Final Disbursement Account) is presented only in English or translated (keywords) by you into English. Due to accounting regulations we cannot accept to pay any cost without supporting original vouchers. Any charge to be submitted on agency letterhead should be agreed prior vessel call.

For Surveyors, Launches and other transportation it is important that any vouchers covering such expenses are clearly marked with name and function of person transported, as well as name of



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 agency@nextmaritime.com - www.nextmaritime.com
 NEXT MARITIME, S.L. VAT ID: B86.05.0.000801

Appendix 7 (2):

mm	The Worldwide agent.
person who ordered the service.	
Please don't send any vessel documentation by courier without our previous authorization.	
All invoices for Port Services must be signed and stamped with the ship's stamp by the Master.	
Where boat/car services are undertaken or contracted for on behalf of the vessel must be in full in accordance with applicable International and local laws and regulations.	
EXCHANGE RATE (if applicable)	
Always provide documentation justifying the rate of exchange used in FDA. The ROE (Rate of Exchange) can be supported by any one of the following:	
Bank document confirming the ROE used by the receiving bank for inward remittance of PDA funding.	
Central Bank published exchange rate on vessels departure date.	
FDA DISPATCH	
Please ensure that your final DA is presented within 30 days of the vessels departure to enable us to prepare and issue any claims to Owners in good time.	
Please dispatch the final DA to the following address:	
NEXT MARITIME S.L. DA Department Puerto Tarraco. Muelle de Lerida B1-2F 43004 Tarragona (Spain)	
Time bar for charterer account: If any charterers expenses to be billed, please ensure same is presented to Next Maritime S.L. within 30 days of vessels departure. If for any reason you can't comply with this, please inform us in time in order for us to inform Charterers accordingly. If presented outside this timescale, Next Maritime SL will not guarantee your re-imbusement of these expenses.	
Please also send us scanned copies (in color) to da@nextmaritime.com .	
We would like to thank-you for your consideration and compliance of our Next Maritime PDA & FDA General Instructions.	
nextmaritime	Via Augusta 2 - 43003 Tarragona (Spain) - Tel 24 hrs: +34 977 234 777 - Fax: +34 977 246 110 agency@nextmaritime.com - www.nextmaritime.com NEXT MARITIME, S.L. VAT ID: S09. 03-0-0550001