1.0 INTRODUCTION

1.1 Background to the study

Supply chain activities include activities such as transportation, warehousing, and inventory control; sourcing and procurement; forecasting, production planning and scheduling; order processing, and customer service. All the aforementioned activities embody the information systems so necessary to monitor them. Glatzel and Niemeyer (2014) observe that the global business landscape continues to evolve, resulting in a complex and fast changing environment that puts new demands on supply chains and that successful companies seek ways not just to manage the change, but also to use their supply chains as a source of competitive advantage. Supply chain risk management is an imperative in gaining this advantage.

Wieland and Wallenburg, (2012) define supply chain risk management (SCRM) as the implementation of strategies to manage both every day and exceptional risks along the supply chain based on continuous risk assessment with the objective of reducing vulnerability and ensuring continuity. Traditionally, businesses have been always faced with various risks that emanate from the environment in which they operate. Today worldwide changes have created newer sources of risks e.g. protection against threats of terrorism, international standards and compliance, political upheavals, diseases, etc. It makes far more sense in terms of time, money, resources and aggravation for firms to adapt their businesses in order to dedicate their efforts to preventing problems from happening (Kendall, 2003). Other more traditional risks that face firms include cost pressures that require firms to constantly balance cost reduction targets with their objectives (ibid). Traditionally, companies used to adopt strategies, which buffer against risks present in their environment by using multiple sources for strategic items and holding safety stock. These buffers restrict operational performances and can negatively impact competitive advantage. New approaches involve risk management, which is a formal process that involves identifying potential losses, understanding the likelihood of potential losses, and assigning significance to these losses. Supply chain management seeks to reduce these risks and enhance competitive performance by closely integrating internal functions within a company and effectively linking them with the external

operations of suppliers, channel members and final customers (Giunipero and Eltantawy, 2003). Supply chain management theory is a relatively recent academic and research field. SCRM is even more recent (APICS, 2011) and even so, it is predicted to be the ultimate source of competitive advantage in the present complex operating business environment (Glatzel and Niemeyer, 2014).

Sandberg (2007) has identified in great detail the roles of top management in the supply chain practices after correctly observing in an equally extensive literature that this gap exists. These are summarized as: the supply chain thinker, the frame setter, the process designer, the relationship manager, the controller, and the organizer for the future. However out of these roles, risk management as a key function of top management has not been fixed anywhere. Empirical studies indicate a difference between the ideal SCRM theory and practice. Taking the SCRM philosophy from theory to practice seems to be a difficult task for companies, despite the many obvious advantages discussed. Sandberg, 2007 has mentioned many authors and researchers who identify top management support as a necessary prerequisite for performing SCM in real life. Larson et al., (2007) also identifies top management support as the most important facilitator for implementation of SCM. This researcher takes a firm stand that management of risk is a key function in SCM that requires top management commitment. Because of the increasing complexity of supply chains; emergence of newer risks and increased competition; supply chain risk management has become a key functional area in the processes of strategy formulation, implementation, sustainability and review by top management. SCR is not a routine occurrence; rather, it is dynamic, uncertain and potentially disastrous or strategically advantageous depending on the SC risk attitude of a firm. The foregone points further buttress the need for top management commitment. Despite recent unprecedented challenges, it appears that many supply chain executives have done very little to formally manage supply chain risk (Dittmann, 2014). The researcher submits that this lack of treatment is due to lack of top management involvement, which in turn stems from a lack of understanding of their roles in SCRM.

The sugar industry in Kenya is currently facing a myriad of problems ranging from globalization due to liberalized markets under the COMESA and WTO protocols,

mergers and alliances, high costs of production, poor state of factories, poor SCM, poor state of infrastructure, inadequate Research and Development (R&D) and extension services, insufficient funding, un-harmonized industry regulatory framework, cheap imports and punitive tax regime, non-tariff barriers, political and state interference and enlightened customers (KSI, 2009). These problems still persist to the present. Other problems include cane poaching by rival millers; encroachment of rivals cane growing scheduled zones; political interference (Gibendi and Mwaniki, 2014). The Kenyan Sugar Industry value chain (growing, harvesting, transport, milling, storage and marketing) is characterized by high proportion of out-growers (contract farmers) causing a great risk for millers in terms of ensuring a steady supply of sugarcane, especially since there are many small-scale farmers. These out-growers increasingly make independent decisions about where to deliver their cane, what farming practices to follow, and whether to invest further in their farms (Chisanga et al, 2014). The inefficiencies experienced at the grower level of the value chain have reduced the supply of cane to local millers. The Kenyan sugar market is thus undersupplied by domestic millers. Hence, competitive capacity needs to be based on SC coordination and cooperation among sugar factories and their SC partners. KSI (2009) proposes some strategies to help promote competitiveness in the Kenyan sugar industry. All these strategies fit into supply chain strategy geared towards mitigating supply chain risk in the sugar industry. The product portfolio of Kenya sugar industries is inherently narrow; the source of the main raw material (cane) is also constrained by bulkiness and perishability while the profit margins of sugar are narrow due farmer agitation.

These conditions above make the optimization of the supply chain clearly critical for profitability of the industry. This is a strategic issue requiring top management's intimate attention. In light of supply chain being one of the major problems in the Kenyan sugar industry, this research seeks to understand the impact of top management involvement in the sugar supply chain generally and in management of sugar supply chain risks specifically. There is very little or no published studies on the role of top management in the sugar supply chain management. It is even worse when supply chain risk management, which is a more recent field of supply chain management, is brought in. The knowledge gap for this study is that for the Kenyan sugar industry there has been

very little if any similar study. The study seeks to find out the impact of top management involvement in the sugar SCRM in the face of the many problems faced by this industry.

1.2 Statement of the Problem

Organizations are increasingly finding that they must rely on effective supply chain networks to compete in the global market and networked economy. Further, disruptions and brand reputation risks are growing in frequency and impact. The Kenyan sugar manufacturing sector is a clear example of the unfolding of this scenario. The greater reliance on partners and global supply sources and markets is generating more supply chain uncertainty. This is exemplified by the COMESA safeguards for the Kenya Industry that may come to an end at any time exposing the weak Kenyan Sugar industry to international competition. However despite these observations, there is little emphasis on the critical role of top management in SCRM. Supply chain management is mostly left by top management to run as a routine operational activity with the top management only coming in when apparently very large financial sums are involved or new projects in the supply chain come up. This a wrong approach because of the hidden costs and opportunities inherent in the supply chain as a result of risk. As a result supply chain risk management processes are buried in other processes and the level of financial impact is under-reported in the books of accounts. Unfortunately risks continue to grow despite firms being shy about adopting concrete counter-measures. There is thus a gap between ideal supply chain risk management theory and the performance of existing supply chains. This researcher observes that the little research available about the role of top management in supply chain risk management is superficial and incomprehensive, only emphasizing that top management involvement is vital without demonstrating the exact nature of this involvement. The role of top management in SCRM is thus unclear or at best only optional or of a contingency nature. There are very many published studies on the importance of top management commitment in many functions such TQM, project management, etc, but surprisingly very little if any on SCRM. This is even worse for the sugar supply chain internationally and locally. This proposed study aims at filling this gap through qualifying top management roles in SCRM through a study of the influence of top management involvement in SCRM in the Kenyan sugar industry. It is anticipated

that this will go a long way towards reducing the existing gap between SCRM theory and actual practice.

1.3 Objectives

- 1. To establish the extent of top management involvement in strategic SC planning
- 2. To assess the level of top management involvement in implementation of SCRM practices
- 3. To determine the influence of top management involvement on usage of the supply chain and its associated risks as a learning resource.

1.4 Research Questions

- 1. What is the extent of top management involvement in strategic SC planning?
- 2. What is the level of top management involvement in effective implementation of SCRM practices?
- 3. What is the influence of top management involvement on usage of the supply chain and its associated risks as a learning resource?

1.5 Significance of the Study

This study is important as it will demonstrate the importance of top management involvement in managing risk in the supply chain. The researcher has picked on an industry that is especially vulnerable to supply chain risks- the Kenyan sugar industry- and this study will provide a valuable insight into what top managers need to be doing in order to mitigate SCR and hence increase the leverage gained from their supply chains.

This study will also open opportunities for other researchers to empirically determine if the findings of this research cut across other industries.

1.6 Scope of the Study

The study will cover 6 out of 11 Kenya Sugar firms located in Kisumu County and parts of Kakamega and Bungoma Counties in Western Kenya. These are fairly representative of the Kenyan Sugar Industry which is mainly concentrated in Nyanza and Western Kenya region. The study will cover top and middle level managers' perceptions on the extent of top management involvement in effective SCRM in these firms.

1.7 Conceptual framework for the research

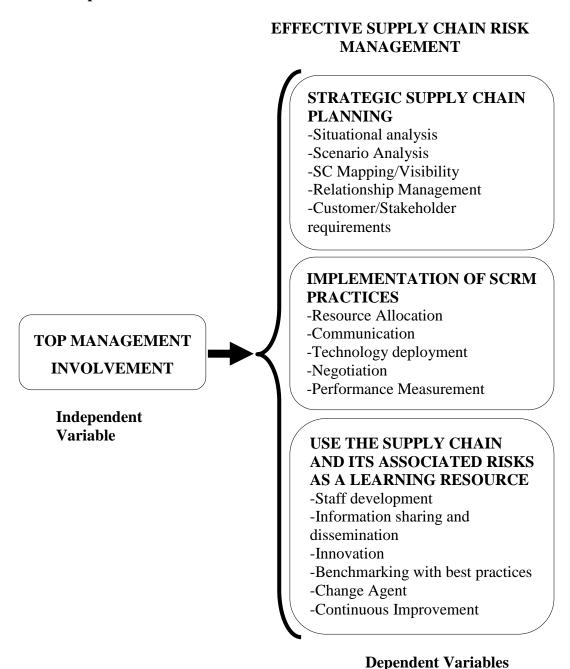


Fig. 1. A conceptual framework.

The conceptual framework describes the influence of top management on effective risk management practice. This influence of top management takes place through the roles of strategic supply chain management, Leadership and commitment in implementation of

Source: Author (2018)

supply chain risk management practices and through the top management spearheading the usage of the supply chain as a learning resource for continuous improvement of the supply chain management practice. Effective supply chain risk management is exemplified by an overall supply chain having cost efficiency, delivery effectiveness, flexibility, security, sustainability, resiliency and regulatory compliance.

2.0 LITERATURE REVIEW

The literature review has identified 3 key areas for this research namely: definition of supply chain risk; definition of top management; and overview of supply chain risk management.

2.1 Theoretical Literature Review

2.1.1 Definition of Risk in the Supply Chain

Once largely associated with insurance, compliance and loss avoidance, the risk management function has been transformed in recent years and is now firmly entrenched as a board-level concern (Economist Intelligent unit, 2007). The same report also makes a key note that the key determinant of success in risk management has become the need to ensure that a strong culture and awareness of risk permeates every layer of the organization. Cecere (2014) defines risk management as the proactive identification of risks to the supply chain – as well as strategies to mitigate those risks. It adds that today's supply chains are cautious, traditional and not proactive. As a result, many of the concepts of risk management are in conflict with traditional supply chain processes. Zsidisin (2003) suggested that supply risk in a supply chain context can be defined as the potential occurrence of an incidence associated with inbound supply in which the result is the inability of the firm to meet customer demand. The importance of supply chain risks cannot be underestimated. The failure to manage supply chain risks can lead to a sharp downturn in a firm's share price, which can be slow to recover (Hendricks and Singhal 2005). There are also wider consequences of a failure to manage risks such as financial losses, reduction in product quality, loss of reputation and others (Cousins et al. 2004). As the foregoing examination of the literature shows, approaches to managing risks are required and this has evidently led to the researchers focus on supply chain risk management. A review of the literature reveals many categorizations of risks in supply chain. Deloach (2000) classifies them in three dimensions: external, internal and information risk. Supply chain risk has also been classified into strategic, financial, operational, commercial and technical risks (Hiles and Barnes 2001). Christopher and Peck (2003) have categorized supply chain risk as: process, control, demand, supply and environmental. Rao and Goldsby (2009) acknowledged the growing literature but lacked

an organized structure for the sources of supply chain risk. They bridge the gap by synthesizing the diverse literature into a typology of risk sources, consisting of environmental, industry, organizational, problem-specific and decision-making factors.

2.1.2 Overview of Supply Chain Risk Management

Efficient supply chain risk management can provide value to various stakeholders of a firm. For example, compliance with appropriate risk management procedures and policies can help to reduce or avoid crisis situations. SCRM entails identifying risks and developing mitigation procedures to maintain operational performance (Dani, 2008). It has also been receiving much attention now than in the previous decade due to events like the threat of international terrorism (Sheffi, 2002) and other global events. The literature in supply chain risk management is vast in the sense of quantity. However, today, there exists no generally agreed definition of SCRM. Lindroth and Norman (2001) stated that SCRM dealt with risks caused by, or impacting on, logistics-related activities or resources. Later, Juttner (2005) defined SCRM as a managerial activity involving the identification and management of risks for the supply chain, through a coordinated approach amongst supply chain members, to reduce supply chain vulnerability as a whole. Musa, (2012) gives detailed analyses of material flow risks, financial flow risks and information flow risks. He refers to these as "supply chain risk issues". Sodhi et al. (2012) claim that there are three gaps in SCRM which they identify as; there is no clear definition of SCRM; a lack in research on mitigating supply chain risk; and a clear deficiency of empirical studies in this area. While the terminology can differ among the authors, a systematic SCRM process usually comprises of the following stages: risk identification, risk analysis, risk mitigation strategies and risk monitoring (Neiger et al. 2009). The overall objective of this SCRM process is to determine, implement and monitor an optimal mix of measures to avoid, defer, reduce, and transfer all relevant risks. This is a proactive approach to responding to risks unlike the traditional reactive approach. However, the aim of this study is to learn about the managerial activity of identifying specific risk response strategies for the present and future risks. Given the widespread globalization of supply chain and the extreme impact of disruptions on corporate results, supply chain risk management is on the fast track to become a corporate governance issue that requires the attention of not only the CPO, but also of the

CEO and eventually the board (Resilinc-ALOM 2011). One of the very trends that have increased supply chain risk-globalization-also provides opportunities to manage risk. Globalization allows firms to cite facilities in safer locations, tap into educated overseas workforce and set up production centers close to raw materials (FM Global, 2006). These are all decisions requiring the input of top management.

2.1.3 Supply Chain Risks and Supply Chain Risk Management Practices

The traditional supply chain consists of product innovation & development; supply chain planning; sourcing and procurement; manufacturing and operations; logistics and distribution; customer service (Deloitte, 2017), APICS (2011) identifies several supply chain risks as natural disaster disruption, inadequate relationship management with suppliers or customers, insufficient monitoring of supply chain performance, lack of information sharing between an organization and suppliers or customers, liability due to lapses in materials safety, losses due to theft or other criminal acts, partner underperformance, suppliers going out of business and others. They also identify 'soft risks' as those risks that are not easily measurable. These include declining relationships with suppliers and customers; focus on efficiency at the expense of risk responsiveness potential; growing uncertainty because of changing laws, regulations, or liabilities; slow supply chain performance compared to competitors. APICS-Protivitti (2004) have extensively identified and classified supply chain risks. Some of these risks are classified under: Supply interruption risks, Demand and supply planning and integration risks, Purchase price risks, Inventory and obsolescence risks, Regulatory and compliance risks, Information privacy and security risks, Customer satisfaction and service risks, Contract compliance and legal risks, Process inefficiency risks, Employee and third-party fraud risks, Product introduction and cycle time risks, Human resource skills and qualifications risks, Project management risks, Corporate culture and change management risks, Information integrity and availability risks. These risks can be classified into five areas (with the consequent management practice) according to the same experts as: supply chain and/or procurement strategic planning; procurement risk management - lack of information for strategic sourcing, lack of supplier and contracts management monitoring and controls, expenditures not leveraged supply interruption compliance and controls. Swiss Re (2014 has identified agricultural risk management practices in the sugar

industry as crop diversification, geographic diversification, vertical integration, contingency capital, good agricultural practices, price hedging, production contracts, marketing contracts and risk transfer schemes.

2.1.4 Top Management Involvement/commitment/support

Most researchers use top management involvement, support and commitment interchangeably. Senior management, executive management, or management team is generally a team of individuals at the highest level of organizational management who have the day-to-day responsibilities of managing a company or corporation and hold specific executive powers conferred onto them with and by authority of the board of directors and/or the shareholders (Menz, 2012). The executive management typically consists of the heads of the firm's product and/or geographic units and of functional executives such as the chief financial officer, the chief operating officer, and the chief strategy officer (ibid). Research papers on top management functions and composition typically follow the upper echelons theory. Authors who invoke the upper echelons UE perspective typically argue that this group of senior executives should be of interest because the group and its members provide an interface between the firm and its environment, and are relatively powerful, and therefore their choices and actions are likely to have an impact on the organization (Hambrick, et al 2004). Top management role in safety has been studied by Ooshaksaraie and Azadehdel (2013) who explained the concept of management involvement in safety as to the extent to which top- and middlelevel managers become personally involved in critical safety activities within the organization. Javed (2015) in TQM explained that top management must be visibly and actively engaged in the quality effort by serving on teams, coaching teams, and teaching seminars. They should lead by demonstrating, communicating, and reinforcing the quality statements. Other researchers have shown the importance of top management involvement in project management (Ahmed 2017, Zwikael 2014), support of Information Technology use (Al-Mamary & Shamasuddin 2015; Kalaian & Jitpaiboon 2005). Firms' operating margins are lower when a top management has a committed support of Supply chain management (Wagner and Kemmerling 2014). According to Bullington and Bullington (2008), lack of top management commitment is a common occurrence. They cite the reason for weak commitment as the lack of understanding of the importance of supply chain management which may seem unlikely, but the problem still exists. For example top management with finance / accounting backgrounds may understand the role of supply in terms of its impact on cost of goods / services, but they may be less prepared to deal with technical requirements in a product development environment or even the nature and importance of a key supplier partnership. Management with engineering backgrounds will understand the importance of new product development assistance, but may also struggle with the need to reduce the size and complexity of the supply chain. Management from marketing backgrounds should understand partnerships and relationships, but may be less prepared to sympathize with the need for supply chain standardization (ibid).

2.1.5 Basic idea of the Stakeholder Theory and Definition

The traditional definition of a stakeholder is "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman1984). The general idea of the Stakeholder concept is a redefinition of the organization. In general the concept is about what the organization should be and how it should be conceptualized. Friedman (2006) states that the organization itself should be thought of as grouping of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. This stakeholder management is thought to be fulfilled by the managers of a firm. The managers should on the one hand manage the corporation for the benefit of its stakeholders in order to ensure their rights and the participation in decision making and on the other hand the management must act as the stockholder's agent to ensure the survival of the firm to safeguard the long term stakes of each group.

The definition of a stakeholder, the purpose and the character of the organization and the role of managers are very unclear and contested in literature and has changed over the years. Even the "father of the stakeholder concept" changed his definition over the time. In one of his latest definitions Freeman (2004) defines stakeholders as "those groups who are vital to the survival and success of the corporation". In one of his latest publications Freeman (2004) adds a new principle, which reflects a new trend in stakeholder theory. In this principle in his opinion the consideration of the perspective of the stakeholders themselves and their activities is also very important to be taken into the management of

companies. He states "The principle of stakeholder recourse. Stakeholders may bring an action against the directors for failure to perform the required duty of care" (Freeman 2004). All the mentioned thoughts and principles of the stakeholder concept are known as normative stakeholder theory in literature. Normative Stakeholder theory contains theories of how managers or stakeholders should act and should view the purpose of organization, based on some ethical principle (Friedman 2006). Another approach to the stakeholder concept is the so called descriptive stakeholder theory. This theory is concerned with how managers and stakeholders actually behave and how they view their actions and roles. The instrumental stakeholder theory deals with how managers should act if they want to flavor and work for their own interests. In some literature the own interest is conceived as the interests of the organization, which is usually to maximize profit or to maximize shareholder value. This means if managers treat stakeholders in line with the stakeholder concept the organization will be more successful in the long run. Donaldson and Preston (1995) have made this three-way categorization of approaches to the stakeholder concept kind of famous.

2.1.5.1. Who are Stakeholders?

A very common way of differentiating the different kinds of stakeholders is to consider groups of people who have classifiable relationships with the organization. Friedman (2006) means that there is a clear relationship between definitions of what stakeholders and identification of who are the stakeholders. The main groups of stakeholders are: Customers, Employees, Local communities, Suppliers and distributors and Shareholders.

In addition other groups and individuals are considered to be stakeholders in the literature of Friedman (2006): The media, The public in general, Business partners, Future generations, Past generations (founders of organizations), Academics, Competitors, NGOs or activists – considered individually, stakeholder representatives, Stakeholder representatives such as trade unions or trade associations of suppliers or distributors, Financiers other than stockholders (dept holders, bondholders, creditors), Government, regulators, policymakers.

2.1.5.2. Operation of the Stakeholder Theory

Stakeholder theory has already been widely used within the supply chain context in order to explain supply chain issues (Genovese et al, 2013). This makes perfect sense, since the supply chain is central to value creation (Monczka et al, 2008; Freeman & Liedtka, 1997). These decision points fairly comprise the main considerations in developing a supply chain management strategy, which is predominantly concerned with the fulfillment of customers' orders (Tan, 2001). Frohlich et al. (1997) identified three supply chain management strategies as innovator, marketeer, and caretaker. All three focus on fulfilling customers' orders, but by different means. Innovators emphasize rapid new product introduction and design changes, marketeers offer broad product lines and caretakers focus on offering the lowest price (Tan, 2001). Evidently, cost, speed or time-to-market, quality, and variety matters are of relevance to the respective SCM strategies. These variables fairly depend on decisions made related to in sourcing or outsourcing (make-or-buy decision), multiple or single sourcing (sourcing strategies), supplier strategies, and contracting. Furthermore, although some stakeholders have a strong influence in helping a firm gain and sustain competitive advantage, they also capture much of the value created (Rothaermel, 2013). Thus, understanding the relationship between stakeholder theory and supply chain management is beneficial to both ends: Firms enhance the sustainability of their competitive advantage, and stakeholders gain value. In sum, a more profound knowledge on stakeholder theory and how it concurs to supply chain management may enhance business' processes, facilitate decision making, and boost value creation and performance.

According to Freeman et al. (2010) stakeholder theory was designed to solve three problems which had arisen throughout the last decades, and aims at improving our understanding of value creation and how it is traded, connecting ethics and capitalism, and help managers deal with these matters (Freeman et al., 1997; Parmar et al., 2010). It addresses the problem of value creation and trade, the problem of ethics of capitalism, and the problem of managerial mindset (Parmar et al. 2010). Stakeholder theory was hence introduced as an approach towards strategic management, and can nowadays be found in an enormous amount of managerial publications contributing to different fields of business knowledge (Donaldson & Preston, 1995). Further, stakeholder theory encompasses facets of descriptive, normative, managerial as well as instrumental theory (Freeman, 1999; Sinclair, 2010; Freeman et al., 2004). Donaldson & Preston (1995), claim that its core is normative, while Freeman (1999)

argues that it is built on instrumental premises. Descriptively, organizations are claimed to have stakeholders. From an instrumental perspective firms that consider their stakeholders' interests are said to be more successful than those that do not. The field which examines why firms should give regard to their stakeholders is the normative perspective (Donaldson & Preston, 1995; Freeman, 1999)

In addition, several assumptions underlie stakeholder theory. The whole idea stems from the presumption that business is an integral part of society rather than an institution that is separate and purely economic in nature. (Freeman & Liedtka, 1997), and that "managerial actions have the potential to affect a broad range of people" and that "pursuit of corporate objectives can be easily disrupted by the actions of unexpected groups" as indicated by real cases, such as the global financial crisis of 2007-2008 (Parmar et al. 2010). Thus, there are groups within and outside the organization, which are affected by the organization, are interested in the organization's success, or affect the organization in some way (Laplume et al., 2008). In addition, the interests of different stakeholders can be balanced. Shareholders or stockholders of corporations are one major exemplary group with an obvious stake in a firm (Freeman & Liedtka, 1997; Parmar et al., 2010; Laplume et al., 2008; Freeman, Wicks & Parmar, 2004). It is further assumed that value creation is necessary for business operations, and it is a business' purpose to serve the interests of society (Freeman, Wicks & Parmar, 2004). Hence, profit maximization is not a business' core object. Furthermore, managing stakeholders and their interests is suspected to enhance profits (Parmar et 1., 2010; Donaldson & Preston, 1995). Moreover, one has assumed a separation of "good ethics" and "good business", which stakeholder theory aims to joint (Parmar et al., 2010, p.415). In an attempt to analyze the stakeholder value chain, Freeman & Liedtka (1997) identified five other assumptions: (1) Firm interest and stakeholder interests move together. When the firm does well, its stakeholders do well. (2) Value creation dominates value capture. (3) Any party that benefits from the value chain needs to invest in its drivers. (4) Stakeholders must interact. (5) Businesses are means to achieve stakeholder purposes. Stakeholder theory has been established on these premises. It had become common sense that value creation must lay within an organization's focus; that customers, employees, suppliers, the government and more are essential to business success. (Freeman & Liedtka, 1997). Freeman started to connect morality with business as a logic consequence to the mutual influence of an organization and its stakeholders.

Stakeholder theory was presented as managerial, intimately connected to the practice of business, of value creation and trade. It is said to have re-invented the practice of value creation and trade. (Freeman, 2000; Laplume et al., 2008). It is observed that an organization has stakeholders beside shareholders, as mentioned antecedent, which have a stake in the firm. Shareholders undeniably are interested in a firm's success, are impacted by its actions, and do have an influence on the firm. But also customers, employees, suppliers, and other groups are likely to have a certain interest in the firm's success, may be impacted by it or may impact it (bilateral relationship). Thus, an organization should be concerned with all its constituents' interests, not only those of their shareholders. (Laplume et al., 2008). In contrast to neoclassical economics, which argues that an organization seeks profit maximization, Freeman claims that "every business creates, and sometimes destroys, value for customers, suppliers, employees, communities and financiers (Freeman, 2011). The idea that business is bout maximizing profits for shareholders, in his opinion, is outdated and does not work very well, as the recent global financial crisis has demonstrated. The 21st Century is one of Managing for Stakeholders (Freeman 2011). Thus, stakeholder theory sees a business' purpose in maximizing value for its stakeholders (Thomsen et al., 2012). Focusing on value creation is key to effective management in today's world of entangled relationships. (Freeman & Liedtka, 1997). Value for stakeholders may have the form of economic extrinsic value (collaboration among employees), intangible extrinsic value (e.g. recognition, training, etc.), psychological intrinsic value (generated by the agent himself, e.g. satisfaction), intrinsic value e.g. operational learning), transcendent value (e.g. acquisition of virtues), and value consisting of positive or negative externalities (Argandoña, 2011). Moreover, stakeholder theory mainly states that a business' survival is dependent on the management of stakeholder relationships, of which business is made up of. Additionally, stakeholder relationship management is considered a moral endeavor (Phillips et al., 2003). It is evident that companies do affect groups beside their shareholders, and hence an obligation or companies arises to minimize negative externalities, and act in the best interest of stakeholders, as long as it does not hinder the business' success (Branco & Rodrigues, 2007). Adopting stakeholder relationships as a unit of analysis is supposed to enhance the effectiveness of dealing with the three problems of business mentioned above (Parmar et al., 2010).

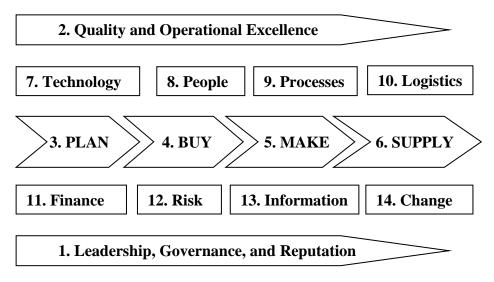
2.2 Empirical Literature Review

In this section the researcher explores various works done by other researches on roles of top management in supply chain (which, for the purpose of this study, include the risk management part) as proposed by this research aimed at bringing to the fore the research gaps. The reason for this approach is that every development in research has been a gradual process and this is even more pronounced in supply chain management as it is a fairly recent field of research. Another reason is that many articles address such issues as information sharing, relationship management, performance management, etc, without necessarily addressing SCRM directly, but the SCM practices being described are indeed intended to address supply chain risk. The roles proposed by this research include strategic planning; leadership in adopting SCRM practices; and use of the supply chain and its associated risks as a learning resource.

2.2.1 Strategic Planning in Supply Chain Risk Management

Supply chain management operates at three levels: strategic, tactical, and operational. At the strategic level, company management makes high-level strategic supply chain decisions that are relevant to whole organizations. The decisions that are made with regards to the supply chain should reflect the overall corporate strategy that the organization is following. The strategic supply chain processes that management has to decide upon will cover the breadth of the supply chain. These include product development, customers, manufacturing, vendors, and logistics. Trouchaud (2013 has given a detailed report on how GlaxoSmithKline (GSK) does their strategic planning for the supply chain to mitigate against risk. The basic model used to develop the various strategies is shown below Figure 2. Quality, operational excellence, leadership, governance, and reputation are the guiding bases of the strategic plan for the supply chain. The normal supply chain consists of planning, procurement of inputs, decisions of whether to buy or make and finally supply to the customers. The supply chain is supported by technology, people, processes, logistics, finances, risk management, information and change management. This is shown below.

Figure 2. Key supply chain processes.



Source: Trouchaud (2013)

They used a set of Ishikawa diagrams to define the type of risks that could impact the supply chain. In parallel to Ishikawa diagrams GSK performed a SWOT analysis as well as conducted audits, specific studies, and operational measurements. This planning is done by Product Review Forum (PRF). Though the article is detailed in giving the planning models used by GSK, the role of top management in the entire process is not mentioned. In fact the highest manager to which these groups report to is the Procurement manager. The various strategic planning models do not emphasize the importance of supplier relationships, lean supply chain, customer focus and green supply chain among other critical SCRM practices. The choice of Product Review Forum (PRF) as the name of the main group spearheading this "strategic" planning process is glaring. Product review is a narrow way of looking at the sustainable supply chain. RIMS (2011) in a survey found out that senior management teams may not have embraced strategic risk management (SRM) as a vital component of enterprise risk management (ERM). This limits awareness of ERM's structured discipline and enabling capabilities to help the organization manage the risks most directly related to achievement of the organization's objectives. According to surveys by Dittman (2015) to find out why few companies have a supply chain strategy revealed the main reason to be lack of time and resources; some supply chains such as healthcare supply chains are simply less mature than those in other industries; senior executives in firms don't really understand the scope of the supply chain and its major potential impact on profit; and a lot of people do not know how to develop a vision, a strategy, a plan, metrics. KSI (2009) in its strategic plan identifies in detail four strategic objectives with which to carry out strategic the planning process specific to the Kenya sugar industry. These are to enhance competitiveness, expand product base, improve infrastructure, and strengthen regulatory framework. These objectives are deployed towards trying to solve the many sugar industry problems. Improvement of corporate governance is one of the main strategies identified for strategically positioning the sugar industry. This is the closest reference to top management. KSI (2009) strategy plan has not clearly stressed the importance of top management in designing, and implementing this strategy. The impression one gets is that top management has no active role in such a plan. This buttresses this researcher's point that firstly top management has a big role to play in the sugar supply chain which is critical for the industry and secondly strategic planning is one way to reduce risk in the supply chain.

2.2.2 Leadership in adopting SCRM

Omondi & Namusonge (2015) identify the role of leadership in providing well trained personnel, relationship management, cost control, customer oriented service and adoption of proactive approach to industry challenges, engaging all personnel so that they may also receive equal appreciation of business requirement thus enabling participation in decision making albeit at different levels. According to Deloitte (2014) supply chain issues should be considered when a company makes decisions regarding new product introductions, pricing, customer service, and entry into new markets. This is more likely to occur in organizations where the supply chain function is represented by a senior executive. There are various reasons why more senior leadership might correlate with SC Leaders' high performance. The greater leadership skills implied by higher position in a large organization may play a role in enabling a function to perform at its best. Corporate realities also dictate that a leader with greater standing is more likely to be allocated the resources required for excellence. Perhaps more important is the senior executive's "seat at the table" where higher-level strategy is set and decisions are made. Being able to offer the supply chain perspective on potential moves, and to explain the supply chain implications of proposed changes, can enable leaders to achieve alignment between

supply chain management priorities and overall business strategies more readily(Ibid). Defee *et al.* (2009) attempt to distinguish supply chain leadership and supply chain followership, are among the first to define supply chain leadership and may be the first significant empirical study devoted to this research area. Defee *et al.* (2010) further develop the theory and propose a formal definition of supply chain leadership,

"[...] a relational concept involving the supply chain leader and one or more supply chain follower organizations that interact in a dynamic, co-influencing process. The supply chain leader is characterized as the organization that demonstrates higher levels of the four elements of leadership in relation to other member organizations (i.e. the organization capable of greater influence, readily identifiable by its behaviors, creator of the vision, and that establishes a relationship with other supply chain organizations)."

Based on their review of the interfaces between their main research areas (supply chain learning and supply chain leadership), Gosling, et al (2016) concluded that supply chain leadership, supply chain learning and SSCM are seemingly distinct areas of research in the literature and the overlaps between them are sparsely researched. It is not difficult to understand the reasons for this: supply chain learning and supply chain leadership are both under-developed areas themselves, let alone their relationship with SSCM.

2.2.3 Use of the Supply Chain and its associated risks as a learning resource

Tennant and Fernie (2013) found that key schools of organizational learning in construction firms are underdeveloped and that construction supply chain organizations routinely employ learning strategies that are best described as reactionary and interventionist. The literature of both organizational learning and the learning organization is in full development, offering new techniques, methods and models that can be used by practicians (Mirela, Stanescu, Nen, 2008). Drawing on the knowledge-based view of the firm and theory from the information processing and organizational learning literatures, (Hult, Ketchen & Slater 2004) devised a model linking knowledge development to cycle time in strategic supply chains – chains whose members are strategically, operationally, and technologically integrated and using data from 58 chains in a *Fortune* 500 firm, they found that the knowledge development process explained substantial variance in cycle time. Bessant, Kaplinsky and Lamming (2003) selected case

studies from what are generally regarded as relatively advanced sectors (in terms of supply chain development activity) but found that most supply chain management programmes do not yet incorporate supply chain learning and where SCL does occur, it is mostly limited to the first tier suppliers (or customers), and very seldom involves structured processes of learning from suppliers (or customers). Clearly much opportunity for improvement exists (Ibid). Supply chain partnerships inadequately exploit established forms of cooperation as vehicles for learning and building knowledge repositories. This can be improved by introducing and optimizing the process of organizational learning in every partnership member as well as a joint partnership activity (Zekić, et al, 2016). Hultet al. (2003) argues that learning among supply chain members may be seen as a strategic resource which provides a bonding effect to enhance a supply chain's success. The four antecedents (team orientation; systems orientation; learning orientation and memory orientation) collectively contribute to the creation of a strategic resource which further leads to ten sub consequences in four categories consisting of learning consequences including information acquisition, knowledge distribution, information interpretation and organizational memory; supply management consequences including relationship commitment and customer orientation; management consequences including innovativeness and entrepreneurship; and performance consequences including cycle time and overall performance (Hult et al., 2003).

2.2.4 Summary of knowledge gaps

Strategic planning in the supply chain is stressed in many articles but the importance of top management in designing, and implementing this strategy has not been clearly stressed other than stating that top management commitment is vital in the same. The impression one gets is that top management has no active role in such a plan. This buttresses this researcher's point that firstly top management has a big role to play in the sugar supply chain which is critical for the industry and secondly strategic planning is one way to reduce risk in the supply chain.

Many researchers clearly mention learning in the supply chain as important towards realizing continual improvement of the supply chain. Nevertheless, very few researchers have examined supply chain risk management as an important source of organizational

learning or even prescribed the role of senior management in spearheading the same. Still there is very scanty literature on organizational learning in sugar industry supply chains generally and particularly in Kenya. It is known that The Kenya Sugar industry experiences the same problems related to the supply chain year in year out and this researcher submits that this is an important entry point for organization learning with a bias on the management of the supply chain risks.

Another finding from literature survey is that supply chain learning and supply chain leadership are both under-developed areas themselves, let alone their relationship with Sustainable Supply Chain Management and as this research proposes, with Supply Chain Risk Management. Many researchers have not explored the real nature of the role of top management in applying these two concepts in SCRM and the researcher.

3.0 RESEARCH METHODOLOGY

3.1. Research Design

The research will adopt a cross-sectional survey design in which the impact of top management involvement in effective SCRM practices in the sugar industry will be studied. Survey research is used:

"to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met, to establish baselines against which future comparisons can be made, to analyze trends across time, and generally, to describe what exists, in what amount, and in what context." (Isaac & Michael, 1997, p. 136)

In the study, both primary and secondary data will be collected. Primary data will be obtained through administration of questionnaires to respondents. The respondents will be middle and executive managers of 6 Kenyan sugar firms - 3 public or government owned and 3 private owned. The middle and top managers are relevant for this study because the top managers formulate policy while the middle managers effect policy and are therefore knowledgeable about this research topic. Meanwhile, secondary data relating to the statistics on production trend of sugar, production capacity of individual sugar firms, age of the firms and general statistics of the Sugar Industry in Kenya will be acquired from various sources such as annual reports of sugar firms under consideration, Kenya Sugar Board, Ministry of Agriculture-Kenya, Central Bureau of Statistics, etc.

3.2. Study Area

The study will be conducted in the Western Kenya Sugar Belt covering pars of Nyanza and Western Regions. Specifically the areas to be covered are in Mumias, Kakamega, Kisumu and Bungoma Counties. These are known sugar growing regions in Kenya.

3.3. Study Population

The study will be conducted in 6 local sugar companies namely: Mumias Sugar Company, Nzoia Sugar Company, Chemelil Sugar Company, West Kenya Sugar Company, Kibos Sugar and Allied Company and Butali Sugar Company which is the youngest. This choice is fairly representative of the entire Kenya sugar industries in terms

of size and ownership structure. Additionally these 6 firms are conveniently located nearest to the researcher. The respondents in these sugar firms will be the mid-level and the executive level managers in 7 functions. There are about 500 middle and top management staffs in these sugar firms in Kenya.

3.4. Sample Size and Sampling Technique

A total sample size of 90 top and middle level managers in 6 sugar factories in Kenya will be used. These 6 firms are conveniently located nearest to the researcher. The study will use proportional purposive sampling to select the operations division of each of the 6 sugar manufacturing firms registered and operating in Kenya as at January 2018 which have a population of 500 top and middle level managers. Proportionality will be based on the relative size of the sugar firms. These operation divisions consist of purchasing and supply, production, engineering, quality assurance, marketing and finance departments. For the sake of this study the agricultural extension department will also be considered. These departments have a direct relationship to the operations function of supply chain management. The total sample size is obtained using coefficient of variation as follows: Nassiuma, (2000) asserts that in most surveys or experiments, a coefficient of variation in the range of $21\% \le C \le 30\%$ and a standard error in the range $2\% \le e \le 5\%$ is usually acceptable. The lower limits for coefficient of variation and standard error are selected so as to ensure low variability in the sample and minimize the degree or error. Nassiuma, (2000) gives the following relation for determining sample size.

 $n = NC^2 / (C^2 + (N-1) e^2)$ Where n = Sample size, N = Population (500), C = Coefficient of variation (0.21) and e = Standard error (0.02). Hence sample size = 90

3.5 Data Collection

3.5.1. Data Collection Procedure

Data collection will involve a self-administered questionnaire. A self-administered questionnaire is desirable because of low cost, adequacy of time for respondents to give responses; it is free of interviewer's biases and is capable of reaching a large number of respondents in line with Kothari (2004). The questionnaires will be delivered to the respondents' place of work and picked later at an agreed day after they have been filled.

3.5.2. Primary Data

Primary data will be collected using structured questionnaire. Likert scale analysis will be used to weigh the respondents' perception.

3.5.3. Secondary Data

Secondary data relating to the statistics on production trend of sugar, production capacity of individual sugar firms, age of the firms and general statistics of the Sugar Industry in Kenya will be acquired from various sources such as annual reports of sugar firms under consideration, Kenya Sugar Board, Ministry of Agriculture-Kenya, Central Bureau of Statistics, etc.

3.5.4 Validation of Data Collection Instrument

The researcher will carry out a pilot survey aiding in improvement of the questionnaire, checking ambiguity of the questions and give professionals the questionnaires to read for qualification of the same.

3.5.5 Reliability of Data Collection Instrument

The researcher will test for the reliability of the data collection instrument using the internal consistency technique in which the scores obtained from the subjects will be computed to determine the correlation among the items. Sekaran (2003) recommends a threshold coefficient of 0.7. According to Sekaran, reliabilities less than 0.60 are considered to be poor, those in the 0.70 ranges are acceptable and the closer the reliability gets to 1.0, the better. This reliability coefficient indicates how well the items measuring a concept are positively correlated to one another.

3.6 Data Analysis

The collected data will be analyzed using descriptive statistics which include mean, mode, standard deviation, and percentages. Inferential statistics will also be used to analyze data collected in the survey. Statistical Package for Social Sciences will be used for the data analysis. Descriptive statistics is used to describe basic features of data collected in a study and provide simple summaries about the sample and the measures. Together with simple graphic analysis, they form the basis of virtually every quantitative

analysis of data (Muganda, 2010). The responding sugar companies will be classified into 2 categories namely Government owned/public owned and private owned. Regression models will be run for these 2 categories of companies to investigate the relationship between top management role input and the effective management of SCR. Regression analyses provides a measure of the effect of one variable or more variables on another variable (Hinton, 2004).

3.7 Data Presentation

The data collected will be classified and presented by frequency distribution tables, charts and graphs.

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