AN ASSESSMENT OF FACTORS AFFECTING SUPPLY CHAIN MANAGEMENT ON ORGANIZATIONAL PERFORMANCE: A CASE STUDY OF OGEMBO TEA FACTORY – KISII COUNTY.

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A Research Project Submitted in Partial Fulfillment of the Requirements for the Award of Diploma in Procurement and Logistics Management of the School of Business and Economic Studies.

Kisii University.

November, 2017
DECLARATION AND RECOMMENDATION

DECLARATION

This research project is my original work and has not been presented to any other institution.

………………………………..………………………………..

Signature Date

NICANOR NYANCHOKA

CB05/10432/15

RECOMMENDATION

This research project has been submitted with my approval as university supervisor.

………………………………..………………………………..

Signature Date

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DEDICATION

This research is dedicated to the my father Kepha Gesage, my mother Kwamboka Gesage, sister Olga Gesage and brother Tonny Gesage who have gave me support during the time of undertaking the research. May God bless you all.
ACKNOWLEDGEMENT

I humbly and greatly acknowledge the contribution of all those who made this research project a success. I highly acknowledge Mr. Eliud Onyiego for his effort in guidance and supervision from the start to the very end of the proposal. Above all, thanks to the Lord God Almighty, who has kept and led me this far.
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ABSTRACT
The main objective of the study assessed factors affecting supply chain management on organizational performance with reference of Ogembo Tea Factory. The study was guided by the following specific objectives; to find out how information communication technology affect supply chain management in Ogembo Tea Factory; to identify the effects of government policies on supply chain management in Ogembo Tea Factory; to determine the effects of staff training on supply chain management in Ogembo Factory. The target population of the study will comprise 50 employees from Ogembo Tea Factory. The study adopted census technique to collect data 10 respondents from procurement department, from 21 employees from accounts departments and supply chain departments 19 respondents respectively making a sample size of 50 respondents. Primary data was collected using a questionnaire. The questionnaire comprised of closed ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. Secondary data was obtained from empirical literature, and text books. The government policies reflected both positively and negatively this was attributed by political influence of politicians, information communication technology was adopted but it was not highly reliable since some employee were not trained. Employee training was not done oftenly leading to resistance in the adoption of new changes due to fear of unknown. The study has revealed that the supply chain management practices are applied to varying degrees. It will be important for the tea factories to be urged to adopt equally these practices in order to enhance performance. The study has revealed that the supply chain management practices explain 45.7% of the challenges on performance of tea factories in Kenya. The companies should be encouraged to enhance adoption of these practices since they have the potential of improving their performance. The researcher recommends that the top management supports training of staff so that they are updated on the usage on new supply chain systems will can enable the organization to gain leverage. As well information communication technology should be adopted in every part to facilitate easy monitoring of the distribution process as well minimize variances.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

A supply chain consists of all inter-linked resources and activities needed to create and deliver products and services to customers. Supply chain management is the process of managing supply and demand, sourcing raw materials and parts, manufacturing and assembly, distribution across all channels, and delivery to the customer (Hakanson, 2009).

Supply chain management has its roots from historical military campaigns. Before the term supply chain was coined, the term used for management and movement of product and services was logistics. The development of logistics was originally undertaken by the military in ancient times. For example, the Roman legions used a flexible system consisting of supplies, storage depots, and magazines (Britannica, 2009). The magazines were stocked with supplies and arms, superb road systems, mobile repair shops, service corps of engineers and armourers, and extensive coordination and planning. This resulted in an efficient, fast, and formidable army that won many battles and conquered much of Europe and Asia, and held it for many hundred. In recent years research in the area of green manufacturing has extended into green supply chain management.

Prior to the actual recycling process, this material is usually referred to as “used”. However, because “used” can also refer to material or products intended for repair or remanufacture, we use the term “recycled” for clarity. As the demand for environmentally friendly products has grown, the technology for converting PCW into new products has improved, and more recycling programs have been put in place. As a result, the demand for recycled material and the availability and variety of products with recycled content continues to increase. In recent years, Supply Chain Management has been suggested as an infrastructural source for E businesses (Behnam ajdari and ekhtyarzadh, 2010). In this regard, Supply Chain Management highlights the integration of the supply chain activities and the associated information flows through improvement of existing links in the chain to achieve a reliability and ongoing competitive advantage (Lavdon, 2002).

The intensification of the global competition in a constantly changing business environment raises the Need of appropriate reaction of industrial manufacturing companies and emphasizes on the companies’ flexibility in an uncertain external environment. So today's
organizations in line with their customers’ expectations as well as the competitive advantage need to an appropriate model like Supply Chain Management to obtain and maintain the suitable status. In today’s organizations, customers are along with the organizations’ members in the production of goods and service delivery procedures of doing things and processes knowledge development and competitive advantage. Today based on this evidence and other facts it is not surprising that demand management programs and even distribution be considered as a priority.

SCM assists the business organization to compete in the dynamic international market. The objective of SCM is to incorporate activities across and within organizations for providing the customer value. This should also be applicable to the academia, which represents a type of non-profit organizations. The goal is to provide the society value by producing high quality graduates and research outcomes. An integrated educational supply chain involves coordination and information sharing up and down the process among all stakeholders. With technology facilitating information flow, a coordinated supply chain can be designed to meet the strategic, planning, and operating objectives of the educational institutions. It also means establishing effective and feasible relationships both inside and outside the organization (Sandelands, 1994).

1.2 Statement of the problem

Supply chain management is the management of upstream and downstream activities, resources, and relationships with suppliers and customers, which is required to deliver products or services. In theory, if supply chain management is done well, it contributes to growth of the particular factory by giving it a competitive advantage through differentiation and lower costs.

Any weaknesses in the supply chain management can severely affect production and delivery of products to consumers. This may have negative impacts on the profitability of the processing firms. Lack of awareness of upcoming technologies telecommunications and IT impediments and energy supplies unreliable. Full package production and fast replenishment demands adequate IT systems to connect the buyer and supplier. This requires a modern and reliable telecommunications infrastructure, and backup from IT professionals. This has motivated the study to establish factors affecting supply chain management on organizational performance with reference of Ogembo Tea Factory.
1.3 Objectives of the Study

1.3.1 General Objective of the study

The main objective of the study assessed factors affecting supply chain management on organizational performance with reference of Ogembo Tea Factory

1.3.2 Specific Objectives

i. To find out how information communication technology affect organizational performance in Ogembo Tea Factory;

ii. To identify the effect of government policies on organizational performance in Ogembo Tea Factory;

iii. To determine the effect of staff training on organizational performance in Ogembo Factory;

1.4 Research Questions

The research questions were:-

i. To find out the effects of information communication technology affect organizational performance in Ogembo Tea Factory?

ii. How does government policies affect organizational performance in Ogembo Tea Factory?

iii. What is the staff training effect on organizational performance in Ogembo Tea Factory?

1.5 Justification of the Study

The findings from the study would also be of significant to other research scholars/academicians as it will adds onto the existing empirical literature materials that the researchers/scholars may use as a source of empirical reference to their future studies on sourcing contribution into the material productivity.

The government of Kenya will also benefit from the findings of this study since tea is a major foreign exchange earning commodity in the country. It will enable the government to come up with appropriate policies and infrastructure that can assist the factories to adopt best SCM practices both efficiently and effectively.
1.6 Limitations of the Study

The researcher covered more ground and involve a larger sample size for the study, however, due to financial constraints, this was not possible. As a result, the researcher was limited to the sample size and the timeframe to be used for conducting the study so as to complete the study within the constraints of the research timeframe and within the planned budget.

1.7 Scope of the study

The study was carried out at Ogembo Tea Factory in the month of May and June 2017 and it tends to focus on factors affecting supply chain management on organizational performance.

1.8 Operational Definition of Terms

**Supply chain management;** - Refers to the act of planning, coordinating and organizing all activities associated with the flow and transformation of goods from the raw materials stage, through to end users, as well as the associated information flows.

**Training:** - Refers to the process of developing, changing and reinforcing job related behaviors, whereas quality management is a new culture and a way of thinking, hence, without training such changes cannot be achieved.

**Government policies;** - Refers to the rules and legislations put in place to control operations of various conduct of individuals, groups and organizations as well as protecting their self-interest.
CHAPTER TWO
LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Economic Theory of Competition

Competition between supply chains could also be regarded as emergent (Storey et al., 2006), along with other forms such as co-competition and national competition whereby the behaviour causing competition arises from the interaction between supply chains for resources, innovation and advantage of particular sort. Building on the process orientation discussed above, emergence extends this idea to a logical conclusion by looking at interaction from the opposite end, i.e. in terms of results. Thus, emergence focuses on the behavioural outcome of interactions between entities and treats these outcomes as a result of the very same interaction between entities. Over time, this should allow certain outcomes to be expected of certain types of interaction and possibly vice-versa. Based on this, emergence expressly assumes that competition (competitive interaction) must involve more than one entity. To be accommodating to supply chain vs. supply chain competition, theories must place equal emphasis on process orientation as they do on emergence. For supply chains, doing this may be instrumental to understanding how some of the complexities of supply chains play in to affect how supply chains compete.

2.1.2 Operation Management Theory

Operations consist of the jobs or tasks composed of one or more elements or subtasks, performed typically in one location operations transform resource or data inputs into desired goods, services, or results, and create and deliver value to the customers. Operations management is the design, improvement, and the management of the transformation processes that create value by converting inputs, such as raw materials, labor, and/or customers into outputs, such as goods or services. Operations management is concerned about Systems and how to make them operate Better, whether more efficiently, more effectively, at a higher level of quality, at reduced cost, and/or at lower environmental emissions, using the appropriate criterion or criteria determined by the organization.
2.2 Empirical Literature

Growing customer expectations, ongoing developments in communications, and transportation technologies have forced businesses to invest in, and direct attention to, their supply chains. Consequently, in order to remain competitive, there is pressure on businesses to decrease costs and enhance customer service levels. The automotive industry in South Africa is no exception. According to the Automotive Industry Development Centre (in South Africa), increasing operational complexities within the automotive industry, rising fuel prices, higher manpower costs owing to higher living costs and growing pressure from China and India to remain competitive have led to the industry’s growing awareness of the impact that an efficient supply chain can have on business sustainability (Gabru 2008).

Another study conducted by Magretta (2006) on effectiveness of the supply chain management system used by Dell Computers found that Dell’s supply chain model is based on the so-called “build-to-order” manufacturing systems which mean lower inventories, lower operational costs and hence higher degree of effectiveness in delivery of parts and supply of finished products to customers. The study found that Dell’s inventory is equivalent to a half a week of inventory, and this contributes to a shorter order to cash circle which is a key measure of financial performance of a company. Thus means a highly effective supply chain system. The study found that Dell’s supply chain management system is the best in the manufacturing industry in the USA (Magretta, 2006).

In addition, the South African automotive industry has also been adversely affected by the same economic climate (recession) as the international industry, where governments had to intervene with aid packages to save the industry from total collapse. In South Africa, the negative economic climate led to a reduction of operations (and in some cases operations were even closed down), and many employees in the industry were retrenched. In December 2008, 36 000 people were employed by original equipment manufacturers (OEMs) and 81 500 by automotive component manufacturers (ACMs).

2.3: Organizing for Supply Chain Management

The need to coordinate and share information across organizations and functional groups has resulted in the development of higher–level positions designed to oversee various supply chain activities. Total supply chain management is an organizational concept whose
primary objective is to manage the two–way movement and coordination of goods and information from raw material through end user (Monezka et al., 2002). Materials management focuses on the coordination of goods, services and information from suppliers through operations, and it is a subset of total supply chain management. Physical distribution management focuses on the coordination of goods, services and information from operations through end user, and it is also a subset of total supply chain management (Vickery, et al 2003).

Conceptually, total supply chain management involves both materials management and physical distribution management. A structure that coordinates the diverse activities within a supply chain contracts greatly with one where separate supply chain groups or activities report to different executive managers. Organizing requires separate activities to report to an executive responsible for coordinating the flow of goods and information.

Organizations that focus on supply chain management must pay close attention to transportation. They recognize the need to control inbound materials shipments as tightly as they control outbound shipments to customers. Allowing a supplier to arrange for inbound transportation may not provide the cost control or coordination required on the inbound side of the supply chain. Inbound transportation is often outsourced to a specialized transportation provider. Quality emphasis has shifted from detecting defects at the time of receipt or use to prevention early in the materials–sourcing process. This requires a strong awareness concerning a supplier’s role in the quality process. Progressive organizations work directly with suppliers to develop proper quality control procedures and processes.

Receiving and storage is usually part of the materials management function because of the need to control the physical processing and handling of inventory. Receiving and storage includes a variety of tasks. A firm must process inkling receipt records, usually through a computer terminal, which update the in–transit file, purchasing files, the accounts payable system.

Before a product heads to the customer, it may be stored for a period in a warehouse. This is particularly true for companies that produce according to a forecast in anticipation of future sales. Increasingly, as companies attempt to make a product only after receiving a customer order, this part of the supply chain may become less important. Shipping involves physically getting a product ready for distribution to the customer. This required packing to prevent damage, completing any special labeling requirements, completing required
shipping documents, or arranging transportation with an approved carrier. Fewer and fewer organizations “own” the transportation link to their customers.

This is a part of the supply chain where full-service transportation providers can design and manage entire distribution networks. It includes a wide range of activities that attempt to keep a customer satisfied with a product or service after the initial sale. Often, this means having dedicated customer account manager who help in managing customer promotions, inventory control and delivery schedules (Monezka et al, 2002). Successful Supply chain management requires a change from managing individual functions to integrating activities into key supply chain processes.

Supply chain business process integration involves collaborative work between buyers and suppliers join product development, common systems and shared information. According to Lambert and Cooper (2002) operating an integrated supply chain requires continuous information flows, which in turn assist to achieve the best product flows (Lambert, 2004).

Ensuring production lines function smoothly because high-quality parts are available when needed. Having an effective supply chain management system in place ensure that production can always run smoothly without delays due to ordering and transportation. It also ensures that no sales are lost because shelves are empty. Managing the supply chain improves a company’s flexibility has the ability to produce goods at lower prices. Supply chain management also enables companies to reduce the cost of purchased parts and products at acceptable levels. Supply chain management reduces costs by controlling the quality of goods thus reducing internal and external failure costs and working with suppliers to produce the most cost efficient means of manufacturing a product.

2.4: Supply Chain Management Problems
According to Baily and Farmer, (2000), one of the most important aspects for the buyer of assuring supplies is the maintenance of good supplier relationships. Good supplier relationships can be a major asset to the buyer not only in assuring supplies but also in maintaining quality levels and good prices. Good supplier relations have always been an important factor in the maintenance of supplies. This change has been brought by the increasing use made by buyers of techniques such as quality assurance, zero defect policies, statistical process control (SPC) and Just-in-Time (JIT), all of which place additional responsibilities on to suppliers who will only be willing to accept them if they see some long-term benefit for themselves in the relationship.
So in return for accepting these additional responsibilities it has become common to offer the supplier a long-term prospect of business in what is referred to as a partnership relationship with both parties offering and accepting complementary responsibilities and helping to solve problems to their mutual benefit. The partnership approach clearly influences the nature of the relationship between buyer and sellers. Choosing the right supplier is frequently the key to obtaining quality, performance and price. One of the most important aspects of the supplier selection process for important contracts is the plant visit known as the vendor audit or capability survey. It is most important that such surveys for the determination of supplier capability are conducted objectively (Baily et al, 2005).

John Shook (2000), defines lean as a philosophy that seeks to shorten the time between the customer order and the shipment to the customer by eliminating waste. Womack and Jones (2006), in their book Lean Thinking, argue that all activities associated with lean attempt to achieve three objectives: flow, pull and striving for excellence. Flow means that inventory moves through the supply chain. Those in charge of materials at the plant their key metric is to have inventory available for production schedule and a secondary focus of not having too much or too little inventory. Those in charge of inbound and outbound yard at the plant should be managing all the inbound trailers, having high asset utilization and velocity in the shipping yard, and high productivity in the work place.

Practitioners of lean supply chain focus on eliminating physical waste (in the form of inventory) and process waste (unnecessary steps in a value chain or time during which assets or goods are unnecessarily idle). Lean supply chain focuses on driving waste out of the entire value chain for a product. To have a truly lean supply chain firms have to go outside their four walls. They have to reach their suppliers because there are going to be constraints present at but their suppliers and customers (Nussle and Morgan 2004). Implementing a Just-in-time (JIT) purchasing system is the first major element of a lean supply chain. A JIT purchasing system means receiving frequent receipts of materials from suppliers to meet immediate requirement.

JIT – in Time transportation, another key element of a lean supply chain, refers to the efficient movement of goods between the buyer and seller. This involves frequent deliveries of smaller quantities directly to the point of use at the purchaser. A lean transportation network relies on company – owned or contracted vehicle that pick up and deliver according to a regular and repeatable schedule in a closed loop. JIT transportation systems
feature certain innovations that can further eliminate supply chain waste. This includes specialized transportation vehicles that allow easy loading and unloading of smaller quantities. The second innovation includes the extensive use of returnable plastic or steel containers. As drivers pickup materials from suppliers they leave empty containers that were used in earlier deliveries (Moneszka et al, 2002).

2.5 Ways to Improve Supply Chain Management

Any supply chain activity or system can be managed better or improved. To this end there are metrics and tools to help achieve this goal. Tyndall et al. (2006) have proposed looking at three facets: total cost approach, enterprise wide demand/supply matching, and a dashboard of select metrics (consisting of operational costs, time to response, margins, and customer service).

Another more comprehensive approach is called SCOR, or Supply Chain Operational Reference (Supply Chain Council, 2001). This consists of a series of 18 metrics that measure customers/quality, time, costs, and asset utilization. With these metrics a firm can measure and strive to keep improving supply chain performance by getting a better score (Supply Chain Council, 2001). Firms are advised to use competitive benchmarking to review their performance in each category against the industry leaders, and then endeavor to emulate their success. Some proponents recommend other tools such as process mapping, and reengineering to review current supply chain processes and improve them based on customer needs (Poirier, 2009).

2.6: Conceptual Framework

This study will adopt a conceptual framework important in identifying the factors affecting supply chain management on organizational performance. Staff training, information communication technology, government policies will be identified as independent variables that determined successful for supply chain management as shown below.
2.6 Conceptual Framework

**Independent variables**

- **Staff training**
  - Quality organizational culture
  - Developing employee skills

- **Information Communication Technology**
  - ICT infrastructure
  - Reconstruction of ICT

- **Government Policies**
  - Government levies
  - Government legislation

**Dependent variables**

- **Organizational Performance**
  - Customer satisfaction
  - Efficiency

- **Intervening Variables**
  - Clear communication channel
  - Efficient and effective workflow and information flow

**Figure 2.1: Conceptual Framework**

**Source:** Researcher, 2017

**Explanation of Variables**

This model shows the relationship between the independent variables and the dependent variable. The information communication technology, government policies, and staff training relate to supply chain management. Organization factors, formal and informal linking structures, and communication processes relate to effective and efficient supply chain management. Crosby (2009) recognizes the need for quality awareness to be raised among employees through education. His emphasis was on developing a quality culture within the organization so that the right climate exists.

Information communication technology developers should build infrastructure that conforms to planning and regulatory requirements, or help bring the supply chain instruments up to date if not adequate performance of services. Minimum technical standards are needed for retrofitting and reconstruction of ICT in the supply chain that incorporates disaster risk reduction (DRR) and sustainable development objectives.
Refers to the rules and legislation established purposely to control the supply chain activities. Governments all over the world use tax incentives to enhance economic activities and investments by firms, they use these form of incentives to channel some special economic activities towards some important sectors of the economy where they are either not felt or not existing at all. Some of the legislations may either reflect positively or negatively on the supply chain management.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research design

The study adopted a case study research design. The research design was appropriate because of its ability to create a profile about a phenomenon. This particular research design was concerned with finding out about the how, who, when and where of a phenomenon so as to build a profile.

3.2 Study area

This particular study was carried out in Ogembo Tea Factory which is managed by Kenya Tea Development Agency. It is located in Gucha sub-county, Kisii County.

3.3 Target population

The target population of this study constituted employees of Ogembo Tea Factory, in the various departments namely supply chain department 23 employees}, Procurement department, {7 employees} and Accounts department {20 employees}. The total target population therefore had 50 employees from Ogembo Tea Factory.

3.4 Census Study

The study adopted census technique to collect data from 10 targeted respondents from procurement department, 21 from employees from accounts departments and supply chain departments 19 respondents respectively making a sample size of 50 respondents.

<table>
<thead>
<tr>
<th>Department</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance accounts</td>
<td>21</td>
</tr>
<tr>
<td>Supply chain</td>
<td>19</td>
</tr>
<tr>
<td>Procurement</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 3. 1 Sample size


3.5 Data collection instruments and procedures

Primary data was collected using a questionnaire. The questionnaire comprised of open and closed ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The closed - ended questions provide additional information that could not be captured in the close-ended questions. The questionnaires
were administered using a drop and pick later method. Secondary data was collected for this study from published materials and e-resources.

3.5.1 Validity of the Instruments.

According to Mugenda and Mugenda (1999) validity is the accuracy and meaningfulness of inference, which are based on the researcher’s results. Validity is the degree to which results obtained in the analysis of the data, actually represent the phenomenon under study. Piloting of the instruments helped to improve face validity while content validity was improved through expert judgment. Therefore, the researcher sought the assistance of experts to improve on content validity.

3.5.2 Reliability of the Instruments

According to Mugenda and Mugenda (2003) reliability is a measure of the degree to which an instrument yields consistent results or data after repeated trials. In this study, the researcher adopted the internal consistency technique by including several survey items dealing with a similar aspect but stated differently.

3.6 Data analysis and Presentation

The completed questionnaires were edited for completeness and consistency. Quantitative data collected was analyzed by the use of descriptive statistics using excel spread sheet and presented through percentages and frequencies for conclusions and recommendations.
4.1:
The researcher was interested to establish the response rate of the respondents and the findings are as presented in table 4.1 below:

<table>
<thead>
<tr>
<th>Response</th>
<th>Number of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected responses</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Received responses</td>
<td>42</td>
<td>84</td>
</tr>
<tr>
<td>Unreturned responses</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Field Data, 2017.
The study established that out of 50 respondents who were issued with questionnaires 42 questionnaire were successfully filled and returned them for analysis thus giving the study 84% response rate.

4.2 Gender of the respondent
The researcher sought to find out the gender distribution of respondents who participated in the study and the findings were as shown in the figure 4.1 below

Figure 4.1: Gender of the Respondents
Source: Field Data, 2017.
The gender distribution of respondents who participated in the study showed that 63% comprised of males and 37% were female. This implied that the higher percentage of employees in the organization were male.

4.3 Age bracket of the respondent
The researcher sought to establish the age bracket of the respondents who participated in the study and the findings were as shown in the table 4.2 below
Table 4.2: Age Bracket of the Respondents

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>31-40 years</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>41-50 years</td>
<td>15</td>
<td>36</td>
</tr>
<tr>
<td>51 years and above</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, 2017.

The findings revealed that 14% of the respondents were aged 20-30 years, 24% were in the age bracket of 31-40 years, 36% were aged 41 – 50 years, while 26% were aged 51 years and above.

4.4 Marital status of the respondent.

The researcher sought to find out the respondents’ marital status of the respondent as shown.

Table 4.3: Marital status of the respondent

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>21</td>
<td>50</td>
</tr>
<tr>
<td>Single</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Widows</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Widowers</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, 2017.

The study established that 50% of the respondents were married, 23% of the respondents were single, 10% of the respondents were widows and 18% were widowers. This indicates that majority of the respondents were married.

4.5 Educational level of the respondent.

The researcher sought to find out the highest educational level attained by respondents who participated in the study and the findings are shown in the table 4 below.

Table 1.4: Educational level of the Respondents

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Diplomas</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td>Bachelors</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>Masters</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, 2017.
When the researcher sought to find out the highest education level attained by respondents, it was established that 23% had certificates, 25% were diploma holders, 33% were degree holders while 20% holders of masters.

4.6 Working experience of the respondent.

The researcher also requested the respondents to indicate the years they have worked in their respective department.

Table 4.5: Working experience of the respondent

<table>
<thead>
<tr>
<th>Working experience in years</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>1-3 years</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>3-8 years</td>
<td>19</td>
<td>45</td>
</tr>
<tr>
<td>Above 8 years</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, 2017.

The table above clearly indicates that majority 45% of the respondents each have worked with their respective department for a period between 3-8 years, 23% of the respondents had worked above 8 years, whereas 20% of the respondents have worked for their departments for a period of between 1-3 years and 13% of the respondents’ had worked less than 2 years.

4.7: Adoption of ICT Systems in Supply Chain

The researcher sought to establish adoption of ICT systems in supply chain and the presentation is as shown below:-

![Figure 4.2: Adoption of ICT Systems in Supply Chain.](source)

Source: Field Data, (2017)
The study revealed that 66% of the respondents indicated yes on the factor as to whether ICT systems are adopted whereas 34% of the respondents indicated No.

4.8: Effectiveness of ICT Systems adopted on Supply Chain.

The researcher sought to find out the effectiveness of ICT Systems on supply chain adopted and findings are as shown below:

**Table 4.6 Effectiveness of ICT Systems adopted on Supply Chain.**

<table>
<thead>
<tr>
<th>Levels</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Effective</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Effective</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Neutral</td>
<td>19</td>
<td>45</td>
</tr>
<tr>
<td>Not at all</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Data, 2017.

From the study it was established that 45% of the respondents indicated neutral on effectiveness of ICT systems adopted on supply chain, 23% of the respondents indicated not at all, 20% of the respondents indicated effective, and 13% of the respondents indicated very effective.


The researcher sought to establish whether government policies had an effect on supply chain and the findings are as presented below:

**Figure 4.3: Effect of Government Policies in Supply Chain**

Source: Field Data, (2017)
The study findings revealed that 54% of the respondents indicated yes on the factor as to whether government policies in supply chain where as 46% of the respondents indicated No.

4.10: Policies and Regulations imposed that affect supply chain.

The researcher sought to establish the policies and regulations imposed that affect supply chain and the findings are as shown below:

Table 4.7 Policies and Regulations imposed that affect supply chain.

<table>
<thead>
<tr>
<th>Policies</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock taking</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Distribution time management</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Regulation Compliance</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, (2017)

According to the study, it was revealed that 40% of the respondents were neutral on the effect of regulation compliance on supply chain, 22% of the respondents indicated distribution time management and 13% of the respondents indicated stock taking.

4.11: The extent to which policies and Regulations adopted affect Supply Chain.

The researcher sought to establish the extent to which policies and Regulations adopted affect Supply Chain and the findings are as shown below:

Table 4.7 The extent to which policies and Regulations adopted affect Supply Chain.

<table>
<thead>
<tr>
<th>Approaches</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Great extent</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Great extent</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Neutral</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td>Small Extent</td>
<td>11</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, (2017)

According to the study, it was revealed that 40% of the respondents were neutral on the extent to which policies and regulations adopted affect supply chain, 25% of the respondents indicated small, 22% of the respondents indicated great extent and 13% of the respondents indicated very great extent.
4.12: Rate at which staff Training is done in supply chain.

The researcher sought to establish rate at which staff Training is done in supply chain and the findings are as presented below:-

Table 4.4: Rate at which staff Training is done in supply chain.

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regularly</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Monthly</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Quarterly</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td>Annually</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data, (2017)

According to the study the findings revealed that 40% of the respondents indicated training was done quarterly, 28% of the respondents indicated annually, 23% of the respondents monthly and 10% of the respondents regularly. This implies that the organization has created a learning environment for skills development.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Findings
On the first objective; - The researcher sought to find out on how information communication technology affect organizational performance and the findings are as follows; - The study revealed that 66% of the respondents indicated yes on the factor as to the assertion on adoption of ICT systems are adopted where as 34% of the respondents indicated No. From the study it was established that 45% of the respondents indicated neutral on effectiveness of ICT systems adopted on supply chain, 23% of the respondents indicated not at all, 20% of the respondents indicated effective, and 13% of the respondents indicated very effective. The study findings revealed that 54% of the respondents indicated yes on the factor as to whether government policies in supply chain where as 46% of the respondents indicated No.

On the second objective; - The researcher sought to find out on how government policies affect organizational performance and the findings are as follows; According to the study, it was revealed that 40% of the respondents were neutral on the effect of regulation compliance on supply chain, 22% of the respondents indicated distribution time management and 13% of the respondents indicated stock taking. According to the study, it was revealed that 40% of the respondents were neutral on the extent to which policies and regulations adopted affect supply chain, 25% of the respondents indicated small, 22% of the respondents indicated great extent and 13% of the respondents indicated very great extent.

On the third objective; - The researcher sought to find out on how government policies affect organizational performance and the findings are as follows - According to the study the findings revealed that 40% of the respondents indicated training was done quarterly, 28% of the respondents indicated annually, 23% of the respondents monthly and 10% of the respondents regularly. This implies that training was done to impact on new technology that render the organization and the supplier compete favorably in the ever changing environment.

5.2 Conclusion
Tea factories adopt a number of supply chain management practices to varying degrees. Good customer relationship management, outsourcing of noncore products and activities, reduction of cycle times across the supply chain and supplier development are the most common and popular among the tea factories followed by other supply chain management
practices such as sharing information across the supply chain, purchasing quality products, reduction of lead time and process integration that are adopted to a very great extent.

The findings revealed that implementation of SCM can considerably improve the performance of an organization such as increased customer service level, inventory turnover and reduced cost. Critical analyses from this study confirm the theory that SCM practices considerably improve the performance of KTDA managed factories. Moreover, earlier case studies have shown that IT and information sharing significantly contribute to most performance measures. The internal operations practice contributes to more performance measures than supplier and customer relationship practice. This indicates that relationship of suppliers and customers practices is mediated by internal operations practice. Firms need to achieve internal integration before embarking to synchronizing their suppliers and customers.

Lastly it was concluded that in order for the Tea factories to improve supply chain management to better levels the following had to be carried out: improve team working and management, to expand market, employee more professional people, to adopt new production machines, increase of employees’ awareness, deliver products at right time and to increase production.

5.3 Recommendations
The following recommendations pertinent to policy making and future research are made;

5.3.1 Recommendations on policy and practice
The study has revealed that the supply chain management practices are applied to varying degrees. It will be important for the tea factories to be urged to adopt equally these practices in order to enhance performance. The study has revealed that the supply chain management practices explain 45.7% of the challenges on performance of tea factories in Kenya. The companies should be encouraged to enhance adoption of these practices since they have the potential of improving their performance.

5.3.2: Suggestions for further Study
Further research is necessary as the findings were based on a relatively small sample that may have influenced the nature of results that were obtained. There is need to expand on the sample size and carry out similar research in other organizations working in other parts of County. The analysis that was used is always not sufficient to draw conclusions on a phenomenon, and to provide adequate information that can be used for policy development.
Appendix I: REFERENCES


Tyndall, G. et al . (1998). *Supercharging Supply Chains – New Ways to Increase Value*
Appendix II: QUESTIONNAIRE

Questionnaire for Employees at Ogembo Tea Factory

Section A: Background information of the respondent

1. Gender of the respondent
   i). Male (  )
   ii). Female (  )

2. Age of respondent in years
   i). Below 20 (  )
   ii). 20-30 (  )
   iii). 31-40 (  )
   iv). 41 and above (  )

3. Marital Status of the respondent
   i). Single (  )
   ii). Married (  )
   iii) Divorced /separated (  )
   iv). Widowed (  )

4. Education Level of the respondent.
   i). Primary (  )
   ii) Secondary (  )
   iii).Tertiary (  )
   iv)University (  )

5. How long have you worked for this organization?
   (i) Below two years (  )
   (ii) Between 2 & 4 years (  )
   (iii) Above 4 years (  )

6. In which department do you work?
   i. Accounts (  )
   ii. Procurement (  )
   iii. Supply chain (  )
Section B: Information Communication Technology

7. Have you adopted any ICT related systems in supply chain?
   i. Yes ( )
   ii. No ( )

8. How effective is ICT systems adopted towards performance of supply chain management?
   i. Very effective ( )
   ii. Effective ( )
   iii. Fairly effective ( )
   iv. Not sure ( )

Section C: Government Policies

9. Does government policies affect supply chain activities in your organization?
   i. Yes ( )
   ii. No ( )

10. What are some of the policies and legislation imposed that affect supply chain management?
    i. Distribution time management ( )
    ii. Regulation compliance ( )
    iii. Stock checking ( )

11. To what extent does government policies affect supply chain activities in your organization?
    i. To a very great extent ( )
    ii. To a great extent ( )
    iii. To an average extent ( )
    iv. To a small extent ( )
    v. Not at all ( )
Section D: Staff training

12. Does your organization conduct staff training in your organization?
   i. Yes (  )
   ii. No (  )

13. How often does your organization conduct staff training in supply chain management?
   i. Regularly (  )
   ii. Monthly (  )
   iii. Quarterly (  )
   iv. Annually (  )

14. To what extent does training affect supply chain management?
   i. To a very great extent (  )
   ii. To a great extent (  )
   iii. To an average extent (  )
   iv. To a small extent (  )
   v. Not at all (  )
### Appendix III: Work-plan

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>June 2017</th>
<th>July 2017</th>
<th>Sept 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2017</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic Selection &amp; Problem formulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School defence of the proposal</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix III: Budget

<table>
<thead>
<tr>
<th>Item/Service</th>
<th>No of Items/Quantity</th>
<th>Unit Cost (Kshs)</th>
<th>Total Cost (Kshs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PROPOSAL PREPARATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reams of foolscaps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reams of photocopiers papers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash disk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet resource expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection of secondary data from libraries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing &amp; Binding draft proposal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td></td>
<td></td>
<td>10,000.00</td>
</tr>
</tbody>
</table>

**Note:** The researcher will finance the project from his personal finances.
Appendix IV: Geographical Location of Ogembo Tea Factory – Kisii County