



GSJ: Volume 7, Issue 8, August 2019, Online: ISSN 2320-9186  
[www.globalscientificjournal.com](http://www.globalscientificjournal.com)

**EFFECTS OF SUSTAINABLE PROCUREMENT PRACTICES ON  
ORGANIZATION PERFORMANCE: A REVIEW OF LITERATURE**

---

**CHARLES KISIENGO CHOGO**

**PhDBA/0003/2018**

**LECTURER  
DR. SAMSON KITHEKA  
PhD-SCM**

**AUGUST 2019**

## **Abstract**

Sustainable procurement is vested under the umbrella of sustainability, choices that retain the correct environmental, social and economic balance to guarantee long-term organizational success. The main objective of the study was to assess the effects of sustainable procurement practices on organization performance. The study was further guided by specific objectives such as to determine the effects of local buying practices, determining the effects of the adoption of eco-friendly packaging, assessing the effects of reverse logistics and identify the effects of ICT adoption in procurement on the organization performance. The study was anchored on stakeholder theory, Knowledge Based View, Technology Acceptance Theory and Resource Based Theory. A conceptual framework was formulated to show the relationship between the selected sustainability procurement practices on organization performance. The study was done using literature review whereby several relevant journals were reviewed randomly. The study revealed that local buying, eco-friendly packaging, reverse logistics and ICT adoption has a significant effect on organization performance. The study recommended the adoption of the selected variables for organizational sustainability. The study further poised for future researchers to use different research design to see whether similar results can be found.

## **Key Words**

Corporate Social Responsibility, Eco-friendly packaging, Organization Performance, Reverse Logistics, Sustainable Procurement.

## **1.0 Background Information**

Sustainable procurement draws its roots from the broad concept of sustainable development established as one of the current global agenda for the future (Argandona, 2014). The focus of sustainable procurement objective is to meet the varied requirements of all individuals in current and future societies, to promote private well-being, social cohesion and to create equal opportunities (CIPS, 2014). It also enables organizations to satisfy their requirements for products, utilities, services and building works in a manner that achieves value for cash on a life-long basis in terms of creating advantages not only for the organization, but also for culture and economy, while at the same time maintaining environmental ability (UK Governments Sustainable Procurement Task Force & CIPS, 2014).

Welsh Procurement Initiative (2015) affirmed that companies are anticipated to develop holistic procurement methods with responsibilities for social, ethical and environmental procurement. This is to minimize the environmental impact through the supply chain and also offer alternatives

that are economically accepted. Thus, according to Rao (2014), these practices would generate values beyond use and not only for the buying organization, but also communicate the tangible advantages to society and economies are usually referred to as Sustainable Purchasing Practices. Organizations also need constant and rapid changes in today's competitive setting to gain fresh competitive benefits (Wu, & Pagell, 2015). Purchasing plays an important role in sustainable development. These policies, procedures and strategies therefore need to be expanded across all SC levels regardless of the limits of companies (Luthra, 2014). This involves engaging vendors at all levels to generate a value in the process of conversion. Guiding principles on sustainability motivate procurement to carry out evaluations that incorporate the Triple Bottom Line's environmental, economic and societal aspects (Meehan & Bryde, 2015).

Environmental and social sustainability problems have risen worldwide in latest years, resulting in pressure to alter the manner organizations conduct themselves, especially in the supply chain (Muthugala & Nayagam, 2015). Organizations need to embrace socially and environmentally accountable procurement (SP) procedures that affect all elements of the supply chain, including providers, customers and staffs, with the main aim of reducing environmental and social impact by the activities of suppliers (Carter & Jennings, 2014).

Nderitu and Ngugi, (2014) stated that Environmental issues have become a critical topic of concern for companies around the world in latest years. Environmental responsibilities have risen significantly as society becomes more aware of its surroundings and there is an growing amount of environmental legislation requiring businesses to be environmentally accountable (Zhu, Sarkis & Geng, 2015). In view of rising expenses of waste management, environmental degradation, public health issues, climate change, resource depletion and constant global poverty, the supply management profession is increasingly called upon to contribute to wider organizational objectives of sustainable development by including environmental criteria and social within procurement processes (Srivastava, 2015).

Firms, especially in the developing countries are experiencing an increased variety of internal pressures caused by investors, employees and policy makers for the improvement of social and environmental activities of their supply chains (Karim, Smith, Halgamuge & Islam, 2016). While the traditional economic dimension of the Triple Bottom Line (TBL) is widely used in business and measurements are well understood and developed, the new environmental and social

dimensions are less prevalent and much more difficult to measure and enforce in the Sub-Saharan African countries (Marc & Michael, 2015). This is due to the fact that there is little or no focus to long lasting environment concerns since most of the firms are exploitative and profit maximization (Marc & Michael, 2015).

Even though the Kenya government has put in place some range of institutional and legislative policies like NEEMA and EMCA to govern business activities for ensuring the protection of the environment, Odhiambo, (2015) reported that the success factors in procurement related activities are still lacking. All organizations in the nation must comply with the regulations and policies of the Act (Martin, 2012). Many private companies in Kenya are working to enhance their operations' environmental efficiency and SP have been seen to have a more influence on the organizational adoption (Martin, 2012). KIPPRA, (2016) showed that Kenya firms are struggling to balance the demand of sustainable procurement and the overall performance due to incremental in cost requirements to maintain the balance.

### **1.1.1 Sustainability in Procurement**

Sustainability in procurement is the administration of the procurement activities in the entire supply chain in the business with the precept of triple bottom line (Srivastava, 2013). Sustainable procurement (SP) coined with environmental purchasing or green purchasing, green procurement compares technology, price, the environmental impact of the product and quality, contract or service. Green procurement strategies apply to all organizations, irrespective of their size (Coddington, 2013). Green procurement programs can be as easy as buying renewable energy or recycling office paper or more engaged as setting environmental demands for providers and contractors.

In addressing SP practices, Brammer and Walker (2015) indicated that the dimensions of SP includes designing and Product packaging, purchase from tiny and local providers, recycling or reuse potential of products, reverse logistics, safety, labor rights, carbon reduction in product motion to equipment, operational excellence, product innovation, management, commitment of providers to waste reduction objectives. As a consequence, McMurray, Islam, Siwar and Fien, (2014) poised the organizations both locally and internationally have currently become interested in embracing the concept of SP in the purchasing process. The focus has been specifically on e-procurement, ethical procurement, green procurement and lean practices as broader determinate

of SP (Wild, Li, 2016; Angeles & Ravi, 2015). Academics and professionals investigated how the environment, society and economy are affected by organizations and their vendors (Karim & Arif-Uz-Zaman, 2015). Despite this growing concern, there is still no proof of organizational performance in the implementation of SP procedures.

## **2.1 Research Problem**

In this evolving region, which offers many potential directions for studies, several study gaps have been revealed, and one essential gap is to define the factors influencing sustainable procurement with their impact on organisational performance (Gupta & Palsule-Desai, 2014). In addition, most study in this developing procurement sustainability region was conducted at SC level and concentrated solely on environmental / green issues (Gupta & Palsule-Desai, 2014). The literature examining social sustainability contains negligible or very modest studies (Miemczyk, 2015). SCM's role is gaining due significance in the environmental leadership of an organization that extends beyond compliance, regulations and cost savings (Hutchins & Sutherland, 2015).

Luthra, (2014) has indicated that Companies do not have a clear strategy for day-to-day activities and methodologies or processes to include in their activities the sustainability into procurement processes. Currently, a report by Ernst and Young (2016) emphasized that buying plays a crucial role in incorporating the values of sustainable development across all the company functions of the company. While many organizations recognize the significance of sustainability, the challenge continues to implement an efficient plan for achieving a viable organization (Galphin, 2015). One such region is procurement that adds to sustainability in terms of resource consumption and the adverse effects of manufacturing operations, transport, distribution and disposal of products after their helpful lives that have never been adequately studied (Walker & Brammer, 2015).

Though a study by Walton, Handfield and Melnyk, (2015) demonstrated doubt that sustainable procurement strategies can pay off economically, Karim, Smith, Halgamuge and Islam, (2016) demonstrated that the SP can in fact lead to more financial commitment by the organization thus a reduction in financial gains. The findings by Walker, Alexander and Touboulic, (2014) In recent years, SP practices have been identified as key tools by which organizations can yield higher profitability. Surajit, (2015) performed a case study of the procurement procedures of an

Indian manufacturing company and found that SP practices enhanced the economic performance of the company by increasing revenues and market share. Furthermore, the results of Leary's (2016) research proposed that inner green supply chain management procedures have the greatest impact on economic performance and environmental cooperation with clients seemed to be the most efficient way to enhance economic performance. By comparison, Murakami and Kimbara (2016) have not found any important connection between green procurement and asset and sales returns, leading to the economic performance of a company.

Appolloni, Sun, Fu and Li (2014) indicated that the impact of SP practices on financial performance has not been extensively investigated, particularly in the Middle East countries, and Appolloni, Sun, Fu and Li (2014) examined the nature of the research conducted between 2013 and 2017, however some topics like social purchasing, ethical sourcing and supplier partnering have been covered, there was a missing connection between re-packaging and reverse logistics in the literature. In consumer behavior literature, packaging eco-friendliness has never been the topic of a definite conceptualization. Instead, scientists used various terms in their study of environmentally friendly packaging: green packaging design, sustainable design, eco-design, environmental design and environmentally conscious design (Boks & Stevels, 2015).

Sustainability opinions are also relative and vary across people, organizations, industries, places, and nations (Walker & Phillips, 2015). Cultural and geographical variations have been shown to contribute to substantially distinct procurement and production policies affecting SP (Samson & Ford, 2014). Research has not fully discussed what makes sustainable procurement possible in the context of Kenya (Kamau, 2015). It is therefore essential to discuss the role of sustainable procurement in maintaining the life-long output of the organization.

### **3.0 General Objective**

The general objective of the study was to determine the effects of sustainable procurement practices on organization performance: a review of literature.

#### **3.1 Specific Objectives of the Study**

- i. To assess the effects of local buying practice on organization performance: a review of literature.
- ii. To determine the effects of eco-friendly packaging on organization performance: a review of literature.

- iii. To assess the effects of reverse logistics on organization performance: a review of literature.
- iv. To identify the effects of ICT adoption in procurement on organization performance: a review of literature.

### **3.2 Research Questions**

- i. Do local buying practices affects organization performance?
- ii. Does eco-friendly packaging affects organization performance?
- iii. How does reverse logistics affects organization performance?
- iv. Does ICT adoption in procurement affect organization performance?

### **4.0 Review of Literature**

Studies have shown that sustainable procurement methods can transform economies, save cash, improve economic viability, improve the competitiveness of eco-industries, safeguard natural resources and promote job creation, which in turn will not only contribute to sustainable development within the organization, but to the region as a whole (Ha, Hong-Youl, & Swinder Janda, 2012; Rundh, 2015; Boks & Stevels, 2016; Schwepker & Cornwell, 2014; Rokka & Uusitalo, 2015; Adlmaier & Sellitto, 2014; Kiiver & Kodym, 2014; Aila & Ototo, 2018). The Recently, the strategic role of procurement and supply as a tool for sustainable development has been reinforced. At the same moment, owing to the growing awareness of society and political officials, environmental and social issues are becoming increasingly crucial in the management of any company. These developments have led to SP practices, which are now deemed an significant aspect of corporate governance that can empower organisations to promote their stated objectives (Shale & Rahma, 2014). Sustainability in procurement is based on the concept of sustainable development of the World Conference on Environmental Development (WCED, 2012), which gained more prominence during the RIO Declaration in Brazil, 2012 and Johannesburg South Africa's 3rd United Nations Conference on Environment and Development. This theory emphasizes sustainability initiatives such as social equality, economic growth and environmental protection.

A study by Foote, Gaffney and Evans, (2015) has revealed a significant relationship between sustainable procurement practices as a key competitive factor for organizations seeking existence in the long term operations. A study by Foote *et al.*, (2015) has further indicated that

sustainability in procurement should form an organization's integral part when formulating mission and vision for long terms achievements. Moreover, other studies (Amina, 2013; Lutz, 2012) The connection between sustainable procurement methods and company image, innovation, competitiveness, foreign direct investment, and the organization's strategic objectives and objectives has been powerful and positive. In the same vein, Surajit (2015) noted that Indian manufacturing businesses have accomplished their strategic objectives, targets, and enhanced company image and competitiveness through the implementation of world-class procurement procedures; while Yeow and Edler (2015) indicated that sustainable procurement can best be enabled through a systemic and service-oriented strategy and sustainable policies.

The current literature also noted that sustainable procurement methods are based on the belief that organisations can enhance the working environment (including health and security), effectiveness, compliance, accountability and decrease the use of natural resources (Angeles *et al.*, 2015; Gottschalk, 2011; Murakami *et al.*, 2016; Thøgersen, 2014; Walker *et al.*, 2015). A study done by Wild, (2016) in Chile for instance reported that Chile is a strong development performer, especially in terms of efficiency, transparency, and natural resources reuse through the implementation of sustainable procurement practices. Similarly, McMurray *et al.* (2015) stated that sustainable procurement involvements has facilitated improvements in efficiency, organizational working environments and conditions, and transparency which caused improved performances. In addition, Appolloni, *et al.*, (2014) found a strong positive relationship between green procurement practices like reverse logistics and eco-friendly packaging to improve on quality and operational excellence on Jordan Sugar Company.

McCrudden, (2014) has provided empirical evidence that environmental practices and integration with suppliers through ICT technologies in purchasing has a positively influence in organization performance. According to Walker *et al.*, (2014) organizations must look across their entire supply chains through integration to effectively address social and environmental impacts on the communication related activities like energy consumption. Suryawanshi *et al.*, (2015) has reported that sustainable ICT integration significantly reduced environmental implications at the sampled UK manufacturing firms. Similarly, Guenther *et al.*, (2015) stated that adaption of ICT capability in procurement activities in the sampled firms in Germany showed a reduction in reduced machine wear and tear and promoted recycling of the ICT



gadgets. Adams *et al.*, (2016) found that sustainable ICT is a key enable of sustainable procurement for organizational success.

## **5.0 Theoretical Framework**

### **5.1 Stakeholder Theory**

The Stakeholder theory was postulated by Freeman, (1984) and It is a management theory that bridges the ethics and capitalism fields and includes the social contract into the decision-making process of the organization. The theory sees how the stakeholder interactions of an organization interact in an ethical way to produce maximum value (Parmar, 2010). Over the previous three decades, it has risen in impact and implementation, partially in reaction to growing social issues about corporate energy development, misconduct and exploitation (Laplume 2012). It also promotes a increasing corporate social responsibility (CSR) study organization (Bhattacharya, 2012; Dawkins & Lewis, 2013) and sustainability (Porter & Kramer, 2015; Carroll & Buchholtz, 2015).

Gibson, (2013) has poised that The theory of stakeholders is organizational management and ethics theory. According to Rajzer (2014), an environmental injustice happens when the effects of economic harm are subjected to marginalized and/or unorganized stakeholders (i.e. those with low authority or lacking institutional legitimacy). For example, manufacturing businesses have acknowledged that stakeholder perceptions of attempts to achieve corporate citizenship can have a important effect on their social license to function within a locality by buying local resources for a competitive edge ((Fitzpatrick, 2011; Prno & Slocombe, 2012). Manufacturing companies can gain a societal acceptance on their projects when local suppliers are engaged and empowers such suppliers (Thomson & Boutilier, 2011). Manufacturing companies are subjected to media publicity by their actions at the local level (Prno & Slocombe, 2012).

It has been shown that corporate reputation has a important effect on many elements of a company's performance, including earnings (Roberts & Dowling, 2012), stakeholder relations (Deephouse, 2013), competitiveness (Deephouse, 2013; Fombrun, 2014), attracting job candidates, clients and investors (Fombrun, 2014). Fombrun and Van Riel (2014) proposed that since many characteristics of a business and its products are concealed from viewpoints, suppliers are instruments depicting reputational data that enhance the trust of an observer in the products and services of the business for future achievement.

## 5.2 Knowledge Based View

The firm's knowledge-based view (KBV) addresses the issues surrounding the multi-person firm's existence, boundaries, and internal organization (Foss, 2016). The point of departure is that knowledge is the key explanatory factor, and the nature of knowledge (tacit, socially constructed) is an important determinant to enhance understanding of firm organization and behavior and is competitive in operations. In the knowledge-based production, the role of organizational factors is critical. The company's competitiveness depends not so much on its product-market placement as on its inner features in comparison to external rivals. Foss, (2016) further stated that performance differences between organizations are increasing in the KBV owing to their distinct knowledge stocks and their distinct information use and development capacities. From this view, the company can be understood as a social group that specializes in velocity and effectiveness in knowledge creation and transfer (Kogut & Zander 2014).

Over the past two decades, the competitive climate of companies has altered dramatically. In the process of globalization and technological change, the function of traditional sources for competitive benefit has worsened (Spender & Grant, 2014). Monopolies have collapsed through market deregulation, and economies of scale seem to yield decreasing yields. The high-tech shift generates innovation incentives and possibilities for entrepreneurs. Large and established businesses also need to adapt to modifications in the company setting (Szulanski, 2013). As James (2012) noted, companies simultaneously exploit the existing potential, but by exploring new business opportunities try to adapt to the ongoing changes. Discontinuities can be transformed into possibilities either through proactive development and self-renewal (Pöyhönen, 2014), or through collaboration and learning from innovative companies. Through acquisitions, alliances and cooperative R&D projects, large businesses build appropriate capacities. Microsoft, Cisco and Nokia, for example, have diversified their capabilities by acquiring Internet, content and software capabilities (Blomqvist, 2012).

According to Liebeskind (2014), the function of human capital has become enormously crucial in worldwide knowledge-based competition. Individuals are no longer mere components of a manufacturing scheme, but the most significant manufacturing factor—knowledge—is owners and controllers. According to the company's knowledge-based perspective, a company should be

recognized as a social group that specializes in velocity and effectiveness in knowledge creation and transfer (Kogut & Zander, 2016).

### **5.3 Technology Acceptance Model (TAM)**

TAM's fundamental form, as postulated by Davis (1986), indicates that intentions to use a technology arise from customer expectations that the technology will be helpful for enhancing the quality of job along with perceptions of how simple perceived ease of use is to use the technology. More specifically, TAM is regarded the degree to which a individual thinks his or her job performance would be improved by using a specific scheme (Davis, 1989). Due to the limited availability of growth and deployment resources, technology recognition and sustainability evaluation is essential for technology designers and investors in the decision making process (Donston, 2015). The outcome (acceptance of technology, sustainability and returns on investment) is determined not only by the quality of the technological solution, but also by social and economic factors that developers often cannot or can only partly impact (Esty & Winston, 2016).

Green Information Technology (IT) as regarded by Molla and Abareshi (2011) as the systematic implementation of ecological-sustainability criteria such as pollution prevention, product stewardship and the use of clean technologies for the development, procurement, use and disposal of IT technical infrastructure as well as human and managerial elements of IT facilities. The environmental impact of using IT is classified into two particular groups, namely the impacts of first and second order (Hilty et al., 2016). The effect of the first order is due to the adverse impact of IT manufacturing, use and disposal on the environment. Therefore, making this effect greener was called Green IT, which mainly believes the environmental impact of IT to be mitigated as a issue. The second-order effect, on the other side, includes the beneficial impact of using information systems (IS) to enhance business and society's eco-sustainability; this is termed Green IS (Molla, 2012; Gholami, *et al.*, 2013).

By referring to the perspectives of several scientists such as (Butler & Daly, 2013; Chen et al., 2014; Viaro *et al.*, 2014), IT plays an important role in generating and determining sustainability problems such as Green Information Technology (GIT). Accordingly, as Molla and Abareshi (2012) consider IT hardware manufacturers and IT manufacturers must exercise

environmental sustainability in the management industry, including sustainable development, product management and pollution prevention.

#### **5.4 Resource Based View (RBV) Theory**

Proposed by Penrose (1959), from its introduction in the International Journal of Physical Distribution and Logistics Management (IJPDLM) by Olavarrieta and Ellinger (1997), the Resource Based View (RBV) has a powerful background of usefulness in the Strategic Supply Chain Management and Logistics (SCML) literature. The RBV offers a helpful lens in the study of reverse logistics to examine the effect of particular company resources, such as IT, on the results of a return program (Richey et al., 2013). The RBV seeks the adjustment for superior results over sustainability of resource-connected procedures. Therefore, the concept of competence in the performance of certain company tasks was earlier dismissed (Ellinger *et al.*, 2012). Similarly, in latest studies by Sauvage (2013) and Adams et al. (2014), the RBV regarded the notion of technology offering a critical organisational resource as supporting the resources for authorizing, monitoring and managing yields.

Penrose (1959) suggested that firms' growth mainly results from the development of firms' skills, rather than merely being the inevitable consequence of circumstances in the internal company setting, can leverage for differentiable benefit. These skills stem from the assembly and configuration of resource packages (Barney, 2014), which enable the company to gain higher rents than competitors. Distributed uneven resources among competing firms enable these bundles to create a competitive advantage for companies that efficiently deploy such resources (Mahapatra et al., 2010). A focal resource must also be essential for partner results in order for the RBV to be relevant within the framework of supply chain management.

A well-designed program of reverse logistics can become a strong competence (Rogers & Tibben-Lembke, 2014). According to Genchev *et al.*, (2010) reverse logistics entails logistical competency for the management of the procedures needed for the effective use of firm-specific funds in the handling of yields and related customer feedback duties by a company. Resource views also contribute to the knowledge of the diversity of companies in packaging (Hunt, 2014) by demonstrating that resources are spread heterogeneously among companies in a market and companies seek an edge over rivals by assembling superior resources.

## 6.0 Conceptual Framework

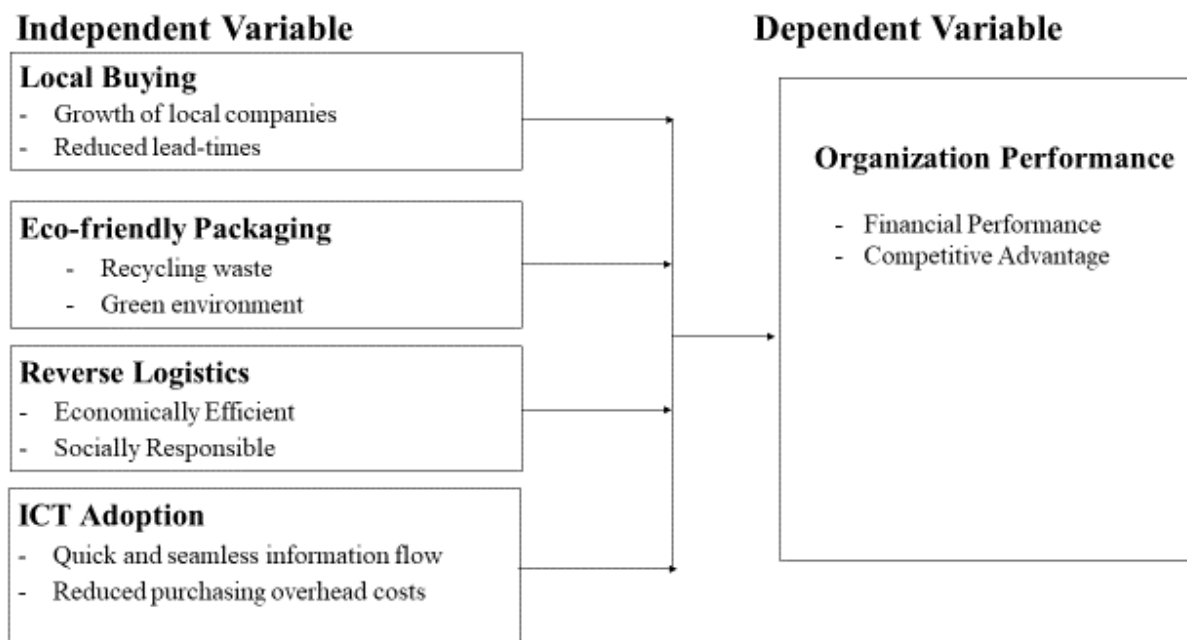


Figure 6.1 Conceptual Framework

### 6.1 Local Buying

As stated by Giovannucci, Daniele, Elizabeth Barham and Richard Pirog (2014), shopping locally is a strategy whereby the firm incorporates into its primary processing products or services which are bought from the a near geographical proximity. While the exact proximity requirements may vary, Giovannucci *et al.*, (2014) further indicated that the firm should only engage the suppliers who can be easily reachable in the local geographical area. Locally manufactured products have a number of ecological advantages including decreased carbon footprints, a lower need for conservatives that extend the shelf life and lower packaging (Local Living Economies Business Alliance 2016; Shuman 2012). Individual actors, technologies and local practices are involved in the micro-level (niche level) (Loorbach, 2016).

Walton *et al.*, (2015) has indicted that since local buying is embedded on social aspect, programs of inclusion with the main actors like employees, customers and the community should be in place for a better sustainability. The favorable profile of client and community assistance is often beneficial for these operations. Leaders of organisations, especially home where they work, are progressively anticipated to guarantee that their companies act as 'excellent corporate citizens' (Brammer, 2012). Delmas and Pekovic (2013) have stated that there is a proof that significantly

shows that local buying enhance organization performance based on reduction of lead times, better supplier-buying understanding, less inventory for efficiency and non-cultural differences. The strategy of local buying creates a sense of belong by the key community that can support the operational activities of an organization since organizations operates on a definite location (Delmas & Pekovic's 2013).

The environmental elements of sustainability of procurement tend to influence the use of funds in the fields in which they function (Hussein and Shale 2014). Only green procurement in the entire life cycle of products, from acquisition to disposal, can be achieved as an environmental consideration in the procurement process. The local purchase of raw materials enables guarantee that goods are recyclable, power consuming, biodegradable and non-ozone depleting substances to boost corporate efficiency (Hussein & Shale 2014).

## **6.2 Eco-friendly Packaging**

In the supply chain, packaging not only plays an important role in protecting products and enabling effective logistics, but also in terms of its crucial marketing function (Rundh 2015). The Sustainable Packaging Coalition (2015) has highlighted eight framework of sustainable packaging as a packing that has to be the use of recycled resources and is produced using clean-production techniques and best practices, produced from good material throughout the life cycle ; is physical, healthy to people and groups, useful, secure and healthy during their whole life cycle ; fulfills efficiency and cost market requirements. On the other hand, Boks and Stevels (2016) have stated that the eco-friendly packaging falls into three broader categories Government, science and consumers, for example. Therefore, environmental-friendly packaging can be evaluated in that context. Government ecological efficiency is linked to legal demands such as how hazardous materials should be recycled or disposed of. Scientific green usually takes a view on life cycle assessment and determines the impact of products over the life cycle of the product. Finally, the consumer category deals with consumers' perceptions of eco-friendliness and consumers' responses to packaging (Boks & Stevels, 2016).

The determinants of consumer intent to buy ecologically packaged goods have been researched by Schwepker and Cornwell (2014). Schwepker and Cornwell (2014) proposed that customers are increasingly prepared to implement modifications in their packaging usage, while considering the determinants of the ecologically packaged products by considering a significant

number of components. Schwepker and Cornwell (2014) have demonstrated that the internal control environment, the issue of perception of pollution, the litter attitude and the ecologically aware living environment were important among the discriminatory factors. Thøgersen's research (2014) showed that eco-friendly communication should be credible to be effective and therefore meet certain requirements. Generally speaking, the credibility of marks issued by autonomous regulatory authorities appears to be improved (Parguel, 2014). With regard to the reflection of ecologic perception, ecological packaging has several impacts on the attitudes and behavior of customers in favor of a product or brand (Thorndike, 2014). For instance, Walsink (2016) took a 4Rs (reduction, reuse, recycling, re-thinking) campaign aimed at optimizing the sustainability of packaging and focusing on improvements in packaging that could reduce materials, increase recycled content and increase the volume of renewable materials involved in the manufacturing of packaging. Same initiatives have been put in place by Coca-Cola Company to enable their packaging to be recovered and reuse by developing Plant-Bottle Packaging to promote recycling and to carry out projects to reduce the quantity of the stuff used in their packages (Rokka & Uusitalo 2015).

### **6.3 Reverse Logistics**

In recent decades, the environmental effect of goods has become an significant concern (Gurtoo & Antony, 2015). With governments increasing their environmental standards and clients becoming increasingly aware of the environment, industry needs to decrease the effect of their products on the environment. Companies have tried and participated in the supplier chain (SC) to increase their own environmental efficiency (Chiarini, 2013). This reality has prompted companies to reflect on environmental management through the responsible disposal of waste and the application of Reverse Logistics. RL operations are therefore usually incorporated into environmental policies of a company (Basaran, 2013) and disposing strategies are also included. RL is primarily concerned with waste management, recycling of materials, restoration of components or remediation-through reprocessing (Pokharel & Mutha, 2016). Reverse logistics is more than container reuse and packaging material recycling. As illustrated by Adlmaier and Sellitto, (2014), reverse logistics also involves recycling of waste products, monitoring of logistics returns and proper disposal of waste products Redesign packaging to use fewer materials or reduce transport energy and pollution is an significant task, however it could be secondary to the actual significance of reverse logistics as a whole. In reverse logistics the

treatment of returned products is also part of the reverse logistics (Adlmaier & Sellitto 2014) processing, seasonal stock, replenishment, rescue, hazardous material recall and disposal schemes, asset recovery and damage. As Stock (2016) put it, the acknowledgement of the strategic significance of inverse logistics activities in organisations is an exciting and important trend in supply chain leadership. The reverse logistics transactions are conducive to diverse actions ranging from what is called "green logistics" to activities that include product yields, repair and renovation (Srivastava, 2013). This includes "initiatives for reducing the environmental impact of the supply chain." Reverse logistical procedures can decrease the danger to the client when purchasing a product and improve the value of the client (Russo & Cardinali, 2012).

Reverse logistics can form a vital aspect of an extended logistics strategy that drives efficiency, efficiency and differentiation as companies are increasingly capable of recovering value from their products through their reverse logistics method (Carter & Narasimhan, 2013; Rogers & Tibben-Lembke, 2015). In previous studies on reverse logistics, the development of reverse logistics competences and operational cost savings had a positive association (Jack et al., 2010). Companies that can collaborate to develop a reverse logistical skill can reduce, reuse and recycle products, in ways that competitors cannot, resulting in cost savings and an increasing concentrate on service issues such as satisfaction, leading to a higher objective level of efficiency for sustainable development and excellence for the corporate organization.

#### **6.4 ICT Adoption**

Green ICT is a pioneering approach of using ICT related to the environment protection and sustainability of ICT in future as well as consists of practices to achieve corporate social responsibility by minimizing carbon footprint, ICT waste and energy conservation (Suryawanshi & Narkhede, 2015). IISD (2012) found that green ICT positively affect sustainability by lessening direct effects on the environment of the manufacturing, distribution, operation and discarding of ICTs equipment through enhanced energy and resources efficiency, increasing the usage of renewable sources of energy, reducing toxicity in materials and improving recycling and disposing of ICTs at the end of their lifetime. The environmental concerns have affected the field of green ICT, which is currently regarded to be the most innovative for conducting businesses (Onwezen et al., 2013). Through dematerialization and internet distribution, transport and travel replacement, a range of surveillance and management apps, increased energy



efficiencies in manufacturing and use, as well as product management and recycling (Kiiver & Kodym, 2014), ITCs can also play a beneficial role. The concept of ICT for sustainability involves environmental protection. By using software and hardware which have minimal environmental impacts (radical innovation) or improvement (incremental innovation) and by using ICT in environmental diagnosis and resolution (Lay, Schroeder & Biege, 2015).

The immediate advantages of reducing CO<sub>2</sub> are the basis for attraction, which are primarily reflected in the savings from the decreased power usage (Mingay 2016). Bachour and Chasteen (2016) think that Green IC TM implementation in organizations, while adopting the triple fundamental criteria of financial viability, social responsibility, and the effect on the environment, implies efficient use of technology. Green ICT's potential to be significant can be influenced by reducing negative environmental or indirect impacts of ICT by using data systems in support of other business initiatives to reduce their negative impact on the environment (Jenkin, Webster and McShane 2014).

Full acceptance of sustainable ICT requires communication and communication with suppliers, public institutions, customers as well as interaction between employees or organizational members (Chen, & Watson, 2014). Conditioned on the adoption of Green ICT, the application of certain cooperative, green company procedures, based upon a green web service is the corporate environmental policy basis. The situation is similar when new green processes are being modeled and implemented, which cannot be achieved without Green ICT acceptance, and without the application of green data systems at a wider stage (Chen, & Watson 2014). Molla and Abareshi, (2015) discovered that the use of environmentally-friendly virtual settings such as green cloud-based computing, green internet and green social networks contributes to maximizing the advantages of the virtual setting and minimizing its ecosystem impact while managing associated buying operations. In addition, Greening IT is expected to play a significant role in improving company sustainable creativity (Tung, 2015).

## **6.5 Organization Performance**

Strong governance and constant redesign to achieve outcomes are the organization's capacity to achieve its goals through sound leadership (Sarkis 2015). Companies extend their productivity examination to include a dual corporate / customer view from a standard corporate view. This extended strategy can assist to reconcile disputes or leverage synergies between enhancing quality of service and increasing efficiency of services (Sarkis, 2015). Bobis and Staniszewski

(2014) noted that sustained procurement has emerged as a key instrument for an organization to utilize competitively advantageous Kennard, (2016) stated that sustainable procurement is a method in which the economic development, social development and preservation of the environment are balanced against company requirements. He describes the advantages of a sustainable procurement policy, through the evaluation of results and respect for environmental and social legislation as part of price control, enhanced inner and external standards. Sustainable procurement is a continued business for a long-term achievement of an organization.

Procurement was acknowledged as an important strategic topic with a major effect on organizational performance as it is guided by the values of transparency, responsibility and value for cash or organizational resources consumption (Aila & Ototo, 2018). Furthermore, Aila and Ototo (2018) have pointed out that until recently, the fourth aspect of their projects was concentrated primarily in three aspects on acquisition professionals and professionals; price, quality and time but with economic dynamics; sustainability.

A study by Kniazeva and Belk, (2016) considered packaging as a significant advertising item and its success depends on its speech being adapted to consumer expectations and private values once done appropriately, acts as a marketing tool for the organization. Similarly, Schwepker and Cornwell (2014) suggested that consumers are more and more willing have e repeated purchase from the firms that adopt the eco-packaging system. Jackson et al. (2016) have shown that e-business technology to reduce dyadic coordination expenses is leading to enhanced economic results. E-contracting contributed to common procedures and transactions to strategic operations and expenditure savings (Smart, 2010). E-business technology could be used to promote both client integration and provider integration and operational efficiency in the provider chain according to Devaraj et al. (2014). Ordanini and Rubera (2016) found that there was an enhanced organization performance by the organizations which adopted sustainable ICT in procurement process as compared to those that did not.

Sustainable procurement can be a lever to deliver broader firm's objectives, local buying, eco-friendly packaging, reverse logistics, supplier involvement, ICT adoption, being accountable among other concepts for a life-long of an organization existence. Sustainable procurement can stimulate innovation, support social and economic environment as embedded in the triple bottom line for the organizational recognition leading to better return on investment and competitive

advantage (McCrudden, 2014). This provides the foundation for incorporating sustainable development in procurement procedures to guarantee the achievement of wider objectives and tasks of the company. Reviews of the SP Chen, Paulraj and Lado pillars (2015) indicated that each of the pillars plays a role in ensuring a competitive edge for organizations.

## **7.0 Research Methodology**

### **7.1 Research Design**

The research design is defined by Burns and Grove (2014), as a criteria and guidelines for carrying out a research study for the utmost control over factors that can interfere with the validity or objectivity of the findings. For this review, a descriptive research design was used. Burns and Groove, (2014) asserted that a descriptive design is geared in finding who, what, when and how phenomenon from the major hypothesis of the study. Sekaran, (2015) observes that the goal of descriptive research is to offer the researcher with a deliberate important feature of the phenomenon/ issues for the concerned which can be based on the organization, business or other perspectives. Elahi and Dehdashti, (2015) depicted that a descriptive research design is suitable when the objective is to establish the extent of the relationship between the variables.

### **8.0 Research Findings**

The main aim of this study was to determine the effects sustainable procurement practices on organization performance through review on literature. The specific objectives used were local buying, eco-friendly packaging, reverse logistics and ICT adoption on procurement performance. The research findings were presented as follows;

#### **8.1 Response on the Effects of Local Buying on Organization Performance**

Findings from reviewed journals showed a significant effect of local buying on organization performance. For instance, Walton *et al.*, (2015) indicted that local buying is embedded on social aspect, programs of inclusion with the main actors like employees, customers and the community for a better sustainability. The favorable profile of client and community assistance often advantages these actions. Hussein and Shale (2014) discovered that environmental sustainability elements tend to influence the use of resources in the fields in which they work, including in-house resources. The findings therefore reveal that local buying significantly affects organization performance.

## **8.2 Response on the Effects of eco-friendly packaging on Organization Performance**

Findings on the eco-friendly packaging indicated that the eco-friendly package increases on the customer intention to purchase. Significantly, a study by The Sustainable Packaging Coalition (2015) highlighted eight framework of sustainable packaging as a packing that has to be profitable, secure and healthy for people and groups throughout their life-cycles ; meets efficiency and cost market requirements, comes from renewable energies, are produced, transferred and recycled which is cost effective. The findings revealed a significant effect of eco-friendly packaging on organization performance.

## **8.3 Response on the Effects of reverse logistics on Organization Performance**

The third objective was to assess the effect of reverse logistics on organization performance. A major literature by Pokharel and Mutha (2016) discovered that the RL's primary emphasis is on waste management, material recovery (recycling), part restoration or item recovery-through remanufacturing (inverse logistic is more than reusing containers and packaging recycling equipment). Jack et al., (2014) discovered beneficial links between inverse logistics skills growth and operational cost savings at an organization. Therefore, reverse logistics was found to have a significant effect on organization performance.

## **8.4 Response on the Effects of ICT adoption on Organization Performance**

The last objective was to determine the effect of ICT adoption on organization performance. The reviewed literature revealed an effect on ICT adoption. For instance, Suryawanshi and Narkhede, (2015) found that green ICT positively affect sustainability by reducing its impacts on the environment, by improving energy and energy effectiveness, improving use of renewable power sources, reducing the use of poisonous products and improving recycling and the end-of-life disposition of ICTs. Molla and Abareshi, (2015) discovered that the use of environmentally friendly virtual settings (such as green cloud computing, green internet and green social network) helps maximize the advantages of the virtual setting and minimize its impact on the ecosystem during procurement. The findings therefore revealed a significant effect of ICT adoption on organization performance.

## **9.0. Conclusions, Recommendations and Suggestions for Future Study**

### **9.1 Conclusions**

Sustainability in procurement is a current and pivotal aspect in organization success and prosperity without detriment on the future resource requirements. Sustainability of procurement is a matter of sustainability, which involves choices that preserve a proper equilibrium of environment, society and business in order to guarantee the continued achievement of the organization. The determinants of procurement sustainability used in this study (local buying, eco-friendly packaging, reverse logistics and ICT adoption) showed a positive significant effect on organization performance. From the findings, it can be concluded that all the variables used in the represents the triple bottom line for sustainability in procurement for an organizational success.

### **9.2 Recommendations**

On the basis of the important role played by sustainable procurement in corporate performance, it is essential that organizations begin to regard sustainable procurement as a strategic value, and that SP not only changes the organizations ' future but also has positive effects on the environment, on industry and on culture as a whole. Organizations need a great transformation in their business in order to tackle sustainable procurement problems through change and to enhance environmental, social and financial efficiency during the entire procurement cycle and by process of acting the interests of their stakeholders and the interests of society at large.

### **9.3 Suggestions for Future Study**

Since this study was based on empirical review of relevant literature, future study can consider using other research methods so see whether similar results can be achieved. Further, future researchers may also consider using other determinants such as earlier supplier involvement as a measure of procurement sustainability.

## REFERENCES

- Adlmaier, D. & Sellitto, M.A. (2014). Returnable packaging for transportation of manufactured goods: *A case study in Reverse Logistics*, 17(2), 395-406.
- Aila, F.O. and Ototo, R.N. (2018). Sustainable procurement concept: Does it all add up?" *International Journal of Development and Sustainability*, 7(2), 448-457.
- Bitektine, A. (2011). Toward a theory of social judgments of organizations: The case of Legitimacy, reputation, and status. *Academy of Management Review*, 36(1), 151-179.
- Brammer, S. & Walker, H. (2015). Sustainable procurement practice in the public sector: An international comparative study. *International Journal of Operations Production Management*, 31, 452-476.
- Chartered Institute of Purchasing & Supply (2015). *Negotiating and Contracting in Procurement and Supply*. UK Approach.
- Chen, I.J., Paulraj, A. & Lado, A.A. (2015). Strategic purchasing, supply management, and firm performance", *Journal of Operations Management*, 22(5)505-523.
- Chen, J.A. & Watson, (2014). An Institutional Perspective on the Adoption of Green IS & IT. *Australis International Journal for Information System*, 11(17), 5-27.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS quarterly*, 319-340.
- Donston, D. (2015). Green IT generates fertile ideas. *E-Week*, 24(16), 46.
- Esty, D., and Winston, A. (2016). *Green to Gold: How a smart company uses environmental strategy to innovate, creates value, and builds competitive advantage*. John Wiley and Sons.
- Flapper, S., (2012). Control of a production-inventory system with returns under imperfect advance return information. *European Journal of Operational Research*, 218 (2)392-400.
- Gottschalk, P. (2011). *Corporate Social Responsibility, Governance and Corporate Reputation*. WSPC. New Jersey.
- Gupta, S. & O.D. Palsule-Desai, (2014). Sustainable Supply Chain Management: Review and Research Opportunities. *IIMB Management Review*, 23, 234-245.
- Henri, J., & Journeault, M. (2016). Environmental performance indicators: an empirical study of Canadian manufacturing firms, *Journal of Environmental Management*, 87 (8) 165-176.
- Herrmann, C. (2016). Environmental footprint of ICT equipment in manufacture, use and end of life. *European Conference and Exhibition on sustainability*, August, 2015.
- Hilty, L. M., Lohmann, W. & Huang, E. M. (2015). *Sustainability and ICT – and overview of the field*. Notizie di POLITEIA.

- Jackson, S.A., Mishra, R. & Napier, R. (2016). Examining the impact of design for environment and the mediating effect of quality management innovation on firm performance. *International Journal of Production Economics*, 173(3) 142-152.
- Jenkin, A.T.; Webster, J.; McShane, L. (2014). An agenda for Green information technology and systems research. *International Journal for Production* 4(1), 17–40.
- Karim, M.A. Smith, A.J.R., Halgamuge, S. & Islam, M.M. (2016). A comparative study of manufacturing practices and performance variables. *International Journal of Production and Economics*. 112, 841–859.
- KIPPR, (2016). *Public procurement policy in Kenya: The need for a coherent policy framework*. Policy brief no. 3/2006.
- Lay, G., Schroeder, M. & Biege, S. (2015). Service-based business concepts: a typology for business-to-business markets. *European Management Journal*, 27(5), 442-455.
- Leary, S. (2016). *Green Supply Chain Management Practices and Firm Performance: Evidence from Finland*; Painosalama Oy: Turku, Finland.
- Lysons, K. & Farrington, B. (2012). *Purchasing and Supply Chain Management. Eight Edition*. Pearson Education Limited. Essex.
- Madeleine Cobbing, (2016). *Environmental Consultant, Greenpeace International Guide to Greener Electronics*.
- Mark, S., Philip, L., & Adrian, T. (2014). Research methods for business students. *Harlow: Prentice Hall*.
- Mingay, S. (2016). Green IT: *The New Industry Shock Wave*, Available online: [http://www.ictliteracy.info/rf.pdf/Gartner\\_on\\_Green\\_IT.pdf](http://www.ictliteracy.info/rf.pdf/Gartner_on_Green_IT.pdf).
- Mitra,S, (2013). A survey of sustainable supply chain management practices in Indian manufacturing firms. *Working Paper Series* (WPS No. 723/ February 2013).
- Menguc, B.; Auh, S.; Ozanne, L. (2016). The interactive effect of internal and external factors on a proactive environmental strategy and its influence on a firm's performance. *Journal of Business Ethics*, 4(94), 279–298.
- Murakami, K.; Kimbara, T. (2016). Does CSR Enhance the Transfer of Environmental Practices to Overseas Subsidiaries? *Journal of Business Administration*, 7(4), 1–8.
- Nderitu, K. M & Ngugi, K. (2014). Effects of Green Procurement Practices on an Organization Performance in Manufacturing Industry: Case Study of East African Breweries Limited. *European Journal of Business Management*, 2 (1), 341-352.
- Porter, M.E. (2016). *The Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press, NY.

- Porter, M.; van der Linde, C. (2015). Green and competitive: Ending the stalemate. *Hary Business Review*, 73, 120–134.
- Rao, P. (2014). Greening the supply chain: a new initiative in South East Asia. *International Journal of Operations Production Management*, 22(6)632–655.
- Rokka, J. & Uusitalo, L. (2015). Preference for green packaging in consumer product choices. Do consumers care? *International Journal of Consumer Studies*, 32(5)516-525.
- Sarki, D. & Tamarkin, B. (2015). *World class supply management. The key to supply chain Management*. Tata McGraw Hill 7th edition
- Samson, D.; Ford, S. (2014). Manufacturing practices and performance: Comparisons between Australia and New Zealand. *International Journal of Production of Economics* 65, 243–255.
- Sirmon, D.G., Hitt, M.A. & Ireland, R.D. (2015). Managing firm resources in dynamic environments to create value: looking inside the black box. *Academy of Management Review*, 32(1) 273-292.
- Surajit, B. (2015). World Class Procurement Practices and Its Impact on Firm Performance: A Selected Case Study of an Indian Manufacturing Firm. *Journal of Supply Chain Management* 6(1), 27–39.
- Thøgersen, J. (2014). Green shopping: for selfish reasons or the common good? *American 366 Behavior Scientist*, 55(8)1052-1076.
- Vanpoucke, E., Vereecke, A. & Wetzels, M. (2014). Developing supplier integration capabilities for sustainable competitive advantage: a dynamic capabilities approach. *Journal of Operations Management*, 32(7/8) 446-461.
- Wang, E.S.T. (2013). The influence of visual packaging design on perceived food product quality, value, and brand preference. *International Journal of Retail and Distribution Management*, 41(10) 805-816.
- Wansink, B. (2016). Can package size accelerate usage volume? *Journal of Marketing*, 60(3)1-14.
- Walker, H. & Phillips, W. (2015). Sustainable procurement: Emerging issues. *Journal of Public Procurement*, 5(2), 41–61.
- Wu, Z. & M. Pagell (2015). Balancing Priorities: Decision-making in Sustainable Supply Chain Management. *Journal of Operations Management*, 29, 577- 590.