CONTINUOUS REPLENISHMENT AND STOCK CONTROLLING ON SUPPLY CHAIN PERFORMANCE OF RETAIL CHAIN STORES IN NAIROBI COUNTY, KENYA

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Full Length Research

ABSTRACT

Supply chain performance is the main focus in the execution of inventory management practices in retail chain stores. With the fluctuations in the supply chain performance of retail chains, there is a need to conduct a study linking inventory management practices to the supply chain performance of the retail chains. The objectives are to examine influence of continuous replenishment on supply chain performance of supermarkets in Nairobi City County and to establish extent stock controlling influence supply chain performance of supermarkets in Nairobi City County. The research adopted descriptive survey research design. The target population of the study were 106 supermarkets operating in Nairobi. The study was a survey hence adopts a census where all the selected supermarkets will be studied. The primary data for this study was collected using the questionnaire. The collected data was examined and checked for completeness and comprehensibility. The data was then be summarized, coded and tabulated. The study adopted descriptive analysis technique to analyze quantitative data. Data presentation was done by the use of charts and percentages and frequency tables for ease of understanding and interpretations.

Descriptive statistics such as means, standard deviation and frequency distribution was used in analyzing data descriptively. Inferential statistics, correlation analysis and regression analysis. Correlation analysis was used to establish whether there exists a significant relationship between inventory management practice on supply chain performance in retail chain stores in Nairobi City County, Kenya. The finding revealed that established that continuous replenishment contribute significantly and positively to supply chain performance in supermarkets in Nairobi City County Results revealed that stock controlling had a significant and negative influence on supply chain performance in supermarkets in Nairobi City County The study concluded that continuous replenishment contribute significantly and positively to supply chain performance in supermarkets in Nairobi City County. The study concluded that stock controlling had a significant and negative influence on supply chain performance in supermarkets in Nairobi City County.

Key words: **Continuous Replenishment, Stock controlling and Supply chain performance**

INTRODUCTION

Supply chain performance is the main building block in the execution of inventory management practices as the customer needs through product or service availability, at the right time, right place, at the right price and in the right quantities. Inventory management focuses on transforming broad and general business objectives into operational actions in day-to-day inventory control and aims to strike a balance between inventory investment and customer service (Heizer & Render, 2014).Singh, Kumar and Tarun (2012) assessed optimal inventory control as a significant task in supply chain management in enterprises to achieve optimal performance. This is because firms with high volume of inventories usually have to

bear substantial inventory costs such as the holding cost, transportation, and management costs (Lee, 2012). The serious stock administration exercises in corporate store outlets upgrade improvement in all spaces stock administration like adaptability, cost effectiveness and lead time execution. According to Mohd, Juniati, Kozicka, and ahmad (2019), Supply chain management incorporation plans to furnish both inner and outside clients with are required help levels as far as amount and request rate fill.. Effective stock administration practices give upstream and downstream stock perceivability in the store network that impact decrease in stock expenses, accomplish practical burden sizes, decrease in stock expense and tied up capital. (Donald, 2017).Futher, Onyango (2012) asserted that the retail store is the stock practices, for example, stock control, stock record the executives and VMI add to execution forecasts produced using deterministic sources of information. For instance, Nimeh, Abdallah and Sweis, (2018).Inventory record mistake happens when there is a distinction between the real and the recorded stock.

Supplier management had huge effect on store network execution improvement in quick buyer items and segments producers in Thailand (Wafula, 2016). Firms in Malaysia get the right innovation of stock control situation for dealing with their store network inventories further developing production network the board productivity. In Malaysia, micro retailing enterprises adopted inventory management practices and factors that influence their use in micro retailing enterprises. As indicated by Atnafu and Balda (2018) observed that survey of 188 micro and small enterprises (MSEs) working in the assembling sub-area uncovered that execution of stock administration practices like ABC appraisal, EOQ-choice, client relationship building, seller the executives stock, and JIT practice sway on benefit, yield level, and cost effectiveness. Ogbo and Ukpere (2014) established that effective system of inventory management has a significant organization performance in the seven-up bottling company, Nile Mile Enugu, Nigeria. In Kenya, retail ventures are additionally confronting globalization moreover, fast changing business procedure on stock administration under gigantic strain to consistently improve quality control, transport rundown, execution, and responsiveness close by lessening costs. In the retailing industry, an efficient inventory management practice may give a significant implication to the firm's performance. Also, Mwangi, Muturi and Shale (2019) believed that stock enhancement added to execution of assembling firms in Kenya.

Request is made through different objective business sectors and special exercises, for satisfying the buyers' needs and needs through a lean store network (Atnafu & Balda, 2018). Corporate store stores industry includes a significant measure of inventories that should be offered to the end clients. Retailing industry has gone through a period of extraordinary change as the power of rivalry among retailers and clients' requests have expanded (Bala, 2012). The operations in retail enterprises have transformed from manual inventory control systems to computerized systems.

The meaning of stock organization continued creating with Fast Moving Consumer Goods Companies picking this mode to pass on their things the country over and past and less on other collecting regions (Nimeh, Abdallah & Sweis, 2018). The organizations received third

part stock (3PL) in their business and didn't mind a lot to have improved bury stock administration. Retail chain stores, for example, Uchumi Company has gone into contracts with various suppliers where they have adopted. (Uchumi, 2011). Uchumi store get shipper the leaders practice work on its presentation as handle convincing stock organization practices that will incite abatement of stock expense (Githendu, Nyamwange and Akelo, 2015). Nakumatt and Tuskys have at any rate demonstrated staggering improvement on account of getting a handle on stock organization methods that incorporates collaboration with suppliers to manage stock expense (Mwaniki, 2013).Stock administration practices structures a wide assortment of exercises going from arranging, procurement, getting, capacity, bundling in Kenya (Achieng, Paul and Mbura, 2018). Stock administration practices has been characterized as a cycle by which associations direct the buy, receipt, stockpiling, bundling and giving of merchandise and parts that fulfill the interest levels of the association in a successful and productive way (Kamau & Kagiri, 2015)).

Statement of the Problem.

In Kenya, retails stores are facing high competitions and complexity in inventory management (Gain, 2008). Presently, Kenya has more than 300 retail stores distributed across the country (Economic Survey, 2015). Malakooti (2013):) indicated that most retails superstores like Tuskys, Nakumatt, Ukwala, and Naivas among others led to the retail superstore being put under receivership management. Similar statistics are reported by African Consumer Insights report (2016) that the market share / penetration rate of retail chains is still low at a figure between 25% - 30%. Uchumi supermarket has experienced frequent stock outs and performance challenges (PWC, 2015). Supermarkets experience delays in payment of suppliers estimated cash KSHs 40 billion breaching the usual 60-day payment agreement. According to Kenya Retails (2016),most retail chains of stores reported delays in suppliers payments as such as Tuskys owe suppliers Kshs 174.8 million,Uchumi with Kshs 123 million and Naivas by Kshs 86.4 million whileChandarana, owed suppliers Kshs 35 million. I year 2020, Naivas supermarket experience decline in supplier's volume by 7.5% in year 2020. (kam, 2020). Also Uchumi Supermarkets has cut its full-year losses by 40.8 percent to Sh1.68 billion, the cash-strapped retailer inventory, 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 in year 2020. With the fluctuations in the supply chain performance of retail chains which are attributed to inventory control, there is a need to conduct a study linking inventory management practices to the supply chain performance of the retail chains.The extent to which continuous replenishment ands stock control influence the supply chain performance in supermarket in Nairobi County in Kenya.

Empirical studies focused on relationship between inventory management practices and firm performance. Deveshwar and Dhawal (2013) proposed that inventory management is a method that companies use to organize, store and replace inventory, to keep an adequate supply of goods at the same time minimizing costs. Achieng,Nyanga'u andMbura, (2018) assesses influence of inventory management practices on performance of retail outlets in Nairobi City County a found that inventory management practices improve retail chain store

profitability, Also, Nyawanga and Otinga (2021) revealed that inventory management practices contributed to improve procurement performance of judiciary in Kakamega County. Further Shajema (2018) study revealed that inventory control practices contribute to increase in financial returns in retail stores in NairobiCounty. The existing literature reviewed concentrated more on the association between inventory management practices and procurement performance of retails stores and judiciary units. Therefore, it is against this revelation that this research project was initiated to analyze the relationship between continuous replenishment and stock control on supply chain performance of the supermarket in the county.

Research Objectives

i. To examine influence of continuous replenishment on supply chain performance of supermarkets in Nairobi City County

ii. To establish extent stock controllinginfluence supply chain performance of supermarkets in Nairobi City County

LITERATURE REVIEW

Theoretical Review

Lean hypothesis is an expansion of thoughts of in the nick of time. The advocates of the lean hypothesis Krause. (2018) have shown that Just in Time as a power based framework is proposed to change the creation and business appraisal throughout the agilely chain. The speculation idea may eliminate pad stock and remove waste in progress cycle. The leanness has constructive outcomes deftly chain of a business firm. They insist on stock leanness as the best stock control instrument.The hypothesis clarifies how makers get adaptability in their referencing choices, decrease the arrangements of stock hung nearby and dispose of stock passing on costs. Gary (2015), analyzes their revelations of diminishing inventories at firm level. They keep saying that at the all out level, the test strength of the lean explanation lies both in the condition and the size of the assignment. In any case in the theory, stock constrains an affiliation's ability to respond to changes mainstream (Wagner, 2018). Associations viably further develop stock through lean smoothly affix practices and structures to achieve more huge degrees of asset use and customer devotion.

Lean hypothesis is a growth of considerations of JIT.The theory disposes of pad stock and cutoff points waste in progress framework. Stock leanness unequivocally impacts the effectiveness of a business firm and is the best stock control gadget (Wagner, 2010). The theory explains how corporate store of stores flexibility in their referring to decisions decay the courses of action of stock featured taking out costs related with the transportation of stock. Information introduced against the theory gathers that stocks ought to be accessible while directing corporate store stores support containing information and data sharing and the trading of accomplices between retail locations

Contingency theory impacts the executives of assignments in various operational settings. The pith of possibility hypothesis is that prescribed procedures rely upon the possibilities of circumstance. As indicated by Wachiuri, Waiganjo and Oballah (2015) the changes in ward measures are considered to address execution accomplished by collections in the free measures. The hypothesis guessed that relationship, stock control structures are determinants of changes in functional execution of tea managing firms. In such way changes in stock control frameworks address deftly chain execution (Salawati, Tinggi & Kadri, 2012). The quintessence of operational execution is production of significant worth. Worth creation might be a mix of monetary and non monetary targets (Prahinski & Benton, 2014). Effective operational execution of a firm can be likened with fruitful worth expansion. Associations' operational exhibition can be decided by numerous points of view. Every tea handling firm has a novel situation making operational execution estimation innately situational (Pyke & Peterson, 2016). Theresponsibility of stock control structure sway flexibility of the affiliation is based on financial and non money related benefits, profitability of techniques and reasonability of deftly chain works out.

Literature review

Continuous Replenishment is an inventory control practices that can be adopted by a tea firm. The point of persistent renewal is to grow free streaming request satisfaction and conveyance frameworks, so pipeline inventories can be significantly decreased .According Pietro (2012), convincing geniuses in deftly chain the heads have suggested that stock is waste and should be kept up a vital good ways from at each conceivable opportunity. The clarifications for this view are heaps of material can horribly influence any relationship since they tie up capital. At any rate they didn't clarify the response for excess stock held by business firm. It is furthermore battled that stocks are routinely held for wrong reasons every so often to cloak weaknesses in the organization of affiliation (Rushton, Phil & Baker, 2011). Chesaro (2016), adds that too minimal stock oftentimes annoyed business exercises. It is moreover fought that an over the top measure of stock consumes real space, makes a money related weight and fabricates the opportunity of damage, crumbling and adversity. Diligent reestablishment practices use around the-retail store information systems to recognize constant interest and to get thing through direct from the supplier through the allotment network (DC) what's more, on the retail source. CRP frameworks are subsequently set up to synchronize this development of thing by zeroing in on the end-client fundamentals by strategies for the utilization of persistent premium, related with movement through task structures that consider cross-docking, store orchestrated bundling and robotized overseeing(Muhayimana, 2015).

Stock is a principal asset and keeping up it is fundamental for tea managing firms. Stock control framework might be gotten a handle on for motivations driving lessening collecting expenses and present day office generally speaking costs. The design gives the conclusive construction and the working designs for keeping up and controlling item to be stacked. As indicated by their appraisal crude materials referencing rehash is indentified as a tremendous factor adding to stock cost.Progressive referencing in little aggregate is considered as a basic methodology for picking stock control framework (Mwangi, 2016).

Stock control can be characterized as the strategies and techniques which deliberately decide and manage which things are kept in stock and what amounts of them are loaded. Mehfooz and Muhammad (2012) seen that thing stacked decisions are needed concerning the size of the need, the time at which further supplies should be masterminded and the total which should be composed. At any rate decisions regarding the degree of stock that a connection should hold and its region inside an alliance's planned endeavors network are essential to meet customer care necessities and requirements (Zappone, 2014). As indicated by Kumar and Suresh, (2008) stock control guarantees that the monetary interest in inventories is negligible. They further make a linkage between effective use of working capital and minimization of cost because of weakening, outdated nature, harm and pilferage of stock. Stock control advances economy in buying (Waller, Nachtmann & Hunter, 2017).In any case their assessment didn't exhibit how much stock control systems reduce cost of the firm. This assessment proposes to assess the effect of cost decline on operational execution of the associations.Constant reviving moreover insinuates as Vendor-directed stock (VMI) is one of the stock association practice, that empower cooperating practices for improving multi-firm easily chain benefit. Consistent reclamation is the place where the undertakings are given commitment concerning controlling stock level at the retailer's distribution organization and in explicit occasions at the retail location level too (Water, 2013). Consistent recharging is a cycle that falls under the 'push' stock administration measures (Upton, 2014).

An all around planned and created way to deal with VMI can lead not exclusively to decreases in stock levels in the flexibly chain, investment funds emerging from disentanglement of frameworks and methods (Letinkaya and Lee, 2010). This is because there is potential for stunning improvement of operational execution of gathering firm. This is an immediate aftereffect of end of deferrals in both data and material stream for the tea preparing firm.The achievement of transport on time is a standard gaining objective. If thing and material appear later than anticipated or work isn't done at the best time, strategies may be lost, creation finished, and damages may be brought by puzzled customers. Delicacy to achieve deftly on time may upset the cash to cash cycle, fittingly diminishing the coalition's ability or viability (Lobna, & Islam, 2019).

Stock Controlling involves all the bound together administration of those interior exercises related with the obtaining, stockpiling, issue, use and inward circulation of stock utilized in the creation and arrangement of administrations. It is the movement of deciding the rate, amounts and the methods of materials to be loaded in an association and guideline of receipts and issues of those stocks (Mandal, 2012).Numerous organizations have had an industrious issue in developing the right stock levels and they have making firms to computerizing their systems to achieve a congruity among responsiveness and viability. Stock Controlling is essentially about showing the size and plan of stacked items. Stock Controlling is required at different regions inside an office or inside various spaces of a reserve association to guarantee the typical and masterminded course of creation against the sporadic agitating impact of running out of materials or items for further developed execution (Govind, Luke & Pisa, 2017). Space for stock, quality management, replenishment, returns and defective goods and demand forecasting (Macharia & Mukulu, 2016). Stock Controlling includes the arranging,

requesting and planning of the materials utilized in the assembling interaction. It practices the board more than three kinds of inventories that is crude materials, work in progress and completed merchandise. Buying is essential worried about administration over the crude materials stock, which incorporates; crude materials or semi-handled materials, created parts and MRO items (Maintenance, Repair and Operations).

Supply chain performance (SCP) hence is determined by interplay of inventory turnover, distribution costs, top management support to strategies generated by a firm and aggressive personal selling by a company (Naliaka & Namusonge, 2015).Firms involved in durable products supply chain (SC) should switch from pull model to push model considering that the producer will not suffer highly due to surplus inventory due to decay while those firms dealing with fresh products supply chains (SCs) involving long distance transportation should embrace pull models because of perishability nature of products combined with extra challenges of matching uncertain supply with uncertain demand for producers and distributors in the supply chain (SC)(Mittal & Gupta, 2012).Supply Chain Performance (SCP) can be measured using metrics such as volume, flexibility, scheduling, quality, cost, customer satisfaction, Return on Investments (ROI), profit as a percentage of sales and present value (Pietro, 2016).

Empirical Literature Review

Mogere, Oloko, Okibo (2013) study revealed advantageous to the administration of tea handling firms to improve their operational exhibition and furthermore illuminate strategy producers. The examination discoveries will contribute towards scholastic ideal models and fill the hole between investigated work and unresearched regions. The normal result in this investigation is that there can be a critical relationship between's the utilization of stock control frameworks and operational execution of a tea handling firm. Method of correspondence that encourages trade of data between echelons in the store network yields a more elevated level of administration when contrasted with the situation where the elements in various echelons plan material streams freely. From Management point of view the stock administration boundaries significantly affected production network execution and figured that the outcome would be comparable in different businesses having diverse boundaryIn a study by Shemsu and Ensermu (2014) investigated the relationship between information sharing, inventory management and customer satisfaction in the downstream chain of textile industry in Ethiopia. The study adopted a quantitative research design to establish the relationship between information sharing inventory management and customer satisfaction in the downstream chain of textile industry in Ethiopia. A sample size of 180 respondents consisting of retailers and distributors was used. The research results indicated that there was a significant positive relationship between information sharing, inventory management and customer satisfaction. Information sharing and customer satisfaction had Pearson correlation coefficient of 0.850 ** Information sharing and inventory management had Pearson correlation Coefficient=0.864** and Inventory management and customer satisfaction had Pearson Correlation coefficient of 0.814** Information sharing and inventory management significantly influenced customer satisfaction. The study concluded that strategic suppliers

partnership and information sharing and improve customer collaboration increasing high levels of customer satisfaction.

Koumanakos (2018) studied the effect of stock controlling on firm performance 1358 manufacturing firms operating in three industrial sectors in Greece, food textiles and chemicals were used in the study covering 2000 – 2002 period. The hypothesis that lean inventory management leads to an improvement in a firm's financial performance was tested. The findings suggest that the higher the level of stock preserved a firm, the lower the rate of return. In conclusion, most of the studies reviewed concentrated on conventional firm level variables such as stock levels, demand and lead time. Koumanakos (2008) in his study aimed at testing the hypothesis that efficient stock management leads to an improvement in a firm's financial performance. The results revealed that the higher the level of inventories preserved, departing from a lean manufacturing, by an enterprise the lower is its rate of returns. Jonsson and Mattsson (2008) studied the utilization of material arranging techniques to control material stream inventories of bought things. *The examination investigated the supply chain management practices of material arranging strategies used to control material stream in various kinds in assembling and dispersion organizations.* They likewise assessed the distinction in saw arranging execution relying upon the manner in which arranging boundaries are resolved and the strategies utilized.
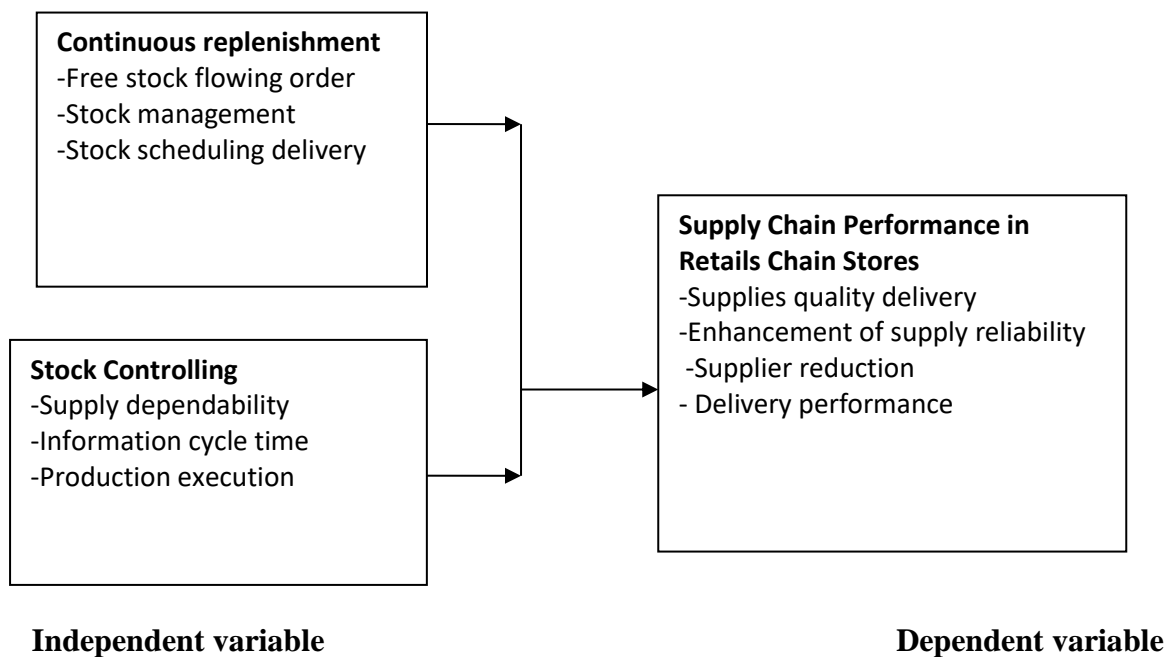
Conceptual Frameworks

Independent variable   **Dependent variable**

Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

The Research Design

The study adopted descriptive survey research design. The study used descriptive survey research design as it allows adoption of multifaceted approaches to collection of data, data processing and data analysis. The research design also allows for a multifaceted approach to data analysis. The research design was chosen because it seeks to collect information that depicts existing phenomena by asking questions relating to individual perceptions and attitudes. According to Miller2010), descriptive survey research design support collection of quantitative and qualitative data.The target population of the study was 106 supermarkets operating in Nairobi (The Retail Trade Association of Kenya, RETRAK (2020). 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, operation managers, inventory managers, ICT managers, and Logistic and relationship managers from the selected 106 retail chain of stores in Nairobi City County.

Data collection

The study use primary data. The data was collected using questionnaire. The questionnaired contrained both open and closed questions items. The study used uestionnaired because it was easy to administer, easy to analysis data from questionnaire, enable collection of large voleme of data and costly in respect ti time resource. Before using a questionnaire, it is always advisable to conduct a pilot study (Miller, 2010). A pilot investigation was first conducted in order to assess the adequacy of the research design and of the questionnaire to be used such as to determine whether the anticipated respondents understands the questions asked in the instrument. Furthermore, a pilot survey brings to light the weaknesses of the questionnaires and of the survey techniques. The study was selecting a pilot group of 11 from a retail chain store that were not included in the actual study.

Data Analysis and presentation

The study adopted descriptive analysis technique to analyze quantitative data. Data presentation will be done by the use of charts and percentages and frequency tables for ease of understanding and interpretations (Sekaran, & Bougie, 2013). Descriptive statistics such as means, standard deviation and frequency distribution was used to establish the extent to which inventory management practices on supply chain performance in retail chain stores focusing on supermarket in Nairobi County. Qualitative data which was collected using open ended questions were analyzed using content analysis in a thematic approach and presented in a continuous prose form. Quantitative data was further analyzed using Inferential statistics ,correlation analysis and regression analysis. Correlation analysis was used to establish whether there exist a significant correlation or association between variables. Regression analysis sought to establish whether there exists a significant relationship between variables.

RESULTS AND DISCUSSION OF THE FINDINGS

Introduction

From a target population of 106, 100 officers involve in procurement and supply chain management in supermarkets filled and returned the filled questionnaires. This constituted 94% response rate. This was adequate for the study. Kothari (2014) noted that a response rate of 50, 60 and 70% was adequate for a study. The respondents were requested to indicate their designations.

Response Rate		
Questionnaire Returned And Completed	100	94%
Questionnaire Not Returned And Incomplete	6	6%
Respondents Position		
Procurement Officers	37	37%
Financial Managers	11	11%
Operation Managers	18	18%
Inventory Managers	7	7%
ICT Managers	5	5%
Logistic And Supply Chain Managers	22	22%
Level Of Education Attained By The Respondents		
College Diploma Level	39	39%
University Degree	27	27%
Master Degree	15	15%
Doctorate As The Highest Level Of Education	11	11%
Secondary Level Of Education	8	8%
Period Supermarket Has Been In Operations		
16 And Above Years	53	53%
6-10 Years	29	29%
11-15 Years	18	18%
Working Experience		
1-5 Years	21	21%
6-10 Years	57	57%
11-15 Years	15	15%
16 And Above Years	7	7%

From the results, 37% indicated that they were procurement officers, 11% indicated that they were financial managers, 18% indicated that they were operation managers, 7% indicated they were inventory managers, 5% were ICT managers,22% indicated that they were logistic and supply chain managers. On the level of education attained by the respondents, most 39 % had attained college diploma level of education, 27% had university degree as their highest level of education while 15% of the respondents had master degree as their highest level of education, 11% of the respondents had attained doctorate as the highest level of education attained while 8% had attained secondary level of education as their highest level of education. Most 53% of the supermarkets had been in operation for 16 and above years, 29% had been in operation for 6-10 years while 18% had been in operations between 11-15 years. This implied that data was collected from supermarkets who have experience in inventory management practices for more than 6 years and how it impact on supply chain performance supermarkets in Nairobi City County. On working experience, 57% of the respondents had an experience of 6-10 years, 21% had working experience of 1-5 years, 15% of the respondents had a working experience of 11-15 years, while 7% of the respondents had a working experience of 16 and above years in the supermarkets.

Descriptive Analysis

Table 1: Continuous Replenishment

Continuous Replenishment	Mean	Std Dev
The supermarket achieve free flowing order fulfillment	4.142	.649
Reduction in line inventory	4.573	.489
Timely inventory replenishment	3.869	.841
Reduction in frequency of ordering	4.676	.578
Identification of real time demand due to up-to-the-point-of-sale information	4.281	.451
Achievement of store ready packaging	4.548	.476
Achievement of stock listing efficiency	4.467	.501
The supermarket achieve stock controls	4.503	.765
The supermarket achieve logistic networks	4.074	.683
Attainment of accurate forecasting of capacity requirement	4.002	.813

From the findings in Table 1, respondents indicated that supermarket experience reduction in frequency of ordering to a very great extent as indicated by a mean of 4.676 with a standard deviation of 0.578, recorded reduction in line inventory to a very great extent as indicated by a mean of 4.573 with standard deviation and enhanced achievement of store ready packaging to a very great extent as indicated by a mean of 4.548 with a standard deviation of 0.476 and that the supermarket achieved stock controls to a very great extent as indicated by a mean of 4.503 with a standard deviation of .765.

From the results, respondents indicated that supermarket recorded achievement of stock listing efficiency, ensured identification of real time demand due to up-to-the-point-of-sale information and deployed free flowing order fulfillment to a great extent as showed by a mean of 4.467, 4.281 and 4.142 and standard deviation of 0.501, 0.451 and 0. .64874 Respectively. Further, respondents indicated that supermarket deployed logistic networks to a great extent as indicated by a mean of 4.074 and standard deviation0. .683, foster attainment of accurate forecasting of capacity requirement to a great extent as indicated by a mean of 4.002 with a standard deviation of 0.813 and reported supermarket timely inventory replenishment to a great extent as showed by a mean of 0.387 and a standard deviation of 0. 841. The respondents explained that supermarkets had deployed continuous replenishment as inventory management in an effort to achieve supply chain performance in Nairobi City County. The finding is supported by Hernon and Whitman, (2012) that vendor managed inventory (VMI) supply chain improves order rate variance in response to random customer demand and improves sales and delivery performance.

Table 2: stock controlling in stores in Nairobi City County

Statement related to Stock Controlling	Mean	Std Dev
There is effect monitoring of stock flow in the retail stores	4.627	.825
The retail store has internal stock movement increases the opportunities for errors	3.991	.52214
The retail store foster accounting higher transaction frequencies	4.383	.582
There is adequate information sharing increasing inventory managed efficiently	4.295	.456
We foster investment in acquiring information to foster accuracy reporting	4.724	.451
There is decrease in holding costs in retail stores	4.314	.706
There is increase in restocking of the shelves	4.148	.620
We foster suppliers partnership thereby increasing retailing operations	4.559	.5389
There is foster strategic information sharing between suppliers and retail chain stores	4.037	.873
There is supplier cooperation's in packaging that meet the customer's specific requirements	4.261	.895
There is co-ordination with the supplier resulting into maximize cost	3.897	0.671

From the results, respondents indicated that supermarkets foster investment in acquiring information to foster accuracy reporting and monitoring of stock flow in the retail chain stores monitoring of stock flow and that supermarket foster suppliers partnership thereby increasing retailing operations to a very great extent as indicated by a mean of 4.724 and 4.627 and 4.559 with a standard deviation of 0.4513 , 0.825 and 0.539 respectively. The respondents indicated that supermarket experience decrease in holding costs in retail stores to

a great extent as indicated by a mean of 4.314 and standard deviation of 0. .706, that supermarket have adequate information sharing increasing inventory managed efficiently to a great extent as indicated by a mean of 4.295 with a standard deviation 0. 456, foster supplier cooperation's in packaging that meet the customer's specific requirements to a great extent as indicated by a mean of 4.261 with standard deviation of 0.8945 and that supermarket increases restocking of the shelves to a great extent as indicated by a mean of 4.148 and standard deviation of 0. 620.

Further, respondents indicated that supermarket fostered strategic information sharing between suppliers and retail chain stores to a great extent as supported by a mean of 4.037 with a standard deviation of 0.87 retail store have internal stock movement increases the opportunities for errors to a great extent as indicated by a mean of 3.991 with a standard deviation of 0.522, have co-ordination with the supplier resulting into maximize cost to a great extent as supported by a mean of 3.897 with a standard deviation of 0. 6712. This demonstrated that stock control in inventory management in supermarket influence supply chain performance in Supermarkets in Kenya .The results concurred with Tundura and Wanyoike (2016) that inventory control strategies in inventory record accuracy enhance information sharing efficiency in Kenya Power Nakuru County, Kenya

Table 3: Supply Chain Performance in Supermarkets- Ensure uniformity in numerical figure

Supply Chain Performance measures	Mean	Std Dev
Improvement in Level of supplier output	4.270	0.707
Provision of error-free products in sales volume	4.570	0.620
Improve Supply chain cost efficiency	4.180	0.411
Improve order-to-delivery lead time	4.450	0.557
Improve customer satisfaction	4.540	0.737
Improvement in quality of chemical products	4.040	0.764
Supply chain flexibility	3.520	0.469
Supply chain response time	4.260	0.719
Delivery performance	4.173	0.492
There is improvement in supply cycle time	3.935	0.672

From the results most respondents indicated that there was provision of error-free products in sales volume and Improve customer satisfaction to a very great extent as indicated by a mean of 4.570 and 4.540 with a standard deviation of 0.620 and 0.737 respectively. This demonstrated that inventory management practices contribute to quality products and enhance customer satisfaction in retail chain stores in Nairobi City. Respondents indicated that retail chain stores achieved Improve order-to-delivery lead time to a great extent as indicated by a mean of 4.450 with a standard deviation of 40.557, retail chain stores achieved improvement in level of supplier output to a great extent as indicated by a mean of 4.270 with a standard deviation of 0.709 and that retail chain stores achieved supply chain response time to a great extent as indicated by a mean of 4.260. Also respondents reported that

supermarkets achieved improvement in Supply chain cost efficiency to a great extent as indicated by a mean of 4.180 with a standard deviation of 0.4115, increased delivery performance to a great extent as indicated by a mean of 4.173 and standard deviation of 0.492 and attained improvement in quality of chemical products to a great extent as indicated by a mean of 4.040 with standard deviation of 0.764. This demonstrated that inventory management practices in retail chains stores contributed to supply chain performance improvement.

Further, respondents indicated that retail chain stores achieved improvement in supply cycle time to a great extent as indicated by a mean of 3.935 and standard deviation of 0.672 and that supermarkets achieve supply chain flexibility to a great extent as indicated by a mean of 3.520 with a standard deviation of 0.469. This clearly demonstrated that supermarkets recorded improvement in supply cycle times and supply chain flexibility as a results of continuous replenishment, stock control, inventory record accuracy and inventory optimization. Respondents further explained that enhance logistic operations, optimized stock demands and efficient delivery of goods contribute to supply chain performance in supermarkets. The finding concurred with Mwangi (2013) that inventory management techniques contributed to supplier delivery cycle times and delivery performance.

Correlation Analysis

Table 4: Correlation coefficient

Pearson Correlation		Supply Chain Performance in Retails Chain Stores
Supply Chain Performance in Retails Chain Stores	r	1
	Sig. (2-tailed)	
Continuous replenishment	r	.712**
	Sig. (2-tailed)	.000
Stock Controlling	r	-.635*
	Sig. (2-tailed)	.001

The findings in Table 4.0 indicates that, there exists a strong, significant and positive correlation between Continuous replenishment and supplier chain Performance of in supermarkets in Nairobi City County, Kenya as indicated by correlation factor, r=0. 712 PV=0.000<0.01). The result predicts a strongly significant and a positive correlation between continuous replenishment and supplier chain Performance of Supermarkets in Nairobi City County. The results in Table 4 indicates that, there exists a moderately strong, significant and negative correlation between stock controlling and supplier chain Performance of in supermarkets in Nairobi City County, Kenya as indicated by correlation factor, r=-0. 635 PV=0.001<0.05). The result predicts a moderately significant and a negative correlation between stock controlling and supply chain performance in supermarkets in Nairobi City County, Kenya.

Multi-variate Regression Analysis

The study perform multiple regression analysis to determine whether combined total sum effect of inventory management practices as predictors on supply chain performance in supermarkets in Nairobi City County, Kenya.

Table 5: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562[a]	.315	.286	.41590

Predictors: (Constant), Continuous replenishment and Stock Controlling

b. Dependent: Supply Chain Performance in Retails Chain Stores

Table 5 present multiple regression model summary results. R-Squared revealed that there existed a significant variation between continuous replenishment and stock controlling and supply chain performance in retails chain stores of Nairobi City County as correlation factor r=0.562 at significant level at 0.05. Adjusted R^2 is called the coefficient of determination and exhibit variation in factors of supply chain performance of supermarkets Nairobi City County. The regression model achieves goodness of fit. It test whether all the independent variable total sum effect or collectively influence supply chain performance in retails chain stores. The results of analysis of variance (ANOVA) indicated that the overall model was statistically significant and that continuous replenishment, stock controlling, inventory record accuracy and inventory optimization as significant predictors of supply chain performance in retails chain stores of Nairobi City County. The F-calculated of 10.937 reported at 0.000< 0.05 far exceeded that F-critical 1.527. This clearly indicated that there existed a goodness of fit between inventory management practices and supply chain performance of Nairobi City County. The result confirms that independent variables were good predictors of supply chain performance in supermarket in Nairobi City County, Kenya.

Table 6: Beta Coefficients

Coefficients a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.431	.689		.625	.533
Continuous replenishment	.670	.185	.513	3.626	.007
Stock Controlling	-.255	.101	-.271	-2.539	.013

a. Dependent Variable: Supply Chain Performance

The resultant multivariate regression model as indicated as substituting the beta coefficient was

$$Y = 0.431 + 0.670X_1 - .255X_2 + \varepsilon$$

From the results in Table 6, constant value in regression model was $\alpha = 0.431$. This indicates the level of supply chain performance in supermarkets in Nairobi City County holding the influence of inventory management practices constant. Coefficient regression results revealed that continuous replenishment had a significant positive influence on supply chain performance in supermarkets in Nairobi City County as $B_1 = 0.670$, PV = .007<0.05, t=3.626). The finding implied that a unit increase in continuous replenishment would lead to a significant increase in supply chain performance in supermarkets in of Nairobi City County factor $B_1 = 0.670$. The results implied that an increase in continuous replenishment would increase supply chain performance. The results is supported by Mogere,Oloko, Okibo (2013) that inventory control systems contribute to supply chain performance in tea processing firms.

From coefficient regression results, stock controlling had a significant and negative influence on supply chain performance in supermarkets in Nairobi City County as $B_2 = -0.255$, PV = .013<0.05, t=-2.539). The finding implied that a unit increase in stock controlling would lead to a significant decrease in supplier chain performance in supermarkets Nairobi City County by regression factor $B_2 = -0.255$. The study was carried during severe supply chain disruption due to covid-19 health pandemic that disrupted real-time inventory tracking and inaccurate forecasting due to unexpected supply chain. Inventory control experience delay in suppliers, delay payment of of suppliers, suppliers of inadequate products and low purchasing of the products due to low customer turn out.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary of Findings

From the results, there exists a strong, significant positive correlation between Continuous replenishment and supplier chain performance in supermarkets in Nairobi City County, Kenya. Regression results revealed that continuous replenishment has a significant positive influence on supply chain performance in supermarkets in Nairobi City County. This demonstrated that enhanced continuous replenishment contribute to reduction in frequency of ordering , ordering line, enhancement in achievement of store ready packaging and influence supermarket achieving stock controls and thus improving supplier chain performance. From the finding, the study revealed that supermarket recorded achievement of stock listing efficiency, ensured identification of real time demand due to up-to-the-point-of-sale information and deployed free flowing order fulfillment, deployed logistic networks, foster attainment of accurate forecasting of capacity requirement and enhance supermarket timely inventory replenishment to a great extent contributing to increase in delivery performance, reduction supply cycle time and enhance supply cost efficiency.

The study revealed a moderately strong, significant and negative correlation between stock controlling and supplier chain performance in supermarkets in Nairobi City County, Kenya. Regression analysis revealed a significant and negative of stock controlling influence on supply chain performance in supermarkets in Nairobi City County. This demonstrates that increasing stock controlling by a unit would lead to a significant decrease in supplier chain performance in supermarkets Nairobi City County. The study established that supermarkets foster investment in acquiring information to foster accuracy reporting and monitoring of stock flow, enhance monitoring of stock flow, foster suppliers partnership, decrease in holding costs in retail stores, ensure adequate information sharing increasing inventory managed efficiently, foster supplier cooperation's in packaging that meet the customer's specific requirements and increases restocking of the shelves to a great extent. The negative implication of stock controlling may be occasion by inaccurate real time tracking of stocks and inaccurate forecasting due to supply chain disruption especially Covid-19 Pandemic and occurrence of supply chain disruptions.

Conclusion

The study concluded that continuous replenishment contribute significantly and positively to supply chain performance in supermarkets in Nairobi City County. Continuous replenishment result into reduction in frequency of ordering, reduction in line production, foster ready packaging, increase stock controls improving supplier, enhance stock listing efficiency, identification of real time demand due to up-to-the-point-of-sale information and deployed free flowing order fulfillment, deployed logistic networks, foster attainment of accurate forecasting of capacity requirement and enhance supermarket timely inventory replenishment to a great extent contributing to increase in delivery performance, reduction supply cycle time and enhance supply cost efficiency. The study concluded that stock controlling had a significant and negative influence on supply chain performance in supermarkets in Nairobi City County as results demonstrated that a unit increase in stock controlling would lead to a significant decrease in supplier chain performance in supermarkets Nairobi City County. Supply chain disruptions as caused by Covid 19 hinder real-time inventory tracking and inaccurate forecasting due to unexpected supply chain. Inventory control experience delay in suppliers, delay payment of suppliers, suppliers of inadequate products and low purchasing of the products due to low customer turn out. at supermarkets in Nairobi City County.

Recommendations

The retail chain stores management should develop and implement measures that enhance continuous replenishment in order to promote significant supply chain performance in supermarkets in Nairobi City County. Continuous replenishment could be achieved through frequency of ordering, foster ready packaging, increase stock controls improving supplier, enhance stock listing efficiency, identification of real time demand due to up-to-the-point-of-sale information and deployed free flowing order fulfillment, deployed logistic networks, foster attainment of accurate forecasting of capacity requirement and enhance supermarket timely inventory replenishment to a great extent contributing to increase in delivery

performance, reduction supply cycle time and enhance supply cost efficiency. The study recommended that retail chain stores management should be keen on how stock controlling is handed in supermarkets. This was informed by stock controlling decrease in supplier chain performance in supermarkets Nairobi City County. As the study was carried during severe disruptions caused by Covid 19 affecting real-time inventory tracking and causing inaccurate forecasting due to unexpected supply chain disruptions. Inventory control experience delay in suppliers, delay payment of suppliers, suppliers of inadequate products and low purchasing of the products due to low customer turn out. Supply chain resilience's practices such as supplier's collaborations and strong risk management culture should be adopted in retail chain stores to overcome the effect of supply chain disruptions and guaranteed achievement of supply chain performance.

REFERENCES

Achieng, J. B. O., Nyanga'u, S. P. & Mbura, L. K. (2018). Influence of inventory management practices on performance of retail outlets in Nairobi City County. *InternationalAcademic Journal of Procurement and Supply Chain Management*, 3(1), 18-43

Ahmad, K. & Zabri, S. M. (2016). Inventory management practices among Malaysian micro retailing enterprises. *Journal of Business and Retail Management Research* 11 (1). 103-115

Atnafu, D. & Balda, A. (2018). The impact of inventory management practice on firms' competitiveness and organizational performance: Empirical evidence from micro and small enterprises in Ethiopia. *Cogent Business & Management*, 5, 1-16

Bala, P.K. (2012) Improving inventory performance with clustering based demand forecasts. *Journal of Modelling in Management*, 7, (1), pp. 23-37.

Chesaro,R.C. (2016). Supply chain management practices and operational performance of multinational manufacturing firms in Kenya, Unpublished MBA Project, University of Nairobi, Nairobi.

Deveshwar, A., & Dhawal, M. (2013). *Inventory management delivering profits through stock management*. World Trade Centre, Dubai: Ram University of Science and Technology.

Donald, W. (2017). Purchasing and supply materials.7 th Edition published in New Delhi. Eroglu, C., & Hofer, C. (2011). Lean, Leaner, Too Lean? The Inventory-Performance Link Revisited. *Journal of Operations Management*, 29, 356-369.

Gary B, J. R. (2015). *Supporting Variable Demand*; Four key Areas to analyze Gibson W. (2015) Purchasing and supply materials, 7 th Edition published in New Delhi.

Govind, A., Luke, R. & Pisa, N., (2017). Investigating stock-outs in Johannesburg's warehouse retail liquor sector, *Journal of Transport and Supply Chain Management* 11(0), 303.

Guilherme ,L., Tortorella,R.& MiorandoG. M. (2017). Lean supply chain management: Empirical research on practices, contexts and performance. *International Journal of Production Economics*. 193, 98-112.

Heizer, J. & Render, B. (2014) *Operations Management, Sustainability and Supply Chain Management*. 11th Ed.

Hernon, P.& Whitman, J.R. (2012).: *Delivering satisfaction and service quality*: A customerbased approach for libraries. New Delhi, ALA Indiana.

Krause, D. R. (2018). The antecedents of buying firms' efforts to improve suppliers. *Journal of Operations Management*, 17(2), 205-24.

Krause, D. R., Scannell, T. V. & Calantone, R. J. (2012). A structural analysis of the effectiveness of buying firms' strategies to improve supplier performance. *Decision Sciences*, 31(1), 33-55.

Kumar, K. H. & Soni, T. C. E. (2011). Just-In-Time Logistics. Wey Court East, Union Road, Farnham, Surrey GU9 7PT, England: Gower Publishing Limited

Lee, H. (2012). *Inventory Control*: Theory and Practice. New Jersey: Prentice Hall.

Lobna, S., & Islam.H. (2019). The Impact of Inventory Management on Firms' Financial Performance: *Case Study Egypt*.

Macharia, S. M., & Mukulu, E. (2016). Role of Just- In -Time in Realization of an Efficient Supply Chain Management: A Case Study of Bidco Oil Refineries Limited, Thika. *The Strategic Journal of Business & Change Management*, 3(6), 123- 152.

Malakooti, B (2013):*Operation and Production Systems with multiple objectives*, Publisher John Wiley & Sons.

Mandal, S. (2012). An Empirical Investigation into Supply Chain Resilience. The IUP *Journal of Supply Chain Management*, 9(4), 46-61.

Mehfooz ,A and Muhammad ,A (2012): Inventory management and its effect on customer satisfaction. *Economics of Knowledge*, 4 (3), 3.

Miller, R. (2010). *Inventors Control*: Theory and Practice. New Jersey: Prentice Hall.

Mogere, K., Oloko, M. & Okibo, W. (2013). Effect of Inventory management practices on Operational Performance of Tea Processing Firms: A Case Study of Gianchore Tea Factory, Nyamira County, Kenya. *The International Journal of Business & Management*, 1 (5), 12-27.

Mohd, S., M.& Juniati, S. & Kozicka, K. & ahmad,R., M.(2019). Influence of Lean Practices on Supply Chain Performance. *Polish Journal of Management Studies*. 19. 353-363

Mugenda, O.M. & Mugenda, A.G. (2013). *Research Methods*. Quantitative and Qualitative Approaches. Nairobi: ACTS Press, ICRAF Complex, United Nations Avenue.

Muhayimana, D. P. (2015). The effect of inventory management on firm performance. *International journal of productivity and performance management*, 57(5),355- 369

Mwangi, N.W., Muturi, W.M., Shale, N.I (2019). Influence of Supply Chain Optimization on the Performance of Manufacturing Firms in Kenya. *PhD thesis Report,* Jomo Kenyatta University of Agriculture and Technology.

Mwangi, S. M. (2016). Role of Just-In-Time in Realization of an Efficient Supply Chain Management: A Case Study of Bidco Oil Refineries Limited, Thika. *Strategic Journal of Business & Change Management*, 3(2).

Nimeh, H.A., Abdallah, A.B. & Sweis, R. (2018). Lean Supply Chain Management Practices and Performance: Empirical Evidence from Manufacturing Companies. *International Journal of supply Chain Management*.7, (1).

Nyabwanga, R. N., & Ojera, P. (2012). Inventory management practices and business performance for small-scale enterprises in Kenya. *Journal of business management*, 4.

Nyawanga, F. K., & Otinga, H. (2021). Influence of inventory management practices on procurement performance of judiciary; A case of law courts in Kakamega County. *The Strategic Journal of Business & Change Management*, 8 (1), 364 – 383.

Pietro, P. M. (2012). Measuring the performance of suppliers: An analysis of evaluation processes. *Journal of Supply Management*, 38(4), 29-41.

Prahinski, C. & Benton, W. C. (2014). Supplier evaluations: Communication strategies to improve supplier performance. *Journal of Operations Management*, 22(1), 39-62.

Pyke, D.F. & Peterson, R. (2016): *Inventory Management and Production Planning and Scheduling*. 3rd Edition, John Wiley, New York.

Salawati, S., Tinggi, M., & Kadri, N. (2012). Inventory management in Malaysian construction firms: impact on performance. *SIU Journal management*, (2) 59-60.

Mittal, .R. & Gupta, R. (2010). The impact of decentralized control on firm-level inventory evidence from the automotive industry. *International Journal of Physical Distribution and Logistics Management*, 41, 435–456

Naliaka, R. & Namusonge,G. (2015). Inventory management practices and business performance for Manufacturing companies in Kenya. *Journal of business management*, 4.

Saunders, M., Phillips,L. and, Adrian,T. (2009):.*Research Method for Business Studies*.5 th edition. Silver, E.A.

Sekaran, U., & Bougie, R. (2013). *Research methods for business. A skill building approach* (6th ed.). West Sussex: Wiley.

Shajema, I. (2018). Effect of Inventory Control Practices on Performance of Retail Chain Stores In NairobiCounty, Kenya,*Journal of International Business, Innovation and Strategic Management* , 1(5), 18- 38

Shemsu, L. & Ensermu, M. (2014). The Relationship between Information Sharing, Inventory Management and Customer Satisfaction in the Downstream chain of textile industry. The case of Addiss Ketema sub city. *MBA Thesis Report*. Addis Ababa University.

Tundura, L.&Wanyoike,D.(2016). Effect of Inventory Control Strategies on Inventory Record Accuracy in Kenya Power Company, Nakuru, *Journal of Investment and Management*. 5, 5, 82-92.

Vikram, R. C. (2012).: An Evaluation of Inventory Turnover in the Fortune 500   Industrial Companies. *Production and Inventory Management Journal*, 39 (1), 51-56

Wachiuri, E. W., Waiganjo, E. & Oballah, D. (2015). Role of supplier development on organizational performance of manufacturing industry in Kenya: A case study of   East   African Breweries Limited. *International Journal of Education and Research*,   3(3), 683-694.

Wafula, M.A. (2016). Inventory management and operational performance in the oil marketing companies in Kenya, *Unpublished MBA Project University of Nairobi*, Nairobi.

Sweis, S. (2018). Indirect and direct supplier development: Performance implications of individual and combined effects. *IEEE Transactions on Engineering Management*, 57(4), 536-546.

Wagner, S. (2018). Supplier development practices: An exploratory study. *European Journal of Marketing,* 40 (5/6), 554-571.

Waller, M.A. Nachtmann, H. & Hunter, J. (2017) Measuring the impact of inaccurate inventory information on a retail outlet. *The International Journal of Logistics Management*, 17, (3), 355-376.

Water, D. (2013).*Global logistics and distribution planning*: strategies for management (4th edition), Kogan Page Limited, London

Zappone, G.K. (2014). *Principles of Supply Chain Management*. A Balanced approach (3rd ed). USA: Printed in the United States of America.