STRATEGY IMPLEMENTATION OF TECHNOLOGY TO ENHANCE SUPPLY CHAIN MANAGEMENT BEST PRACTICES AT UNICEF

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DECLARATION

This research project is my own original work and has not been presented to any other university for the purpose of examination or otherwise

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DEDICATION

I would like to dedicate his work to my entire family. My mother, Rose Mulunda. Thank you all for your support.
# TABLE OF CONTENTS

DECLARATION........................................................................................................................................... ii
ACKNOWLEDGEMENTS ............................................................................................................................. iii
DEDICATION............................................................................................................................................ iv
TABLE OF CONTENTS ............................................................................................................................ v
ABSTRACT................................................................................................................................................ vii

CHAPTER ONE: INTRODUCTION ............................................................................................................ 1
  1.1 Background of the study ...................................................................................................................... 1
    1.1.1 Implementation of strategy .......................................................................................................... 2
    1.1.2 Supply chain management best practices .................................................................................... 3
    1.1.3 Use of Automation in supply chain management ................................................................. 4
    1.1.4 Advancements of technology at UNICEF ............................................................................. 6
    1.1.5 The UNICEF supply chain ..................................................................................................... 9
  1.2 Research problem............................................................................................................................... 11
  1.3 Research Objectives ........................................................................................................................ 13
  1.4 Value of the Study ............................................................................................................................ 14

CHAPTER TWO: LITERATURE REVIEW ................................................................................................... 15
  2.1 Introduction....................................................................................................................................... 15
  2.2 Theoretical foundation ..................................................................................................................... 15
    2.2.1 Resource Based View Model .................................................................................................. 15
    2.2.2 Dynamic Capability Theory ................................................................................................. 16
  2.3 Strategic Management and Supply Chain Practices ......................................................................... 17
  2.4 Strategy implementation studies .................................................................................................... 19
CHAPTER THREE: RESEARCH METHODOLOGY ........................................... 22
3.1 Introduction ................................................................................ 22
3.2 Research Design ........................................................................... 22
3.3 Data Collection ............................................................................ 23
3.4 Data Analysis ................................................................................ 24

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION ............. 25
4.1 Introduction ................................................................................ 25
4.2 General Information .................................................................... 25
4.3 Strategy implementation at UNICEF ............................................. 26
4.4 Discussion of findings ................................................................... 27
  4.4.1 Comparison with theory ......................................................... 28
  4.4.2 Comparison with other empirical studies ................................... 29

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATION ..... 32
5.1 Introduction ................................................................................ 32
5.2 Summary .................................................................................... 32
5.3 Conclusion .................................................................................. 33
5.4 Recommendations ........................................................................ 34
5.5 Limitations of the study ............................................................... 35
5.6 Suggestions for further research study .......................................... 36

REFERENCES ..................................................................................... 37
APPENDIX I: INTERVIEW GUIDE ....................................................... 40
ABSTRACT

Strategic implementation put simply is the process that puts plans and strategies into action to reach goals. Strategic implementation is critical to a company’s success, addressing the who, where, when, and how of reaching the desired goals and objectives. A successful implementation plan will have a very visible leader, such as the CEO, as he communicates the vision, excitement and behaviors necessary for achievement. Everyone in the organization should be engaged in the plan. Performance measurement tools are helpful to provide motivation and allow for follow up. Implementation often includes a strategic map, which identifies and maps the key ingredients that will direct performance. Such ingredients include finances, market, work environment, operations, people and partners. Technology strategy is an evolutionary learning process for firms. An organization's technological capabilities allow them to implement technology strategies that best fit their goals. The experience gained from implementing technology strategy feeds back into the technological capabilities which then enable firms to improve and build their core competencies to help them maintain their competitive advantage. Technological competencies are defined as the capabilities of the firm that enable them to cope with environmental demands. Since new and innovative technological competencies are needed for survival in a highly competitive environment, firms must be careful not to fall into a competence trap. This can happen when a company's product and/or strategy is successful and they become comfortable with existing areas of “expertise”. The phrase, “If it ain’t broke, don’t fix it” causes firms to not think “outside of the box” to expand core competencies in order to keep up with the growing and aggressive competition. Existing competencies should not prevent innovation and creativity. Technology is everywhere in the value chain and at all levels. Firms must first develop their internal or core technology before determining the scope of their technology strategy. Choices are always up to management in a firm. Management decides which type of technology strategy best fits the organizational design and structure of the firm. Deciding whether or not to have a centralized research and development department will impact the success of a technology strategy. In this research we shall look at how strategy can be well implemented in areas of technology to enhance supply chain management best practices. The case study was conducted by way of personal interviews with staff in management positions drawn from different departments and sectors after which content analysis was carried out on the responses received. The research study established that for an organization to be successful, proper strategies need to be put in place and for these strategies to succeed, proper implementation is crucial. Otherwise a good strategy with bad implementation will lead to failure. The study also unearthed various limitations that could underrate strategy implementation. The study makes recommendations on how to implement strategies to enhance best practices in supply chain management.
CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Strategy implementation is the process that puts plans and strategies into action to reach the goals of the organisation. Strategy implementation involves decisions regarding how the organization's resources (i.e., people, process and IT systems) will be aligned and mobilized towards the objectives. Implementation results in how the organization's resources are structured (such as by product or service or geography), leadership arrangements, communication, incentives, and monitoring mechanisms to track progress towards objectives, among others (Mintzberg et al, 1996).

The implementation of strategy is comprised of a series of sub activities which are primarily administrative (Andrews et al., 1969). Such administrative activities include the allocation or reallocation of resources, funds, equipment, personnel and the adjustment of the organisational structure (Chandler, 1962). Ansoff & McDonnell (1990) have defined implementation as a process that establishes a desired organisational behavior, in accordance with the strategy content. Strategy implementation is therefore concerned with the translation of strategy into organisational action through organisational structure and design, resource planning and the management of strategic change. Successful implementation of strategy is likely to be dependent on the extent to which these various components are effectively integrated to provide, in themselves, competencies which other organisations find it difficult to match (Johnson & Scholes, 1999).
Strategic implementation of technology is one of the most important tools for development. It can be used to enhance efficiency in supply chain process by incorporating the use of automation or supply chain information systems to increase operational efficiency and reduce processing time and transaction costs (Simons, 1987). The research is able to link strategies in technology (a science) with the Business and bring a proper understanding on the importance of advancing our technology. Some of the variables that can be used to enhance supply chain management best practices through technology include RFID, Barcodes, e-commerce, global positioning systems (GPS) and ERPS.

1.1.1 Implementation of strategy

The strategy implementation stage may be considered as the most complicated stage of the strategic management process, as it requires managers to convert strategies into actions that will ultimately result in a high level of performance. The implementation of organization strategy involves the application of the management process to obtain the desired results. Particularly, strategy implementation includes designing the organization's structure, allocating resources, developing information and decision process, and managing human resources, including such areas as the reward system, approaches to leadership, and staffing (Barnat, 1998).

The implementation process covers the entire managerial activities including such matters as motivation, compensation, management appraisal, and control processes (Steiner, 1979). Almost all the management functions: planning, controlling, organizing, motivating, leading, directing, integrating, communicating, and innovation are in some
degree applied in the implementation process (Higgins, 1985). Pierce and Robinson, (1997) say that to effectively direct and control the use of the firm's resources, mechanisms such as organizational structure, information systems, leadership styles, assignment of key managers, budgeting, rewards, and control systems are essential strategy implementation ingredients.

1.1.2 Supply chain management best practices

In a dynamic competitive industry, organizations and suppliers must maintain a competitive advantage and position, and improve performance through strategic implementation of efficient supply chain operations. Supply chain management best practices, refers to profitability, flexibility, reliability, and waste elimination and can be unique to each individual organization that supports better operational processes and improves speed of delivery or response to customer requests using information systems (Chen, 1997).

There are a number of benefits derived from supply chain efficiency: speed in response, waste elimination, and information networks between suppliers and customers (Cigolini et al., 2004). Speed in response increases delivery lead time, captures customer consumption, and reduces operational response. The waste elimination process includes reduced steps of supply which result in transportation cost reduction, and streamlined processes for waste reduction. When companies develop or use more efficient information networks, they can improve processes for continuous replenishment and shipping based on ordering notices. Companies can also explore other information
technologies such as radio frequency identification (RFID) for transportation tracking and shared databases, and electronic data interchange (EDI) for order placement and invoicing. The internet can also improve communication with customers (Heikkila, 2002).

1.1.3 Use of Automation in supply chain management

A recent study found that supply-chain problems cost companies between 9 and 20 percent of their value over a six month period (Huhns et al, 2001). A strategic supply chain automation system allows the organization to smoothly manage the movement of goods through from the suppliers to the users. Automation of supply chain has been achieved through the use of Supply Chain Information Systems (SCIS).

SCIS refers to a computer system that is used to coordinate information between internal and external customers, suppliers, distributors and other partners in the supply chain (Gilbert Odadi 2012). SCIS consists of elements such as information sources, information collection system, storage, processing, retrieval and report formatting. It can therefore be summed as the vehicle for supply chain competency (Sople 2012). There are various supply chain information systems strategically implemented in different platforms of supply chain at UNICEF for example, Barcodes, ERP, RFID, E-commerce and Global Positioning System (GPS).

Barcodes are implemented strategically in non-profit organization by using a global standard identification barcode which allows different countries and entities to link the product to a record in a product data base containing all the information they need and ensures that the identification number will be unique. Standards are important as a
strategy to supply chain as it limits costs and potential incompatibilities and maximizes the visibility of the product through the supply chain.

RFID is a generic term that is used to describe a system that transmits the identity (inform of a unique serial number) of an object or a person wirelessly using radio waves. RFID data can be read through the human body, clothing and non-metallic materials (Brown, 2011). Data is then written or read on the tag when it is exposed to radio waves of the correct frequency. The strategic advantage of the RFID is that it can capture the date and time a product reaches a point in the supply chain. The applications of Radio Frequency Identification (RFID) and Electronic Product Codes (EPC) in Supply chain Management have vast potential in improving efficiency and effectiveness in solving supply chain problems. RFID technology can track inventory very accurately in real time resulting into reduced processing time and labor. Strategic implementation of RFID technology can help a wide range of organizations throughout the supply chain to realize the significant productivity gains and efficiencies.

The strategy for a successful implementation of ERP in supply chain management software is that the objective should be set at the commencement of the project. The business has to define what benefits they expect or the implementation will never be deemed a success. ERP integrates all information in a single application, and SCM applications benefit from having a single major source to go for up-to-date information (Waligum,1986). Enterprise resource planning (ERP) is a business process management software that allows an organization to use a system of integrated applications to manage
the business and automate many back office functions related to technology, services and human resources.

E-commerce can be used strategically as a form of economic activity that can be conducted via electronic connections (Wood et al, 2008). The electronic connection refers to computer to computer connection such as EDI and the internet. Implementation of e-commerce as a strategic tool leads to improved online information sharing, speed and accuracy in material movement and increased visibility form the core of e-commerce (Sople, 2012). It can include all inter-company and intra-company functions (such as marketing, finance, manufacturing, selling and negotiation) that enable commerce.

The implementation of GPS as a strategic tool by UNICEF has led to efficient transportation of logistics in that it allows carriers to keep track of their vehicles. GPS leads to real time visibility in terms of shipment location which is helpful if shipment needs to be diverted or rerouted. It also provides data on vehicle speed as well as driver behavior when transporting shipment. It can also help trace lost assets (Wood et al, 2008).

1.1.4 Advancements of technology at UNICEF

The history of UNICEF dates back to the time after World War II, when European children faced famine and disease. UNICEF was created in December 1946 by the United Nations to provide food, clothing and health care to them. UNICEF Supply Division has agreed to provide the secretariat for People that Deliver (PtD), a global partnership of over 80 international and country agencies whose mission is to build global and national
capacity to plan, finance, develop, support and retain the national workforces needed for effective, efficient and sustainable management of health.

UNICEF is the driving force that helps build a world where the rights of every child are realized. It has the global authority to influence decision-makers, and the variety of partners at grassroots level to turn the most innovative ideas into reality. That makes this organization unique among world organizations, and unique among those working with the young. UNICEF believes that nurturing and caring for children are the cornerstones of human progress. It was created with the purpose to work with others to overcome the obstacles that poverty, violence, disease and discrimination place in a child’s path. It advocate for measures to give children the best start in life, because proper care at the youngest age forms the strongest foundation for a person’s future. It ensures that all children are immunized against common childhood diseases and are well nourished because it is very wrong for an innocent child to suffer or die from a preventable disease.

UNICEF as a humanitarian organization has used strategy to implement various technological advancements to enhance their supply chain. In the UNICEF supply annual report 2012, UNICEF rolled out a global based Enterprise Resource Planning system (VISION). UNICEF and its partners plan to create a strategic supply chain information network over the next five years that will increase transparency, improve efficiency, and capture feedback from the communities served through its programmes. This can be achieved through automation that improve information coordination, reduce errors, and administrative costs and enable standardization of business processes (Goodhue et al, 2000). An organisation can therefore increase its responsiveness through a proper supply
chain information system (SCIS) for tracking inventory hence reducing the element of uncertainty and risk (Odadi 2012). UNICEF has therefore used barcodes, RFID, GPS ERP and e-commerce as a strategic tool to improve its supply chain efficiency.

Strategic implementation of technologies like RFID, ERP, barcode GPS and e-commerce in supply management have been used at UNICEF to improve efficiency. According to the Gavi alliance report 15 February 2013, vaccines which are usually transported by UNICEF are a powerful but sensitive technology and hence have to be stored at a certain temperature or they become unviable. UNICEF works hard to transport these vaccines to the required parties that need them.

To be able to track the movement of these vaccines and products UNICEF has incorporated the idea of putting the 2D barcode on every vial of vaccines so that countries can track every dose as it is being shipped, delivered and administered.

Development and humanitarian supply chains are among the most complex in the world. Ensuring the delivery of supplies to children in situations of conflict, disaster or in hard to reach areas requires technical know-how, innovative solutions, collaboration, and financial resources. The UNICEF Supply Chain involves working with various industries to develop more effective formulations of medicines and products for children whilst keeping prices at affordable and quality international standards. Every link of the supply chain is essential in ensuring vital supplies reach children. The UNICEF supply chain has various steps that need to be followed. These steps start with definition of need, budgeting and planning, procurement, delivery and clearance, inspection, warehousing distribution and reorder, utilization by end user and finally monitoring and evaluation.
Therefore, as a result of such strategic implementation of technology, supply chains in many organisations have improved drastically. An example is Cisco which reported a savings of $500 million by restructuring its internal operations integrating with suppliers and customers with the help of Web Based Tools (Berger, 2000).

1.1.5 The UNICEF supply chain

The goal of humanitarian supply chain is to be able to respond to multiple interventions, as quickly as possible and within a short time frame. According to McLachlin et al., (2009), one of the characteristics of humanitarian logistics is the level of uncertainty they have to cope with. Every day, in many parts of the world, humanitarian workers are confronted with various forms of uncertainty. Given that beneficiaries’ needs evolve over time and are really difficult to forecast, demand and supply vary on a daily basis. Also, there are many cause and effect interactions that affect operations. For example, an earthquake can provoke a flood if a brimming lake is formed by landslides from the earthquake. Local infrastructure may also be damaged to the extent that the supply chain network has to be continuously rethought along with reconstruction of roads, airports and other key elements of the network (Gray, 2006).

Humanitarian logisticians have, therefore developed strategic tools and methods to respond quickly to short-term changes, thereby improving the agility of their supply chain owing to market turbulence and demand (Lee, 2004). Consequently, being able to react quickly to changes is an essential capability for commercial supply chains (Swierczek, 2009). Cross-learning opportunities between business and humanitarian
sectors have been listed by many authors (Gray, 2006). This approach is common in international agencies and NGOs. Unlike most business supply chains, the humanitarian aid supply chain is often unstable. And sometimes, the supply chain breaks down at the receiving end, but it may also be unstable at its origin for two main reasons: politicized donations by governments and the competitive nature of fund-raising from private donor. The critical components of the humanitarian supply chains are: logistics management, inventory management, supplies management and procurement management (Makuba, 2009).

Humanitarian or emergency supplies are those goods, materials, and equipment used by organizations to provide relief in a disaster, particularly those required to meet the essential needs of the affected population. Such supplies cover an enormous spectrum, from food, drugs, and clothing to rescue equipment, electric generators, construction materials, and tools (Butcher, 2008). Supplies consist of relief items, personnel/volunteers, and transportation and construction resources, among others. Most of the supplies fall into the relief items category. There are specific challenges related to supplies that come from in-kind donations. Largely, since the quantity and mix of the supplies depend at least to some degree on the donor, there is a high uncertainty of what is going to be received, (Lee, 2000). The customers in a disaster supply chain include the population at the affected area, as well as intermediate customers at local or global storage facilities. Their needs change significantly according to disaster types and the phases in the disaster timeline. Dependency of demand in disasters on these hard to measure factors and its high uncertainty are the main differences from the demand in
regular supply chains. Unlike logisticians in the private sector, humanitarian workers are always faced with the unknown: when, where, what, how much, where from and how many times; in short, the basic parameters needed for an efficient supply chain setup are highly uncertain (Wassenhove, 2006).

1.2 Research problem
Strategy implementation consists of issues involved in putting the formulated strategy to work. It spells out more precisely how the strategic choice will come to be. No strategy no matter how brilliant will succeed if not well implemented. New information and communication technologies (ICTs) have advanced in various ways over the past decade. They are increasingly driving and supporting community level changes as well as local, national and global economies and international development efforts. Several humanitarian organisations have used strategy to implement various technological advancements to enhance efficiency in supply chain. The concept of Supply Chain Management is based on two core ideas (Handfield, 1999). The first is that practically every product that reaches an end user represents the cumulative effort of multiple organizations. These organizations are referred to collectively as the supply chain. The second idea is that while supply chains have existed for a long time, most organizations have only paid attention to what was happening within their “four walls.” Few businesses understood, much less managed, the entire chain of activities that ultimately delivered products to the final customer. The result was disjointed and often ineffective supply chains.
The UNICEF supply chain involves working with industry to develop more effective formulations of medicines and products for children whilst keeping prices at affordable and quality at international standards. Every link of the supply chain is essential in ensuring vital supplies reach children. This supply chain has various steps which can be summarized as follows: Definition of need which involves working with governments to design programmes and identify which supplies are needed and in what quantities, Budgeting and planning which involves identifying the amount and timing of the required budget and finding sources and scheduling orders to ensure supplies arrive when and where needed, Procurement which involves buying the right products at the right price and quality via detailed specifications, competitive tendering, smart contracting and innovative funding mechanisms. Delivery and clearance includes arranging transportation from UNICEF warehouses or directly from suppliers to the port-of-entry and customer clearance, Inspection where the supplies which have been verified and received are of the correct quantity, condition and quality, warehousing, distribution and reorder which involves transporting supplies through a series of in-country warehouse or distribution point to the end-user, utilisation by end user is whereby supplies are provided to children and mothers as part of programme implementation by government and partners and last but not least, monitoring and evaluation which involves closing he feedback loop in terms of on-time delivery and whether supplies were fit for purpose to continuously improve products for children and strengthen supply chains.

Various scholars have carried out research on the importance of strategic implementation and its challenges. Some of these include local researches like: Njogu (2012), Challenges facing the implementation of liquefied petroleum gas supply chain strategies in Kenya.
Mugo (2012) researched on Strategy implementation at the City council of Nairobi, Gichema (2012) managed to research on the strategy implementation at the World Vision Kenya which is an NGO and Kiindu (2012), factors influencing strategy implementation among local non-governmental organisations in Nairobi, Kenya. International research include: Chandraprakaikul (2010) who looked at a guiding framework for designing humanitarian relief supply chains-A case study in Thailand, Petit (2006), who researched on the critical factors for emergency relief logistics, Thomas (2005), From logistics to supply chain management: the path forward in the humanitarian sector and Wassenhove (2006), humanitarian logistics and supply chain management. No known study has been done on the importance of strategy implementation of technology to enhance supply chain management best practices at UNICEF, hence the knowledge gap for the study.

The study will answer the research questions: what is the importance of strategic implementation of technology to enhance supply chain management best practices at UNICEF?

1.3 Research Objectives

To Identify and evaluate the existing technological methods used in supply chain management at UNICEF and analyse the impact of strategy implementation in enhancing supply chain management best practices.
1.4 Value of the Study

This study will provide valuable insight to the management and staff at UNICEF to understand the importance of well implemented strategies and how they bring success to an organization. It would help to identify solutions to some of the challenges faced during implementation of strategies at UNICEF. The study will therefore equip managers with the skills necessary to improve their implementation strategies in supply chain process and make it more cost friendly.

Researchers will also find it relevant to add these findings to their understanding and to broaden their thinking on the different approaches to strategic implementation of technology in supply chain. The Government and policy makers will also find the information useful in arriving at decisions with UNICEF and its associates and hence enhance a better understanding on its key role in supporting this organisation.

The study findings will help provide other researchers and interested scholars with required literature for their research. It will also help the academic community which will guide on training, and further research. The researchers will also be able to use this study to develop new theories, test existing theories or compare theories hence guide the accumulation of scientific knowledge and suggest new enquiries. A gap in knowledge will be discovered by the students and the academic community which will enhance more knowledge in strategic management.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of previous literature relevant to the objectives of this study. This literature is reviewed from books, journals, newspapers, magazines and government statistical records. The chapter is divided into discussion of the theoretical foundation. This is followed by a discussion of the strategic management and supply chain practices, and finally strategy implementation studies.

2.2 Theoretical foundation

This study was guided by two theories. These include the resource based view model and dynamic capability theory.

2.2.1 Resource Based View Model

According to this theory, organizations should look inside the company to find the sources of competitive advantage instead of looking at competitive environment for it. According to RBV proponents, it is much more feasible to exploit external opportunities using existing resources in a new way rather than trying to acquire new skills for each different opportunity. In RBV model, resources are given the major role in helping companies to achieve higher organizational performance. There are two types of resources: tangible and intangible, (Wernerfelt, et al, 1980). Tangible are physical things, Land, buildings and other assets that are tangible. Intangible resources are everything else.
that has no physical presence but can still be owned by the company for example trademarks and intellectual property.

The two critical assumptions of RBV are that resources must also be heterogeneous and immobile. The first assumption is that skills, capabilities and other resources that organizations possess differ from one company to another. If organizations would have the same amount and mix of resources, they could not employ different strategies to outcompete each other. What one company would do, the other could simply follow and no competitive advantage could be achieved. This is the scenario of perfect competition, yet real world markets are far from perfectly competitive and some companies, which are exposed to the same external and competitive forces (same external conditions), are able to implement different strategies and outperform each other. Therefore, RBV assumes that companies achieve competitive advantage by using their different bundles of resources. The second assumption of RBV is that resources are not mobile and do not move from company to company, at least in short-run. Due to this immobility, companies cannot replicate rivals’ resources and implement the same strategies. Intangible resources, such as brand equity, processes, knowledge or intellectual property are usually immobile.

2.2.2 Dynamic Capability Theory

Dynamic capabilities theory examines how firms integrate, build, and reconfigure their internal and external firm-specific competencies into new competencies that match their turbulent environment (Teece et al., 1997). The theory assumes that firms with greater dynamic capabilities will outperform firms with smaller dynamic capabilities. The aim of
the theory is to understand how firms use dynamic capabilities to create and sustain a competitive advantage over other firms by responding to and creating environmental changes (Teece, 2007).

Capabilities are a collection of high-level, learned, patterned, repetitious behaviors that an organization can perform better relative to its competition (Winter et al, 2003). Organizational capabilities are called “zero-level” (or “zero-order”) capabilities, as they refer to how an organization earns a living by continuing to sell the same product, on the same scale, to the same customers (Winter, 2003). Dynamic capabilities are called “first-order” capabilities because they refer to intentionally changing the product, the production process, the scale, or the markets served by a firm (Winter, 2003). An organization has dynamic capabilities when it can integrate, build, and reconfigure its internal and external firm-specific capabilities in response to its changing environment. For example, whereas organizational capabilities have to do with efficient exploitation of existing resources, dynamic capabilities refer to efficient exploration and implementation of new opportunities (March, 1991).

2.3 Strategic Management and Supply Chain Practices

The strategic management discipline originated in the 1950s and 1960s. Among the numerous early contributors, the most influential were Peter Drucker, Philip Selznick, Alfred Chandler, Igor Ansoff, and Bruce Henderson (Pankaj, 2002). Strategic management is the formulation and implementation of strategies to achieve corporate success. It involves specifying the mission, vision and objectives of an organisation, undertaking strategic analysis and choice and implementing the formulated strategies
Strategic management involves the formulation and implementation of the major goals and initiatives taken by a company's top management on behalf of owners, based on consideration of resources and an assessment of the internal and external environments in which the organization competes (Chen, 2007). Strategic management provides overall direction to the enterprise and involves specifying the organization's objectives, developing policies and plans designed to achieve these objectives, and then allocating resources to implement the plans (Pankaj, 2002).

Strategic management involves the related concepts of strategic planning and strategic thinking. Strategic planning is analytical in nature and refers to formalized procedures to produce the data and analyses used as inputs for strategic thinking, which synthesizes the data resulting in the strategy. Strategic planning may also refer to control mechanisms used to implement the strategy once it is determined. In other words, strategic planning happens around the strategic thinking or strategy making activity (Mitzberg et al, 1996).

Strategic management is often described as involving two major processes, formulation and implementation of strategy. The two processes are iterative and each provides input for the other (Mitzberg et al, 1996).

Supply chain management is a chain with links detailing every step of the process needed to ensure raw materials become finished goods and delivered to the client at the designated time. There are ten best practices for supply chain management organisations. These include: Establishing a governing council, aligning and staffing the supply chain
organization, utilizing technology and procure to pay, state the strategic sourcing strategy, establishing key supplier alliances, manage total cost of ownership, establishing processes and controls, managing compliance and risk, optimizing company owned inventory and lastly establishing green initiatives and social responsibility (Engel, 2010)

2.4 Strategy implementation studies

Strategy implementation consists of the issues involved in putting the formulated strategy to work. It is necessary to spell out more precisely how the strategic choice will come to be. No strategy, no matter how brilliantly formulated, will succeed if it cannot be implemented. Mintzberg (1996) suggests that the traditional way of thinking about strategy implementation focuses only on deliberate strategies. Some organizations begin implementing strategies before they clearly articulate mission, goals, or objectives. In this case strategy implementation actually precedes strategy formulation (Minztberg, 1996).

Strategic implementation results in how the organization's resources are structured (such as by product or service or geography), leadership arrangements, communication, incentives, and monitoring mechanisms to track progress towards objectives, among others (Minztberg, 1996).

Strategy implementation is neither to plan the strategy, nor to decide how to operationalise the strategy (Eccles, 1993). Some authors have defined strategy implementation as “planning” or “deciding”. For instance, Hrebinak & Joyce (1984) have considered planning and organisational design to be the basic activities of implementation and Stonich (1982) has considered the decision of how to operationalise a strategy to be strategy implementation. According to Eccles (1993), however, these
activities are intermediate stages that precede implementation. If those concepts were true, no strategy would be translated into reality (Eccles, 1993). The concept of implementation is related to action. Implementing consists of actually effecting the necessary actions according to the plan, whereas planning and designing (or deciding how to operationalise a strategy), however important they may be, are intermediate stages between the conception of the strategy and its implementation (Eccles, 1993).

The implementation of strategy is comprised of a series of sub activities which are primarily administrative (Andrews et al., 1969). Such administrative activities include the allocation or reallocation of resources and the adjustment of the organisational structure (Chandler, 1962). More recently, however, other management activities have also gained substantial relevance in the implementation of strategy. These are related to individual and organisational behaviour, namely, to internal resistance and barriers to the changes that should be introduced by a new strategy content.

Implementation is the process of causing the firm to behave in accordance with the purposes, guidelines and strategies (Ansoff & McDonnell, 1990). A definition that captures both administrative and behavioural aspects of implementation is that given by Johnson & Scholes (1999): Strategy implementation is concerned with the translation of strategy into organisational action through organisational structure and design, resource planning and the management of strategic change. Successful implementation of strategy is likely to be dependent on the extent to which these various components are effectively integrated to provide, in themselves, competencies which other organisations find it difficult to match (Johnson & Scholes, 1999).
Implementation is, thus, in simple terms, the execution of a new strategy. Execution of a strategy is constituted by a sequence of actions involving (almost) every organisational department/resource in a coordinated way. Such execution results in actual changes in the direction of the organisation. This means giving a different shape to what is already being done or introducing bigger modifications at different levels.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter discusses the methodology that was used in gathering the data, analyzing the
data and reporting the results. Here the researcher aims at explaining the research design,
population size and sample that was used. The researcher also discusses the methods and
tools used to collect and analyze data, and the reasons why these methods were used.

3.2 Research Design

The research was carried out as a case study. A research design typically includes how
data is to be collected, what instruments will be employed, how the instruments will be used and the intended means for analyzing data collected. Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry is an instance of a class of phenomena that provides an analytical frame an object within which the study is conducted and which the case illuminates and explicates (Thomas, 2011). Data collection in a case study occurs over a sustained period of time (Cresswell, 2009).

A case study was ideal for the researcher because it allowed her to collect indepth information. The importance of the case study is emphasized by Creswell (1994) who acknowledges that a case study is a powerful form of qualitative analysis that involves a careful and complete observation of a social unit, irrespective of what type of unit is
under study. This study adopted a case study descriptive research design whereby there is a one time interaction of the individuals involved in the supply chain department at UNICEF whereby they give inferences of how their supply chain is made efficient by better strategy implementation of technology.

The interviewed persons of this study were the staff and managers working in the supply chain and innovation department at UNICEF in Nairobi. These will be divided into various categories, CEO, project managers, direct line managers and other officers in the organisation. The researcher intends to use 6 respondents for the interview.

3.3 Data Collection

The data to be collected was divided into primary and secondary data. Primary data was be collected by carrying out interviews both direct and indirect depending on the availability of the respondents while secondary data through publications like books, journals and internet. Interview was the preferred method of data collection because it provided more reliable data. There was also room for clarification by the respondents. The researcher used open ended questions to elicit further responses from the respondents.

The interview guide was designed on the basis of the objectives of the research and the literature review. The researcher interviewed 2 respondents from each category and department in order to gain first hand opinions and views on the objectives of this research. A pretest was done to correct and detect any weakness in the questionnaire. Amendments deemed necessary were then done on the pretested questionnaires.
3.4 Data Analysis

The data analysis method used was content analysis. The method of content analysis enables the researcher to include large amounts of textual information and systematically identify its properties, such as the frequencies of most used keywords by locating the more important structures of its communication content. Such amounts of textual information must be categorised to provide a meaningful reading of content under scrutiny.

The data collected was from publications and interviews hence it was qualitative in nature. Data obtained through the questionnaires was first checked for completeness. These were then filed and grouped for analysis. The purpose of analysing data is to obtain usable and useful information. The analysis may describe and summarise the data, identify relationships between variables, compare variables, identify the difference between variables and forecast outcomes.

Content analysis was preferred by the researcher because it enabled her to shift through large volumes of data in a systematic fashion with relative ease. The data collected was compared with theoretical approaches and empirical information cited in literature review to draw conclusions. Data from various departments was compared against each other in order to identify general and specific issues.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents analysis and interpretation of the data obtained from various respondents. The study sought to establish the strategy implementation of technology to enhance supply chain management best practices at UNICEF. The challenge faced during implementation of this study was also established. Data collected from respondents was analysed using content analysis for meaning and implications to establish the research findings.

4.2 General Information

The respondents in the interview included the divisional heads, supply chain managers, departmental heads, and officers. The results show that UNICEF offers a good working environment with relevant experience and expertise. Results also show that there is good understanding and communication in the entire organization. Results also show that the heads of the departments are well educated with majority pursuing their PHDs and some are holders of postgraduate and graduate degrees. This clearly indicates that the management comprises of highly knowledgeable and professional individuals. The respondents have been receiving training on strategic management and implementation strategies and strategic change. This shows how dedicated the managerial staff are on ensuring effective strategic implementation within the organization.
4.3 Strategy implementation at UNICEF

Responses from the interviews at UNICEF revealed that strategy implementation is a very crucial step in strategy management at UNICEF. Any information on introducing new strategies and implementation is effectively communicated from the upper management to the lower levels of officers. This is done through meetings or seminars and trainings which are held severally within the organization. It was also found out that there is easy flow of information from different positions and also from department to department. This enables new ideas to be implemented very well and on a timely basis and hence high level of efficiency is achieved. Senior managers like the CEO, Head of departments are easily accessible by all the rest of the staff members hence in case of any clarifications required when it comes to strategy implementation, the senior members are available to assist.

Investigations showed that challenges that were found to occur during strategy implementation at UNICEF included, lack of ownership of the strategy. A very common mistake in strategic implementation is not developing ownership in the process. The staff usually see the strategy to be implemented as the organization’s strategy and not their own strategy implementation. Hence accountability also became a challenge in this context. The other challenge is delivering the desired results on time. In such an organization, various strategies are usually implemented at the same time hence delivering all the required results become a challenge to the staff. Also in such an international organisation that deals with supply of relief foods, majority of the staff are
usually on the move in the field doing the community work. Hence being able to communicate this strategy to all the members at the same time was established as a challenge.

In the area of introducing new technology to the staff, results showed that the management uses seminars, trainings both inhouse and outside the organization, field work and also they sponsor their staff for further studies inorder for them to grow and gain more beneficial information to the organization as a whole. It was also noted that the new technologies used have been very beneficial to the organization in terms of performance and efficiency. There has also been time saving and reliable flow of information.

4.4 Discussion of findings

Strategy implementation at UNICEF is one of the most important tool in strategic management. UNICEF being itself a supply chain has various departments of which each is very important to the success of the other. This means that one step within the entire process highly depends on the next stage. According to the findings it was noted that the organization views implementation as the process that turns strategies and plans into actions in order to accomplish strategic objectives and goals. Implementing your strategic plan is as important, or even more important, than your strategy. The critical actions move a strategic plan from a document that sits on the shelf to actions that drive business growth. Sadly, the majority of companies who have strategic plans fail to implement them. According to a Fortune cover story in 1999, nine out of ten organizations fail to implement their strategic plan for many reasons hence leading to failure.
Companies will often only address the implementation annually, allowing management and employees to become caught up in the day-to-day operations and neglecting the long-term goals. Often a strategic implementation is too fluffy, with little concrete meaning and potential, or it is offered with no way of tracking its progress. A very common mistake in strategic implementation is not developing ownership in the process. Also, a lack of communication and a plan that involves too much are common pitfalls. Another pitfall is not making employees accountable for various aspects of the plan or powerful enough to authoritatively make changes. To successfully implement your strategy, several items must be in place. The right people must be ready to assist you with their unique skills and abilities. You need to have the resources, which include time and money, to successfully implement the strategy. The structure of management must be communicative and open, with scheduled meetings for updates. Management and technology systems must be in place to track the implementation, and the environment in the workplace must be such that everyone feels comfortable and motivated.

4.4.1 Comparison with theory

Strategy implementation of technology at UNICEF requires time, adequate resources and effective communication and integration of components to make the implementation process a success. This finding is supported by Johnsons and Scholes (1999) who states that successful implementation of strategy is likely to be independent on the extent to which the various components are effectively integrated to provide, in themselves, competencies which other organisations fail to match. The findings agree to the resource based view theory that resources are key to superior firm performance. It is much more
feasible to exploit external opportunities using existing resources in a new way rather than trying to acquire new skills for each different opportunity. UNICEF as an organization uses their existing technology to exploit the environmental resources to attain competitive advantage. Resource based view of the firm starts with the assumptions that the desired outcome of managerial effort within the firm is a sustainable competitive advantage. Achieving this sustainable competitive advantage allows the firm to earn economic rents or above average returns. In turn, this focuses attention on how firms achieve their competitive advantage. Resource based view states that the answer lies in the possession of certain key resources, that is, resources that have characteristics such as value and relevance (Tallam, 2013).

The findings of the study also agree with the statement that the implementation of strategy is comprised of a series of sub activities that are primarily administrative (Andrew et al 1969). Such administrative activities include the allocation and reallocation of resources and the adjustment of the organization structure (Chandler, 1962). The management activities like the individual and organizational behavior have also gained relevance to strategy implementation.

4.4.2 Comparison with other empirical studies

According to Mitzberg (1996), the traditional way for thinking about strategy implementation is focused on deliberate changes. Some organizations begin to implement strategies before articulating the missions, goals and objectives. In this case strategy implementation precedes strategy formulation. The results in these findings concur with Pankaj (2002), who state that strategic management provides overall direction of the
enterprise and involves specifying the organization’s objectives, developing policies and plans designed to achieve these objectives and then allocating the resources to implement the plans.

Strategy implementation involves planning and executing strategies related to process changes. In businesses of all sizes, including small businesses, this type of implementation helps ensure that changes occur appropriately across all departments and teams within the company. On both a macro level, which involves the entire organization, and a micro level, which focuses on each individual within the organization, change needs to be well-thought-out and communicated effectively to be successful.

On the question on the important areas to emphasise during strategy implementation inorder for it to be successful at UNICEF, the responses were narrowed down into three crucial points. One is strategy clarification whereby, strategies are mostly expressed as high-level statements that resonate with board and executive levels but fall flat with mid-level and frontline personnel. Unfortunately, if people don’t understand the strategy, they are unable to connect with it. So the first step is to clarify your strategy in a way that people in your organization can rally to support its implementation. Done well, this strategy will tie together your goals and objectives and clearly explain what you intend to do. The second one was to communicate the strategy whereby powerfully communicating the essence of strategy at every level of the organization using multiple mediums is the key. Use of internal blogs and message boards, brown bag luncheons, podcasts, and department meetings to communicate what the strategy is and how everybody’s work is informed by that strategy is important. Discussions need to occur at each level,
translating the organization’s strategy to understandable and contextualized sound bites, which connect to the work of individuals. In short, communicating the strategy provides the “connective tissue” throughout the organization that helps people understand the big picture. Thirdly was cascading the strategy, whereby strategy is cascaded throughout the organization to the practical and tactical components of people’s jobs every day. Ideally managers are involved in this process, and they will help to translate the elements of the strategy for your organization to their own functional areas. Doing this allows them to develop and own the process of cascading the strategy and designing implementation plans with high likelihood of execution.
CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides a summary of the entire study. It highlights the research findings, conclusions and recommendations as observed by the researcher. It also points out the limitations of the study and provides suggestions for further research as well as implications of the study on policy and practice.

5.2 Summary

This section dwelt on the summary of the findings generated from data analysis. The summary was done along the objective of the study. The objective of the study was to analyse the impact of strategy implementation in enhancing supply chain management best practices at UNICEF. From the study, the researcher found out that strategy implementation is crucial for the success of the processes within the UNICEF institution and communication of this strategy is a key factor to implementing it. For instance, on the question on the level of participation of management in strategy implementation within the organization, the results shows that there is commitment in the managers in ensuring strategy implementation process is a success.

The results indicate that leadership at UNICEF greatly influences strategy implementation. The management of UNICEF are very open and available for the rest of the staff that communication is made easier and faster when it comes to strategy implementation. Discussions on strategy implementation at UNICEF occurs at each level
where strategy is translated to understandable terms which the other staff members can understand and apply in their day to day operations.

Results also indicate that all heads of the division carry out research on technological improvement that can benefit their departments and the organization as a whole. These managers organize for meetings and trainings to discuss the findings and the significance attached to the new advancement, which later if viable it is implemented. The management and higher level at UNICEF highly influences strategy implementation. UNICEF involves the management to cascade strategy implementation throughout the organization and get to the practical and tactical components of people’s jobs every day. Managers are involved in this process, and they help to translate the elements of the strategy for the organization to their own functional areas. Doing this allows them to develop and own the process of cascading the strategy and designing implementation plans with high likelihood of execution.

5.3 Conclusion

The findings show that there is high level of cooperation and understanding at UNICEF when formulating, implementing and evaluating strategy. The strategies that all the heads of department implement are corporate and business level strategies. These strategies are overall decisions that need to be made by the company. These strategies concern the growth and objectives of the company. The organizational leaders at UNICEF, seem to meet every now and then to come up with ways of improving strategy implementation and make it more efficient. The unity and cooperation at UNICEF is one of the key factors that enable efficient strategy implementation.
Findings from the study has shown that the management use of seminars, trainings both inhouse and outside the organization, field work and also sponsoring their staff to further studies in order for them to grow and gain more beneficial information is motivating and gives morale to the staff to perform their work efficiently. The study also concluded that since some staff are usually on field work, all the staff cannot be able to be trained on certain new technologies at the same time. To curb this challenge, the management usually organizes various trainings according to people’s availability hence better communication. Keeping the lines of communication open is perhaps the most important role of employees during the implementation process. This includes taking the time to voice concerns, seek out answers and resolve any difficulties as changes are put in place. Staying in touch with management and helping co-workers overcome obstacles will help make the implementation process as simple and efficient as possible.

5.4 Recommendations

The management should address the challenge of ensuring each staff owns the implementation process by appointing change leaders to oversee the process. This will help implement and secure process changes in the workplace. Change leaders set the example for other employees and serve as a point of contact for employees when difficulties or concerns arise. This serves two purposes. It allows employees to seek out help through an appropriate channel, thus limiting rumors and reducing negative morale, and helps management garner invaluable feedback on common concerns and difficulties as changes are implemented.
The study established that there was a challenge in giving training to all the staff at the same time. It is recommended therefore that this can be enhanced by grouping the staff into various training groups depending on their timings and availability. Being an international organization, the staff are usually given various assignments on field work that warrants them to be away on certain days.

5.5 Limitations of the study

The study was limited to the cited category of strategy implementation due to time constraints. However, there may be other strategies applied at UNICEF that has not been covered under the study. Due to limitation of time, these strategy implementation methods could not be explored even though they are worth exploring. Being a case study, this research was limited to UNICEF and therefore cannot be used to generalize the practice in all the humanitarian organizations. He study targeted to interview 6 respondents, some of who were not available. The data collected was also historical and can therefore not be used for predicatory purposes with the guarantee of accurate outcomes. Another limitation of the study arose from the fact that the respondents being senior managers at UNICEF, had little time to spare for further and more in-depth probing. This limitation was however overcome by the fact that the interview guide used to collect data was very specific on the nature and content of information it sought.
5.6 Suggestions for further research study

This was a case study as earlier cited and hence cannot be generalized as the industry practice due to differences in culture, systems, organizational structures and capabilities. There is therefore need for a study to be done to identify the successful strategy implementation of technology by other humanitarian organizations to get a comprehensive overview and experiences on how the other players in the sector are managing strategy implementation. A replica of the same study can be done by analyzing strategy implementation in humanitarian organisations in general or other not for profit organisations to get a wider scope of findings that would add value in the policy formulations at UNICEF and other organisations.
REFERENCES


Bob Ferrari, *Top five supply chain technology and integration challenge*


GAVI alliance, 15 Feb 2013, *Tracking and Tracing vaccines in the GAVI alliance supply chain.*
George Steiner, Strategic Planning (1979). Free Press.


Henry Mintzberg, The Rise and Fall of Strategic Planning (1994). Basic Books


Martin Murray (2014), Strategies for successful ERP implementation, About.com


McLachlin,R, larson PD and Khan, S (2009), Not-for profit supply chains interrupted environment: the case of faith based humanitarian relief organization, management research news, 32(11), pp 1050-62

Michael N Huhns and LarryM Stephens, August 2001, Automating supply chains


Paul R Murphy, Jr & Donald F Wood 2008, Contemporary logistics, Ninth edition


APPENDIX

INTERVIEW GUIDE

I am a student at the University of Nairobi pursuing a Master’s degree course in Business Administration (MBA). As part of the academic requirements, I am required to undertake a research study entitled “Strategy implementation of technology to enhance supply chain management best practices at UNICEF”. I therefore request for your contribution to the following questions:

SECTION A: Respondent profile

1. Position held
2. Department of interviewee
3. Number of years of services at UNICEF

Section B : Technological advancements

4. How does UNICEF go about introducing and describing new upcoming technological advancements in any department?
5. What is UNICEF’s initiative in introducing new technology to enhance efficiency in supply chain?
6. UNICEF in itself is a supply chain. What are the existing technological methods used to enhance supply chain best practices at UNICEF?

Tendering:

Acquisition of supplies:
Transportation and distribution:

Tracking of supplies:

7. Did you undergo any formal training/orientation when you joined the department in regard to the existing technologies and which other trainings have you undergone in your current position?

8. How has technology enhanced supply chain management best practices in terms of time management, transportation and logistics and any other areas you have seen an improvement?

Section C: Strategy implementation

9. Has UNICEF implemented any strategy in relation to technology during your tenure?

10. How is strategy implementation communicated from the senior management to the junior staff?

11. How is the senior management involvement to the implementation of strategy?

12. Have there been any challenges encountered during the strategy implementation process?

13. We all know that a good strategy with bad implementation leads to failure. What are the important areas to emphasize during strategy implementation in-order for it to be successful?

THANK YOU.