

RELATIONSHIP BETWEEN SUPPLIER COLLABORATION AND RETAIL STORES PERFORMANCE IN NAIROBI COUNTY, KENYA: INTERVENING ROLE OF SUPPLY CHAIN RESILIENCE

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International Academic Journal of Human Resource and Business Administration

(IAJHRBA) | ISSN 2518-2374

Received: 14th June 2021

Published: 16th June 2021

Full Length Research

Available Online at: http://iajournals.org/articles/iajhrba_v3_i10_46_66.pdf

Citation: Mwangi, P., Ragui, M., Arani. (2021). Relationship between supplier collaboration and retail stores performance in Nairobi County, Kenya: Intervening role of supply chain resilience. *International Academic Journal of Human Resource and Business Administration*, 3(10),46-66

ABSTRACT

In Kenya, retail chains are facing disruptions due to high competition, increase in globalization and high level advancement in technologies and virus health crisis- Covid-19 pandemic posing a threat to profitability earnings. To improve on performance, retail stores are instituting supplier collaboration as a precursor of supplier chain reliance. Leading retail stores such as Tusks and Uchumi have recorded declines in performance motivating supplier collaborations. The objective was to determine influence of supplier collaboration on performance of retail stores in Nairobi County, Kenya and to establish intervening role supply chain resilience in the relationship between supplier collaboration and performance of supermarkets in Nairobi City County. The study was anchored on transaction cost theory. The study used cross-sectional descriptive survey research design. The target population was 32 retail stores in

Nairobi City County. The study respondents were 160 staff working in the retail stores. Correlation results found a strong, significant and positive association between supplier collaboration and firm performance on supermarkets. Further regression results revealed that supplier collaboration had a statistically significant and positive effect on performance of supermarkets. The results established that supplier chain resilience has a significant intervening role in relationship between supplier collaboration and performance on retail stores in Kenya. The study concluded that enhancing supplier's chain resilience through supplier's collaboration significantly contribute performance on retail stores IN Nairobi County, Kenya.

Key Words: **Supplier Collaboration, Supplier Chain Resilience, Performance, Globalization, Competition**

INTRODUCTION

The world has increasingly become complex, uncertain and very competitive. In order to remain competitive and relevant in the market, most organization has resulted to supplier relationship management. Provider relationship the executives are picking up force all-inclusive because of gigantic challenge in the corporate world just as the retail chains industry. Suppliers Relationship Management (SRM) is the improvement and enhance supply chain risk management with fundamental providers and empowers ventures into pondering the production network and inventory network straightforwardness. Suppliers Relationship Management (SRM) foster the development and safeguarding of key relationships, enhance risk management in supply chain and achieve expected firm performance. The vital centered results display (SFOM) classifies joint effort into three. These are Market coordinated effort in risk management which incorporates exercises as shared promoting; information sharing, joint moving and conveyance channel the board. Operational coordinated effort which incorporates shared operational risk mitigation, creating and sharing of market risks and supply integration. Vital coordinated effort which incorporates adjusting supplier capability, sharing fundamental innovations, shared generation designing, creating joint market

approaches and creation of joint capital consumptions in an effort to achieve firm performance (Tan Leong, 2009).

Many researchers have studied supply chain collaboration and its benefits since the early 2000s (Horvath, 2001; Min et al., 2005; Sahay, 2003; Zacharia et al., 2009; Lehoux et al., 2014). Cost savings from lower inventory levels and reduction in the number of warehouses and distribution centres are some of the usual consequences from supply chain collaboration. Firms that collaborate can improve their business performance; improve customer satisfaction, increase market share, and gain more revenue while at the same time enhances their positive relationship with supply chain partners. In the current competitive environment, all firms are faced with numerous challenges such as supply chain disruption, short product life cycle, natural and man-made disasters. However, firms cannot respond to such challenges on their own. They need to work with their supply chain partners and stakeholders in order to be better equipped in dealing with such challenges. Entering into alliances and collaborating with supply chain partners can help reinforce the resiliency of supply chains. At the heart of this collaboration is the sharing of information and data.

Supply chain disruption include limited to delivery failure, incapacities to meet agreed quantity demands, occurrence of irregular supply data long lead time as well as unstable delivery (Prahinski & Benton, 2014). Supply chain resilience in the chain of supply requires reengineering of the functions of the supply chain along with their activities, the suppliers collaboration in the entire supply chain, development of an agile supply chain, and formulation of a culture of supply chain disruption mitigation in an entity (Grant & Stolt, 2020). Retail stores are increasingly being warned on disruption along supply chains which are key components of global economies. Developing supply chain resilience across their supply chains to mitigate the disruptions they face emanating from global pandemics, complications in the functioning of supply chains and technology to be able to gain competitive advantage and gain performance targets (Goldbeck, Angeloudis & Ochieng, 2020).

Globally, supply chain disruptions such as global health Covid-19 crisis have transform the market environment for many retail stores and bring forth the significance of firms ability to react, response, adapt and execute supply chain disruptions management practices to overcome disruptions in supply chain operations. Retail chain stores are strengthening supply chain operations and management of disruptions to attain supply chain resilience (Telukdarie, Munsamy & Mohlala, 2020). Driven by ever-changing macroeconomic environment and competitive business conditions, supply chain disruption management practices have become important for continuous flow, production, scheduling of transport after recovery leading to effectiveness, efficiency and responsive supply chains in manufacturing companies. According to CIPS (2013), supplier collaboration has been adopted in response disruption in supply chains to foster openness, effective communication, trust, honesty, transparency, sharing, mutual benefit, and close co-operation between the buyer firm and selected suppliers. As discussed in the theoretical framework, the logic underpinning supplier collaboration between a buyer firms and its key suppliers is drawn from the Resource

Dependency Theory (Ukalkar, 2010). According to Bowersox, Closs, Cooper and Bowersox (2013), there are five basic forms of collaboration which are based on acknowledged dependency and information sharing between buyer firms and suppliers and achieve supply resilience. According to Lysons and Farrington (2010), suppliers' collaboration has been linked to supply chain resilience's. However, the link between supply collaboration, supplier resilience and performance in enterprises remain elusive.

In Kenya, performances a relatively new much as it focuses on the supermarkets enterprises' capability to absorb disruptions. As such, performance enable retail chains stores to overcome supply chain disruptions and continually supplying and meeting expectations of the markets, shareholders and any other stakeholders. According to Arani (2017), strategic sourcing, supply chain re-engineering, operational flexibility, supply chain re-engineering and risk awareness foster manufacturing capability in responding to supply chain disruptions'. Retail chains stores are also facing quick changing business works on putting associations under huge strain to enhance item or procedure quality, conveyance list, execution, Covid-19 pandemic and responsiveness alongside diminishing expenses. SRM assumes a critical job in the decrease of expenses and the enhancement of execution in associations (Maestrini et al., 2018). Firm resort to suppliers' collaboration in an effort to ensure efficient operations recovers losses due to disruptions and achieves resilience. Muricho and Muli (2021) asserted that effective supply chain collaboration could foster management of supply chain disruptions and achieve supply supplier resilience and improve performance in enterprises. Performance in a firm's operations has been put in jeopardy by the supply chain disruptions (Kapsali, Roehrich & Akhtar, 2019), and this informs enterprises responses to recover losses and focuses on ensuring continuous and efficient operations. The supermarkets in Kenya contribute to the economy, provide employment opportunities for many people and act as a convenience to many shoppers since they provide almost all household things under one roof (Karuga & Ntungwe, 2017). However, the sector is facing supply chain disruptions resulting onto industry's annual losses. Most retail supermarkets adopting supply chain resilience measures to mitigate the tough situation caused by the unforeseen global pandemic. Effective supply chain managing inventory, cycle and lead times, overall productivity, the agility of an entity, timely deliveries, quality, and reliability in supermarkets remain vulnerable to disruptions forcing supermarket to foster supply chain collaborations in an effort to attain supplier resilience's and ensure supermarkets bounce back and continue achieving expected performance targets.

Statement of the Problem

In Kenya, retail chain stores are facing supply chain disruptions due to high competitions, increase in globalization and high level advancement in technologies and Covid-19 pandemic posing a threat to supply chain performance and profitability earnings (Gain, 2008). Retail chain of stores focus on attain supplier resilience to recover and bounce back to full-scale operations. According to Awwed (2018) supply chain collaboration could foster resilience. Macfadyen et al (2015) study on the importance of retail food entities in the improvement of

food supply chain resilience across the world ascertained that supply is not stable and is prone to disruption. Frohlich and Westbrook (2001) studied the performance outcome of the integration of operations between the suppliers and the consumers of the organization. Presently, Kenya has more than 300 retail chain stores distributed across the country (Economic Survey, 2015).

Kenya's leading supermarkets, Nakumatt and Uchumi are losing on market share, loss of customer base and low profitability earnings as a result increase supply chain disruptions. Supermarkets experience delays in payment of suppliers estimated cash KSHs 40 billion breaching the usual 60-day payment agreement. Uchumi owes Kshs. 380 million to Tanzanian suppliers while Nakumatt owes its suppliers over KSHs 700million. Also Uchumi Supermarkets has cut its full-year losses by 40.8 percent to Sh1.68 billion, the cash-strapped retailer, which had posted a loss of Sh2.84 billion in the previous financial year, saw its net sales dip by 60 per cent to Sh2.59 billion from last year's Sh6.42billion. This informs retails chain stores instituting supplier collaboration in response to supply chain disruptions. Muricho and Muli (2021) asserted that effective supply chain disruptions management including agility, supply chain collaboration and supply chain integration contribute to significant improvement in performance of Food and Beverages Manufacturing companies in Kenya. Further, Arani (2017) asserted that strategic sourcing; supply chain re-engineering, operational flexibility and risk awareness were significant antecedents for supply chain resilience where supply re-engineering was the most significant predictor in manufacturing companies. The retail chains in Kenya deploy suppliers' collaboration in an effort to achieve better performance in retail chains in Nairobi City County, Kenya. Despite increase in utilization of supplier's collaboration in retail chains in Nairobi County, its contribution on supply chain resilience's and performance of the retail chains remain elusive. This motivated the undertaking of the study to determine influence of supplier collaboration on supply chain resilience and performance in retail chains in Nairobi City County, Kenya.

Objectives

- i. To determine influence of supplier collaboration on performance of supermarkets in Nairobi City County
- ii. To establish intervening role supply chain resilience in the relationship between supplier collaboration and performance of supermarkets in Nairobi City County.

LITERATURE REVIEW

Theoretical Review

Theoretical framework is defined as the employment of interrelated concepts drawn from a theory with an aim of deciphering the research problem under study (Imenda, 2014). The exchange cost hypothesis was produced by Williamson (1975). The hypothesis gives an understanding into institutional courses of action for financial connections between associations. The indispensable responsibility of Transaction cost financial aspects to association hypothesis, brought about a wide scope of exact commitments (Macher &

Richman, 2008), utilizing exchange cost financial matters, for example as a settle on or purchase choice help, or confirmation of the correct contract mode. Exchange Cost Economics (TCE) examines how colleagues who team up with one another shield each other from dangers with contrasting connections and enhance execution. It has been the most critical new institutional hypothesis which puts the complement on the choice on the sourcing problem, if to re-appropriate or not. The sourcing circumstance of a firm is in like manner portrayed as the settle on or-purchase choice of a firm (Christopher, 2009). The two essential drivers of Transaction Cost Economics are vulnerability brought about by the outside condition and costs, which comprise of Coordination expenses and Transaction costs (Fink, 2016).

Nevertheless, as perceived in exchange cost financial aspects (TCE), expanded specialization inside a creation arrange can't be accomplished without an expense. While executing firms make interests in specialization, exchange costs emerge in view of the dread of advantage (Sako, 2013). A focal reason of TCE is that exchange costs increment as executing firms makes more prominent resource explicit ventures. The standard thinking is that as resource explicitness expands, increasingly complex administration structures are required to wipe out or weaken the expenses caused from dealing with the provider who claims the particular resources and, subsequently, who has expanded its arranging power (Azadegan, 2011). Hence, exchange costs are dared to increment with an expansion in coordinated efforts. Firms can at the same time accomplish the double advantages of high provider's association particularity and low exchange costs – a condition that could be a vital wellspring of upper hand and enhance authoritative execution (Tracey & Tan, 2011). Seeing how such a circumstance is accomplished may give vital bits of knowledge into successful between firm coordinated efforts. The transaction cost theory support the supplier collaboration in promotes supplier relation management in an organization. This study is applicable to the current study as it promote suppliers partnership/collaboration and help in creating insight on the relationship between suppliers collaboration and organizational performance in retail chain stores in Kenya.

Conceptual Framework

The conceptual framework links the independent variable, suppliers' collaboration and dependent variable which is performance of retail chains and measured using the indicators market share, sale performance, cycle time and profitability.

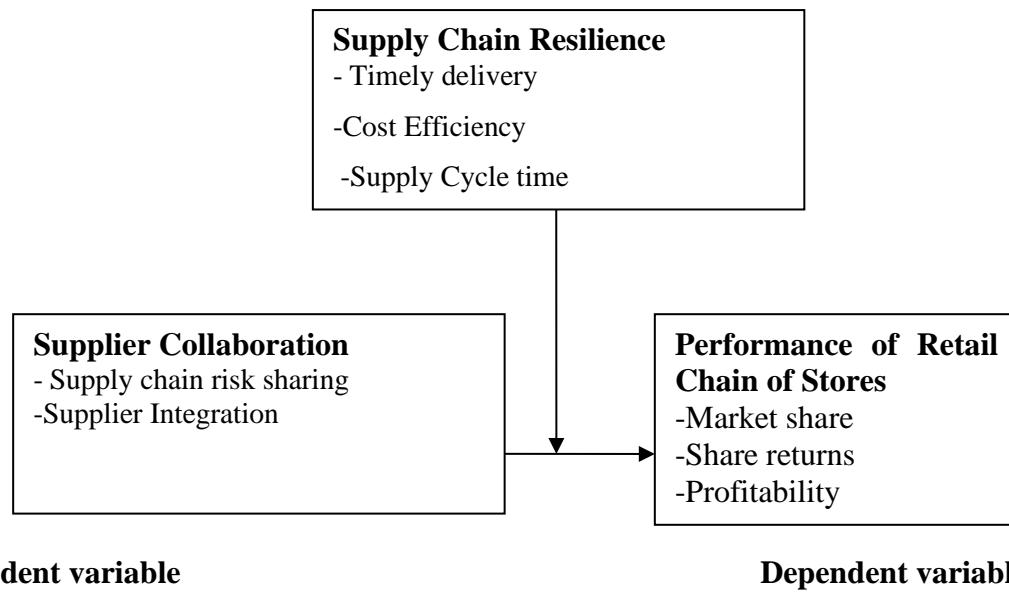


Figure 1: Conceptual Framework

Supplier collaboration and Retail Chains Stores Performance

Collaboration of suppliers at operation level in chain stores influence achievement of better firm performance as it contributes to effective supply chain risk management and improves firm supply risk management capabilities. Operational collaboration which includes shared operational planning information, developing and sharing of forecasts, link order management system and joint capacity management system foster supply chain management and improve firm better position for achieve expected supply chain performance and eventually firm performance goals. Strategic collaboration which includes aligning customer requirements, sharing basic technologies, shared production engineering, developing joint market entry strategies and develop joint capital expenditures lower supply chain risks that may cause delivery delays, unreliable deliveries and failures in delivery, high costs of supply and supply of quantity not agreed (Tan Leong, 2009).

Long-term strategic alliances are developed with a small core group of suppliers (Lambert & Cooper, 2000). Secondly, supplier contracts have increasingly become long-term, and more and more suppliers provide customers with information regarding their processes, quality performance, and even cost structure to foster effective management of threats posed through these processes. Through close relationships, supply chain partners are more willing to share risks and reward and maintain the relationship over a longer period of time (Chen & Paulraj, 2003). Supply chain relationships are typically long-term and are required to achieve strategic coordination. The anticipation of sharing risks and rewards across the chain affects long-term commitment of channel members (Lambert & Cooper, 2000). There is need for two-way inter-organizational communication for successful supplier relationship. In order to jointly find solutions to material problems and design issues, buyers and suppliers must commit a greater amount of information and be willing to share sensitive design information (Chen & Paulraj, 2013). With recent advances in communications and information technology, firms have an opportunity for significant savings in logistics costs by coordinating the planning of

the various stages of SCM. Cross-functional teams have been identified as important contributors to the success of such risk management efforts as supplier selection and product design to remain on course to achieving expected performance.

According to CIPS (2013), supplier partnership is characterized by openness, effective communication, trust, honesty, transparency, sharing, mutual benefit, and close co-operation between the buyer firm and selected suppliers. From the theoretical framework, the logic underpinning supplier partnership between a buyer firm and its key suppliers inform supply risk sharing to foster trust among suppliers (Ukalkar, 2010). According to Bowersox, Closs, Cooper and Bowersox (2013), there are five basic forms of supply collaboration which are based on acknowledged dependency and information sharing between buyer firms and suppliers foster risk management especially through contracting and outsourcing. In these relationships, acknowledged dependency is limited. Contracting with a supplier introduces a time dimension to traditional buying by framing price, service, and performance expectations over a specified period. In turn the supplier agrees to deliver the specified item(s) according to negotiated terms and delivery requirements. Alliance and enterprise extension relationships are the most advanced collaborative relationships. Both these relationships are governed by the participating firms' long-term desire and willingness to work together in an intellectual and operational approach improving risk management and foster firm performance. This is supported by Mafini and Muposhi (2017) that supply chain collaboration plays a significant role in improving supply chain risk management as a tool for improving both risk management practices and financial performance in SME supply chains. These results demonstrate the importance of supply chain collaboration as a tool for improving both risk management practices and financial performance in SME supply chains.

Wachiuri, Waiganjo and Oballah (2015) carried out a study on effect of investigated the suppliers development on firm performance in of manufacturing companies in Kenya. The study adopted a descriptive survey design was used. Descriptive and regression analysis was adopted in data analysis. The finding revealed supplier development, supplier information sharing, financial suoport and training of the suppliers improve firm performance in EABL in Kenya. Tangus, Oyugi and Rambo (2015) impact of provider relationship the executives rehearse on execution of assembling firms in Kisumu County. Utilized clear study structure and gathered information utilizing survey. Both clear and inferential strategies for examination were utilized to survey relationship in the factors included. The examination uncovered that expansion in provider relationship the executives rehearses were related with expanded dimensions of execution. In any case, multivariate investigation uncovered just data sharing was related with better execution while provider advancement and provider division affected execution in assembling firms.

Supply chain Collaboration, Supplier Resilience and Firm Performance

Supplier collaboration in manufacturing companies is an antecedent of supplier chain resilience firm achieves performance expectation. Although strategic outsourcing enable manufacturing firms to reduce costs through management of cost, lowering cost due to

quantity discount, it could lead to creation challenges to manage inherent demand fluctuation and major disruptions'. To manage supply chain disruptions linked to strategic sourcing, flexible supplier based is created to foster effective production and management demand fluctuation. Flexible supply chain base enable manufacturing companies to manage regular demand fluctuation and use to maintain continuous supply of raw materials in the event disruptions occurs in supply chain. The significant premise of supply chain collaboration is sharing of information and knowledge sharing to lower to improve firm performance (Christopher & Peck, 2004), heighten visibility, enhance operational effectiveness and efficiency, improve customer services and result to firm performance. Through strategic sourcing, supplier's alliances improve support and achievement of support supply chain efficiency operational efficiency to improve performance (Juttner & Maklan, 2011). Over the last decade supply chain disruption management has become prominent in retail industry due to increasing interest of enterprise in minimizing supply chain disruptions through enhance supply chain resilience. Today business have become more and more interconnected, which have made supply chains both long and complex (Fan, 2020). Supply chain resilience is key determinant of supply chain performance in retail industry in an ever changing environment. Supply chain resilience depict the capability of firms to anticipate, predict, identify, respond and learn from disruptions (Telukdarie, Munsamy & Mohlala, 2020). Resilience process in supply chain is agile and fast responsive. The capability of manufacturing enterprises to adapt allows the supply chains to respond, recover after disruptions and reinstating to the originally designated to attain desired supply chain operations outcomes. Supply chain disruptions management practices proactively minimize or reactively response to supply chain disruptions in an effort to achieve effectiveness and efficiency in supply chains of retail industry Ghagde, Dani & Kalawsky, 2013). The conceptualization of management of supply chain disruptions focuses on supply chain vulnerability and extent firms achieve supply chain resilience to maintain productivity level in retail industry.

Collaboration is the continuous relationship that exists between a business entity and its stakeholders such as suppliers, state and non-state actors. It influences the organizations' plans and operation efficiencies and capability. Collaboration is hinged on a direct long-term relationship between a firm and the suppliers which provide a basis for shared problem solving and abilities to plan according to Badraoui, Van der Vorst and Boulaksil (2020). Collaboration can be categorized into low interactivity, collaborations that take long periods and shared strategic and operation capabilities. Collaboration provides for mutual benefit and continued engagement in the organization's key areas. It results inefficiency as a business entity only transacts with known suppliers'. It allows suppliers to participate in the design of new products benefiting the organization through cost reduction, risk identification, and assistance during the design process. Supply chain resilience in an organization makes use of collaboration with suppliers in a manner in which the needs of the customers are considered significantly during risk assessment, product design, and operations of a firm. Wieland and Wallenburg (2012) empirically tested hypotheses on the influence of supply chain risk management (SCRM) on the performance of a supply chain by means of case study. Survey data were collected from 270 manufacturing companies for hypotheses testing via structural equation modeling. Additionally, qualitative data were collected to explore the nature of non-

hypothesized findings. The study found out that robustness can be considered a basic prerequisite to deal with supplier-side risks, while agility is necessary to deal with customer-side risks. Being agile has a strong positive effect on the supply chain's customer value, while its impact on business performance is mediated by the supply chain's customer value and, thus, is indirect only. In contrast, achieving robustness has a strong positive direct effect on both the supply chain's customer value and business performance.

Globally, a study conducted by Awwed (2018) on the theory of supply chain resilience theory in Toyota determined that collaboration between stakeholders; responsiveness, reengineering supply chains and risk mitigation techniques enable resilience in the Toyota supply chain. Macfadyen et al (2015) study on the importance of retailers of food products in enhancing the global food supply resilience ascertained the global supply of food is not stable and is prone to shocks and disruption and variability across the supply chain can be minimized through stakeholder engagement and change of operations across large areas. Research by Aigbogun, Ghazali, and Razali (2014) about a framework that enhances resilience in supply chains in the case of the pharmaceutical industry in Malaysia showed agility, integration of systems, collaboration and sharing of information help in reducing the risks to the Malaysian pharmacy industry. Bichanga and Mwangi (2014) evaluated the importance of supply chain visibility effectiveness in Uchumi supermarkets in Kenya ascertained suppliers, customers and stakeholders are to access accurate, timely information of operations across the supply chain to allow organizations to make quick and accurate decisions to counter any disruptions. The studies provided different ways that resilience practices and techniques impact performance of various sectors. Supply chain performance refers to the process of a retail organization instituting measures to use to reach their goal of sustaining customer satisfaction. Performance of the retailers during disruption involves the determination of the profit, reliability and responsiveness in order to keep the business afloat (Kapsali, Roehrich & Akhtar, 2019).

RESEARCH METHODOLOGY

Research Design

Descriptive survey research design is deemed fit structure for conducting research that involves collecting, analyzing and integrating quantitative. Target population is a list of things, people or items that have similar characteristics under investigation. The target population of the study was 32 supermarkets operating in Nairobi. The study was a survey hence adopts a census where all the selected supermarkets were studied. The respondents of the study constituted middle officers who were procurement managers, financial managers, inventory managers, ICT managers and relationship managers from the selected 32 retail stores in Nairobi City County. Questionnaire was adopted to gather data for the study and administered through drop and pick method to respondents who were the procurement managers, financial managers, inventory managers, ICT managers and relationship managers from each of the selected 32 retail stores in Nairobi City County. This makes a total of 160 respondents. The structured questions were used in an effort to collect large volume of data. The collected data

was analyzed using descriptive statistics technique' mean and standard deviation was used to analyze data. Further inferential statistics Pearson' correlation analysis was used at 95% confidence level; this provided the generalization of the strength of association between supplier collaboration, supplier chain resilience's on performance in supermarkets in Nairobi City County, Kenya.

Results and Discussion

This section provides research results and discussion on influence of to determine influence of supplier collaboration and Supplier Chain Resilience's on performance of supermarkets in Nairobi City County. Out of 160 questionnaires administered, 136 (85%) responded in time for data analysis. This rate was considered appropriate to derive the inferences regarding the objectives of the research.

Supplier Collaboration

Table 1: Extent of Deployment of Supplier collaboration in Retail Chain Stores

Statement related to Deployment of Suppliers Collaborations	Mean	Std Dev
Improve of risk sharing to improve suppliers commitment	4.33	0.43
Increase distribution channel management	4.08	0.31
Increase supplier contract performance	4.78	0.53
Monitor supplier performance	4.75	0.76
Foster development of joint market entry strategies	4.79	0.68
Jointly plan that include suppliers interests	4.56	0.51
Foster long-term strategic alliances	4.61	0.59
Foster suppliers partnership thereby increasing production	4.55	0.53
Outsource relationships involving a degree of information sharing	4.71	0.63
Foster strategic information between suppliers and retail stores	4.58	0.57
Promotion of shared merchandising	4.54	0.53
Increase shared production engineering	4.60	0.58

From the majority of the respondents agreed that supplier's collaboration as a resilience practices was deployed in retail stores through fostering development of joint market entry strategies, increasing supplier contract performance, monitoring supplier performance and outsourcing relationships involving a degree of information sharing to a very great extent as ($M=4.79$, 4.78 , 4.75 and 4.71 respectively). Most of the respondents agreed that supplier's collaboration as a supply chain resilience practices in retail stores through fostering long-term strategic alliances, increasing shared production engineering, fostering strategic information between suppliers and retail stores, jointly planning's that include suppliers interests, fostering suppliers partnership thereby increasing production and promoting of shared merchandising to a very great extent as $M=4.61$, 4.60 , 4.58 , 4.56 , 4.55 and 4.54 respectively. Also, most of the respondents agreed that supplier's collaboration as a supply chain resilience practice in retail stores industry through improvement of risk sharing to improve suppliers commitment and increasing distribution channel management to a great extent as indicated by a ($M=4.33$ and 4.08) This implies that supplier's collaboration as a

supply chain reliance precursor was deployed in management of supply chain disruptions in retail stores sectors in Kenya.

Table 2: Extent to which Supplier Chain Resilience was Attained in Retails stores in Kenya

Statement related to Supplier Chain Resilience's in Retails Stores in Nairobi, Kenya	Mean	Std Dev
Timely delivery of goods	4.12	0.714
Improvement in efficient cost management	3.65	0.793
Reduction in the number of defects and returns	4.21	0.518
Quick response to buyers queries	3.96	0.860
Sufficient supplies at the right time	4.03	0.354
Reduction in supply cycle times	4.37	0.565

The results in Table 2 revealed that retail chains stores experience reduction in supply cycle times, reduction in the number of defects and timely delivery of goods to a great extent as indicated by a mean of 4.371, 4.217 and 4.123 with a standard deviation of 0.565, 0.518 and 0.714 respectively . The results also indicated that retails chains stores reported sufficient supplies at the right time to a great extent as indicated by a mean of 4.035 and standard deviation of 0.354, experience quick response to buyers queries to a great extent as indicated by a mean of 3.968 with a standard deviation of 0.860 and improvement in efficient cost management to a great extent as indicated by a mean of 3.3.651 with a standard deviation of 0.793. The result demonstrated that retails chain stores achieve supply chain resilience to a great extent enabling supermarkets to improve on supply chain performance.

Table 3: Extent to Retails stores Achieve Performance in Kenya

Statement related to Performance in Retails Stores in Nairobi, Kenya	Mean	Std Dev
Improve profitability Level	3.974	0.709
Sale performance	4.001	0.811
Improvement in market share	4.003	0.812
Increase in share returns	3.591	0.826
Increase in customer base	4.274	0.598

On the extent retail chain of store achieve expected performance target, result in Table 3, most respondents agreed that retail chain stores increase customer based as indicated by a mean of 4.274 with a standard deviation of 0.598, experience improvement in market share as indicated by a mean of 4.003 with a standard deviation of 0.812 and increase sale performance as indicated by a mean of 4.001 with a standard deviation of 0.811.Respondents also agreed that retail chain of stores Improve profitability Level as indicated by a mean of 3.974 with a standard deviation of 0.709 and that increase share returns among the

shareholders as indicated by a mean of 3.591 with a standard deviation of 0.598. This clearly demonstrated that supplier collaboration contribute to improvement in performance in retail chain stores.

Correlation analysis

Table 4: Correlation between Supplier Collaboration and Performance of Retails Stores

		Performance of supermarkets	Supplier collaboration
Supplier collaboration	r	.711*	1
	Sig (2-tailed)	.021	

The correlation between supplier relationship management and performance on retail stores were determined using Pearson Product Moment correlation coefficient (Mirie, 2014). Table 4 shows the results. The results in Table 2 shows that there is a strong, significant and positive correlation between supplier collaboration and performance on retail stores where $r=0.711$, $PV=0.021<0.05$. The study found that increase in effective supplier collaboration would lead to increase in performance on retail stores. The results concurred with Al-Abdallah, Abdallah and Hamdan (2014) that relationship the executives (SRM) provider quality improvement, trust-based association with providers, provider lead time decrease, provider coordinated effort in new item advancement, and provider organization/improvement improve upper hand and execution in assembling organizations.

Table 5: Correlation between Supplier Collaboration and Supplier Chain Resilience of Retails Stores

		Supplier Chain Resilience	Supplier collaboration
Supplier collaboration	r	.792*	1
	Sig (2-tailed)	.000	

The correlation between supplier's collaborations and supplier chain resilience retail stores were determined using Pearson Product Moment correlation coefficient. The results in Table 5 showed that there existed a strong, significant and positive correlation between supplier collaboration and supplier chain resilience of retail stores in Nairobi Kenya as $r=0.792$, $PV=0.000<0.05$. This demonstrated that an improvement in supplier collaboration could predict a significant improvement in supplier chain resilience in retail stores sectors in Kenya. A Multiple regression analysis was carried out to establish the relationship between performance on retail stores and the supplier collaboration factors influencing performance on retail stores. The model summary results are on Table 6.

Table 6: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.863a	0.745	0.739	0.7850256

- a. Independent Variables: (Constant), supplier collaboration
- b. Dependent Variable: Performance of retail stores

R-Squared is the proportion of the variance in the dependent variable d performance on retail stores that was explained by variations in the independent variable supplier collaboration. This implied that 73.9% of variance or correlation between variables in general but does not reflect the extent to supplier collaboration was associated with the performance on retail stores.

ANOVA

The result in Table 7 presents results on goodness of fit of the regression model.

Table 7: Goodness of Fit

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.239	6	2.5398333	2.2995887	.001 ^b
Residual	142.477	129	1.1044729		
Total	157.716	135			

- a. Independent Variables: (Constant), supplier collaboration
- b. Dependent Variable: Performance on retail stores

The findings revealed that an F-ratio of 2.2996, P=0.001<0.05. This result ascertain the regression model adopted by the study had a significant goodness of fit as F=2.2996 and far exceeds the F=statistic 0.10696 and PV=0.001<0.05. The results on Table 5 shows the regression coefficients analysis.

Table 8: Beta Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.8725	0.308		2.011	.0012
Supplier collaboration	0.529	0.044	0.519	3.515	0.03

- a. Independent Variables: (Constant), supplier collaboration
- b. Dependent Variable: Performance on retail stores

The Multiple regression analysis model for the study was. $Y = \alpha + \beta_1 X_1 + \epsilon$ (1)

The resultant regression model took the form:

$Y=3.8725+0.529X_2+\epsilon$. The regression results indicated that predictor supplier collaboration has a significant and positive relationship with performance on retail stores as $\beta_2=0.519$, PV=0.04, t=3.515. This demonstrated that an increase in supplier collaboration would result into increase in performance of supermarkets by 0.519.

Intervening Role of Supplier Chain Resilience

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.885 ^a	0.783	.731	.63239
2	0.907	0.822	0.794	.60178

Predictors: (Constant), Supplier Collaboration.

Predictors: (Constant), Supplier Collaboration and Supplier Chain Resilience

b. Dependent: Performance of Retail chain stores

The findings presented in Table 9 shows that upon introduction of supply chain resilience to the relationship between precursors of Supplier Collaboration and performance of the retail chain stores as an intervening variable, R-squared improved from 0.783 to 0.822. This therefore implies that 82.2% % of performance of retail chain stores could be explained by supplier collaboration due to attainment of supply chain resilience from the initial 78.3.0%.The ANOVA finding further revealed that at 95% confidence level, the variables produce statistically significant values and can be relied upon to explain the moderating effect of transformational leadership practices on the relationship between precursors of employee's retentions and employee retention in Christian Faith based health institutions in Nairobi County, Kenya.

Table 10 : Goodness of Fit of the model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87.764	4	21.941	37.9735	.0001 ^b
	Residual	75.692	131	0.5778		
	Total	274.991	135			
2	Regression	82.252	4	20.563	58.4048	.0001 ^c
	Residual	36.059	131	0.3516		
	Total	196.1704	135			

b. Predictors: (Constant), Supplier Collaboration

c. Predictors :(Constant), Supplier Collaboration and Supplier Chain Resilience

a. Dependent Variable: retention

The F-statistic change from 37.9735 to 58.4048 as shown in Table 10. This showed that F-calculated change was significant hence a linear relationship between the supplier Collaboration, Supplier Chain Resilience variable and performance of retail chain stores. In addition, the p-value was 0.0001, which was less than the significance level (0.05) demonstrating that model attained goodness of fit for the data and hence it was appropriate in predicting the intervening influence of supply chain resilience on the relationship between supplier collaboration on performance of retail chain stores in Nairobi, Kenya.

Table 11: Beta Coefficient for Intervening Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.	Beta		
1	(Constant)	3.577	.311	11.503	.0000
	Supplier Collaboration	0.610	.047	.583	12.974 .0001
2	(Constant)	7.492	.6104	12.8050	.0000
	Supplier collaboration	0.7384	.0521	.697	14.174 .0013

a. Performance on retail stores

The findings in Table 11 showed that on introducing supply chain resilience as an intervening variable on the relationship between supplier collaboration was 7.492 from 3.577 in the direct relationship when all the independent variables are held constant. The Beta coefficient (β_1) improves from 0.610 to 0.7384 which shows that a unit increase in supplier chain resilience on the relationship between supplier collaboration and performance on retail stores would lead to a 0.1284 increase in performance on retail stores. The relationship is significant as the P-value (0.000) is less than the significance level (0.05). The finding demonstrated that attainment of supply chain resilience in retail chain stores in ever-increasing supply chain disruptions enhancing supply chain performance and significantly influencing performance retail chain stores. Deployment supplier collaboration in retail chain stores enhance supply chain resilience in retail chain stores sectors contribute to performance of retail chain stores Nairobi, Kenya.

Summary of Findings

The results indicated that suppliers collaboration have positive effect on performance of retail stores in Nairobi County. The correlation results indicated that there exist a strong, significant and positive correlation between supplier collaboration and performance on retail stores. Further regression findings revealed that supplier collaboration have a significant and positive effect on performance on retail stores. This demonstrate that supplier's collaboration issues influence performance of retail stores through fostering development of joint market entry strategies, increasing supplier contract performance, monitoring supplier performance and outsourcing relationships involving a degree of information sharing to a very great extent. The results established that supplier's collaboration fosters long-term strategic alliances, increase shared production engineering, foster strategic information between suppliers and retail stores, jointly planning's that include suppliers interests, fostering suppliers partnership thereby increasing production and promoting of shared merchandising in retail stores to a very great extent.

In an effort to achieve expected performance target in the face of supply chain disruption, promoting supplier chain resilience could be enhance through deployment of supplier collaborations in retail chain store sectors in Nairobi, Kenya. The findings established that enhancing supplier chain resilience through deployment supplier collaboration significantly influence performance on retail stores. This further demonstrates that supplier collaboration is a significant enhancer of supplier chain resilience in retail chain stores. With enhanced

supplier chain resilience, retail chain stores would experience reduction in supply cycle times, reduction in the number of defects and timely delivery of goods, improve sufficient supplies at the right time, experience quick response to buyers queries, improvement in efficient cost management contributing to significant.

Conclusions

The study concluded that enhancing supplier's chain resilience through supplier's collaboration significantly contribute performance on retail stores. Retail chain stores executed supplier's collaboration that contributed to development of joint market entry strategies, increasing supplier contract performance, monitoring supplier performance and outsourcing relationships involving a degree of information sharing to a very great extent. Supplier's collaboration led to fostering long-term strategic alliances, increase shared production engineering, foster strategic information between suppliers and retail stores, jointly planning's that include suppliers interests, fostering suppliers partnership thereby increasing production and promoting of shared merchandising in retail stores to a very great extent . With significant deployment of supplier collaboration in retail chain stores at it faces supply chain disruptions foster supplier chain resilience and achieve expected profit level, sales volumes and market shares.

Policy Recommendations

From the conclusion, recommends an increase in supplier collaboration would enhance supply chain resilience and contribute to performance in retail store sectors in Kenya. Supply chain disruption in retail chain stores would contribute to reduction in effectiveness and efficiency in supply chains impact severely on supply chain operations. The Supermarket enterprises have become vulnerable due to growing number of supply chain disruptions. As such, supply chain disruptions management practices in an effort to achieve supply chain resilience and curb the devastating outcomes of disruptions. This informed the need to deploy enhancers of supplier chain resilience in an effort to achieve expected performance targets. Retail chain stores sector should therefore deploy collaboration of suppliers to enhance supplier chain resilience and hence improve performance in the face of supply chain disruptions.

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