

**LOGISTICS OUTSOURCING PRACTICES AND PERFORMANCE OF SMALL
AND MEDIUM ENTERPRISES IN MOGADISHU, SOMALIA**

BY

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DECLARATION

This research project is my original work and has not been presented for a degree in any other University



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This research project has been submitted for examination with my approval as University Supervisor



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DEDICATION

I dedicate this research project to my friend Hassan Idow for the support he gave me.

TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGMENT	iii
DEDICATION.....	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
ABBREVIATIONS AND ACRONYMS.....	ix
ABSTRACT	x
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study	1
1.2 Research Problem	5
1.3 Research Objectives.....	7
1.4 Value of the Study	7
CHAPTER TWO: LITERATURE REVIEW.....	9
2.1 Introduction.....	9
2.2 Theoretical Review	9
2.3 Logistics Outsourcing Practices.....	12
2.4 Firm Performance	14
2.5 Empirical Literature Review.....	15
2.6 Summary of Literature and Research Gaps	18
2.7 Conceptual Framework.....	19
CHAPTER THREE: RESEARCH METHODS	20
3.1 Introduction.....	20
3.2 Research Design.....	20
3.3 Target Population.....	20
3.4 Data Collection	20
3.5 Data Analysis	21
CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION.....	23
4.1 Introduction.....	23

4.2 Response Rate	23
4.3 General Information	23
4.4 Logistics Outsourcing Practices	26
4.5 Logistics Outsourcing Practices and Firm Performance (Customer Satisfaction)	30
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS-----	33
5.1 Introduction-----	33
5.2 Summary of the Findings-----	33
5.3 Conclusion-----	34
5.4 Recommendations for Management, Policy and Practice-----	355
5.5 Limitations of the Study-----	36
5.6 Suggestions for Further Research-----	36
REFERENCES-----	37
APPENDICES -----	37
Appendix I: Questionnaire-----	46
Appendix II: List of Small and Medium Enterprises in Mogadishu-----	51

LIST OF TABLES

Table 2.1: Summary of Literature and Research Gaps 18

Table 3.1: Summary of Data Collection and Analysis.....22

LIST OF FIGURES

Figure 2.1: Conceptual Framework	19
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ABBREVIATIONS AND ACRONYMS

3PLs	Third Party Logistics
LOPs	Logistic Outsourcing Practices
MSE	Micro and Small Enterprise
RBV	Resource Based View
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
SMEs	Small and Medium Enterprises
TCT	Transaction Cost Theory

ABSTRACT

The general objective of the study was to establish the effect of logistics outsourcing practices on performance of Small and Medium Enterprises in Mogadishu, Somalia. The study was guided by the following specific objectives: to establish logistics outsourcing practices that have been adopted by Small and Medium Enterprises in Mogadishu, Somalia and to determine relationship between logistics outsourcing practices and performance of Small and Medium Enterprises in Mogadishu, Somalia. The study adopted cross sectional survey design targeting 78 small and medium enterprises in Mogadishu, Somalia. Census was used and thus all the 78 firms were included in the study. Primary data was collected as supported by the questionnaire. The analysis was done using descriptive statistics (means and standard deviations) and inferential statistics (regression analysis). The findings indicated that majority of the small and medium firms in Mogadishu have adopted logistic outsourcing practices and these have significantly contributed towards their performance. The study concluded that inventory management practice had the largest and significant effect on performance of the small and medium enterprises in Mogadishu, Somalia followed by information flow management practice, warehousing management practice, transportation management practice and material handling management practice. The study recommended that logistic managers of the small and medium enterprises operating in Mogadishu should focus more on inventory management practice, information flow management practice and warehousing management practice since they have the greatest contribution towards their overall performance. The study was limited by Covid-19 pandemic that was a major challenge during collection of data. The study recommended further research to be done among larger firms away from the SMEs so that a comparison of the findings would be possible.

The key words: of the study was logistics outsourcing practices and firm performance of small medium enterprises Mogadishu, Somalia.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

There has been a growing popularity of outsourcing as a practice among firms as they strive to eliminate non-value adding activities for timely response to the needs of their customers. Mageto, Prinsloo and Luke (2018) noted that the decision of transferring some functions of the firm to third parties like logistics has been shown to play a key role as far as strategic alignment of the organization is concerned. The ever-increasing competitive forces and pressure from globalization means that firms must critically and objectively examine their business activities and processes and thus the need for logistics outsourcing (Dmitry, 2018). The key drivers of logistics outsourcing among firms include the desire to reduce costs, grow revenues generated and thus improve on profitability position (Joto & Odock, 2019).

The transaction cost theory, the network theory and resource-based view provided theoretical underpinning of this study. The TCT explained how the desire to reduce costs like decentralization of the order processing activities drive firms to engage in logistics outsourcing (Coase, 1937 & Williamson, 1985). The RBV was explain how resources (both internal and external) help the firms to engage in logistics outsourcing practices (Wernerfelt, 1984 & Barney, 1991). On the other hand, the network theory was explain how formation of relationships (either internally or externally) can support logistics outsourcing practices (Ellram & Cooper, 1990).

Small and Medium Enterprises (SMEs) play an important role including opening up employment opportunities to majority of the people. In fact, the SMEs are the largest component of the business units that are spread in different sectors of the economy including health, financial services, manufacturing as well as hotel and hospitality sectors. Low amount of capital is required when setting up the SMEs and they have the capability to offer products that are customized with the needs of the customers (Botan, 2018).

The key challenge faced by these SMEs is inadequate access to capital and other resources and this scarcity require that efforts are done to reduce operating costs for better performance (Mohamed, 2018). The study therefore sought to explore how logistics outsourcing may help in reducing costs incurred by these SMEs and how this enhances their performance.

1.1.1 Logistics Outsourcing Practices

Logistics relate with the movement and flow of raw materials that include stock of finished goods, work in progress as well as the component parts and it is classified as either in-bound or out-bound logistics (Zailani, Shaharudin, Razmi & Iranmanesh, 2017). On the other hand, outsourcing deals with engagement of third parties to carry out all or part of the business activities. Magutu, Chirchir and Mulama (2013) indicated that logistics outsourcing is about engaging external suppliers to carry out the inbound and outbound logistics activities and this helps the organization to effectively utilize resources in carrying out core activities that enhance performance. Solakivi, Töyli and Ojala (2013) orated that logistics outsourcing can be viewed as a firm practice where third parties are engaged to carry out some or all the logistic activities that were formally done internally in the firm.

Logistics outsourcing has been used synonymously to mean third-party logistics (3PL) services. According to the council of Logistics Management, 3PL is an entity that engages in provision of multiple logistics services to users such that the logistics service offered are integrated (Leuschner, Carter, Goldsby & Rogers, 2014). Ideally, logistics outsourcing focuses more on inbound as compared to outbound logistic activities. The key emphasis of inbound logistics includes acquisition of raw materials from supplying entities to a manufacturing firm (Ngonela, Mwaniki & Namusonge, 2014). On the other hand, outbound logistics look at

how the final products and the associated information are stored and flow from the final stage of production to the end consumers (Lin, Pekkarinen & Ma, 2015).

Among the logistics activity that can be outsourced by the firm include facility location, inventory management, warehousing, information flow management, material handling, transportation, order processing and packaging (König & Spinler, 2016). An organization can engage third parties (3PL) to offer part of all these logistics management activities. According to Lee, Lin and Cheng (2013), the adoption of logistics outsourcing is driven by the need to reduce the costs and enhance satisfaction of customers. A classification of the key logistics management activities that can be outsourced was provided by Langley and Capgemini (2016) and Liu, Huo, Liu and Zhao (2015) to include operational activities (clearing and forwarding, fleet management and transportation), information processing (that cover order management and information systems of logistic function) and the value added as well as strategic services (they include packaging, warehousing and inventory management).

1.1.2 Firm Performance

Performance describes the financial and non-financial proxies that give relevant information concerning how the objectives and goals of the firm are being realized (Jenatabadi, 2015). Imbuga, Guyo and Wario (2018) offered the dimensions of organizational performance to include learning and innovative ability, productivity, profitability, effectiveness and efficiency. While effectiveness relates with how an organization attains its set goal in a right manner, efficiency is used in reference to how well an organization leverages on the available adequate resources to meet the formulated goals. Quality is the extent which an organization meets or exceeds the expectations of customers (Armstrong & Kotler, 2015).

Kasie and Belay (2013) suggested that performance is the extent to which an organization is able to meet the overall established goals (these include financial as well as the non-financial goal). Unlike non-financial indicators of performance that are subjective, financial proxies of performance (profitability, returns generated on assets (ROA) and equities (ROE) as well as investments (ROI) have objectivity as actual figures are used in computing them (Tseng & Liao, 2015). It is challenging to determine performance of the firm since the most critical industry measures should be carefully determined with a clear time frame. The study operationalized organizational performance into customer satisfaction, which was measured by the number of customer complaints, new customer referrals and repeated purchase from customers (Garnefeld, Eggert, Helm & Tax, 2013).

1.1.3 Small and Medium Enterprises in Mogadishu, Somalia

There exists no clear definition of the term small and medium enterprise and the available definitions largely focus on number of employees and sales revenues generated by the firm. In fact, there exist significant variations in the term SMEs across different Countries around the world. For instance, in Kenya, the Micro and Small Enterprise (MSE) Act (2012) defines SMEs as any firm that employ 10-15 people and generating sales revenue of Kshs. 500,000-5,000,000. The SMEs cover various firms that operate in different sectors of the economy.

In Mogadishu, there are 78 formerly registered and recognized SMEs that operate as manufacturers and in-service sectors of the economy (Appendices II). However, the figure could be higher than this given the informality of the sector and the fact that most of these SMEs have not been formally registered (Ministry of Commerce and Industry of Somalia, 2020). It is estimated that the SMEs sector in employ about 80% of the labor force in Somalia while significantly contributing to about 1.2% of the Gross Domestic Products (GDP)

of the country (Abdirahman, 2017). However, most of these SMEs do face challenges related with adequacy of resources and this make it hard to own capabilities that would enhance the level of efficiency in their operations (Ahmed, Osman, Abdulle & Musse, 2018). Hence, it is through outsourcing that some of these capabilities like logistics can be available to these SMEs (Ngonela et al., 2014). It is therefore against this background that the present study seeks to determine how outsourcing of the logistics function may affect performance of these SMEs.

1.2 Research Problem

Organizations are under pressure to offer products that meet the ever-changing needs of the customers while minimizing operating costs so as to maximize on revenues generated. Wang, Sadler and Shee (2017) held that the forces of globalization, environmental turbulence and competition at the market place also pose a challenge for firms seeking to survive and improve on overall performance. Therefore, to survive in such an environment, firms must continuously examine their operations with the need to outsource. This helps in freeing up the available resources that can be used in carrying out the core business of the organization while saving on costs and thus better performance (Somuyiwa, Odepidan & Dosunmu, 2015).

The SMEs play a key role as far as the growth of the economy of Somalia is concerned through creation of employment opportunities. Well performing SMEs are seen to offer quality products and create more jobs thus improved living standards of people where they are operating (Kasie & Belay, 2013). Given that most of the SMEs do face a challenge as far as resources are concerned, effective utilization of these resources would be ideal in enhancing their performance. Most of the SMEs in Somalia have limited capabilities like transportation which can be best obtained through logistics outsourcing. Thus, by outsourcing some of the

non-core activities like logistics management, more efforts would be diverted towards strengthening the core activities which is likely to translate into better performance (Joto & Odock, 2019).

In the mining sector of Namibia, Nzitunga (2019) looked at logistics outsourcing practices and the ability of the firm to perform where a positive relationship was noted. Another study conducted in Slovenia by Kavčič, Gošnik, Bekerb and Suklan (2015) looked at logistics outsourcing and its link with performance of the organization where a positive relationship was noted. A study conducted in Pakistan by Uzair and Siddiqui (2018) sought to determine the key factors that shape logistics outsourcing and these factors were suggested to include human and physical assets as well as partnerships. In Kenya, Njoroge and Onserio (2017) looked at the key factors that constrain import logistics outsourcing borrowing evidence from manufacturing entities in Kenya. It was shown that the reasons for outsourcing predict the decision of outsourcing logistics firms.

Kyusya (2015) focused on the Kenyan shipping industry to seek for a link between logistics outsourcing and operational performance of an entity. It was shown that outsourcing of logistics services helps the firm to focus more on the core activities which may enhance its performance. Locally in Somalia, Gele (2019) did an analysis of sustainable supply chain and its link with competitive positioning of the manufacturing entities. It was noted that integration with suppliers is a key driver of the competitive positioning of the entity. Farah (2018) focused on supply chain management and its link with the ability of the manufacturing entities to perform where a significant connection was noted.

From the above studies, it is clear that some of them were conducted in developed countries like Pakistan and Slovenia and not in Somalia and this create contextual gap. There are other studies that focused on variables like operational performance not organizational performance resulting into conceptual gaps. None of the study done in Somalia focused on logistics outsourcing practices which creates the gap. To address these

gaps, the present study sought to answer the following research question: What is the effect of logistics outsourcing practices on performance of Small and Medium Enterprises in Mogadishu, Somalia?

1.3 Research Objectives

The general objective of the study was to establish the effect of logistics outsourcing practices on performance of Small and Medium Enterprises in Mogadishu, Somalia.

The specific objectives of the Study

- i. To establish the logistics outsourcing practices that have been adopted by Small and Medium Enterprises in Mogadishu, Somalia.
- ii. To determine relationship between logistics outsourcing practices and performance of Small and Medium Enterprises in Mogadishu, Somalia.

1.4 Value of the Study

The findings of the study would be important to the management of the SMEs in Somalia, the government of Somalia, the 3PL firms as well as future scholars. Through the findings of this study, the management of the SMEs in Somalia would have a clear understanding of the role played by logistics outsourcing on performance of their organization. This would guide formulation of sound policies guiding logistics outsourcing practices among the SMEs that was enhance performance.

Practitioners like the 3PLs would rely on the findings of the study to understand the role played by their services on performance of partner organizations. The government of Somalia would rely on the results of

the study to formulate sound regulations governing logistics outsourcing for improved performance of the SMEs sector. Future scholars will use the study to carry out additional research on the topic.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter reviews relevant information as it regards logistics outsourcing and firm performance. The review of literature is centered on the theories forming foundation of the study and the concepts as well as the empirical studies. A summary of the reviewed literature with gaps and the conceptual framework are also indicated in the chapter.

2.2 Theoretical Review

This section is set out to detail the theories that provided anchorage to the constructs.

2.2.1 Transaction Cost Theory

Advanced by Coase (1937) and Williamson (1985), the TCT theory argues that firms incur expenses when exchanging (transacting) in two or more products. These expenses incurred by the firm as it transacts are called transaction costs. These transaction costs can be classified as internal or external transaction costs. Among the key forms of external transaction costs include information and search related expenses incurred to look for suppliers, decision and bargaining costs incurred in purchasing a component and enforcement and policing costs incurred in monitoring the quality. Internal transaction costs are incurred inside the through transactions occurring within different departments and units (Coase, 1937).

This theory has been criticized for failing to measure the direct transaction costs but only focus on variables like uncertainty (Gulbrandsen, Lambe & Sandvik, 2017). The theory has also failed to adequately define the key terms including the costs and the transactions in question. The theory fails to clarify whether the transaction costs in question arise from the firm or from the market (Zylbersztajn, 2018). The theory is

premised on the fact that the governance mechanisms in the firm strive to lower the transaction costs, but is not clear how this is done (Dagdeviren & Robertson, 2016). Despite these criticisms, this theory is relevant to the study since the key driver of firms to outsource logistics management practices is to reduce the costs (Dakare & Ikenwa, 2016) including the transaction costs that are central theme of the TCT. By reducing these transaction costs, an organization was regarded as lean which would enhance its performance. Thus, the theory was link how cost reduction resulting from outsourcing of the logistics management practices enhances performance at the firm level.

2.2.2 Network Theory

This theory was developed by Leonhard (1736) and it provides that trust, power and economic gain influence the ability of parties to enter into collaborations. The theory argues that an organization should be able to manage relationships by cultivating a culture of information exchange with other organizations. The theory raises the need for the firm to effectively manage relationships with third parties. It argues that firms should form alliances and other mutual relationships with each other for mutual gain (Tacheva & Simpson, 2019). More specifically, the theory argues that firms that do have sufficient in-house logistics capabilities should enter into relationships with third parties who provide such services. Through this, the firm was save on costs and improve on services through reduced lead times (Ma, Xue, Yuen, Sun, Zhao, Zhang & Huang, 2020).

One criticism of this theory is that firms functioning within established networks do not have freedom to pursue actions that are well aligned with their own goals (Ngugi, 2016). Neither can these firms carry out operations in isolation from each other. According to Houe and Murphy (2017), the theory fails to provide an explicit explanation for firms in making a decision of outsourcing the logistics services. The theory is premised on the fact there is sharing of information between the parties involved in the outsourcing of logistic

services (Lu, Potter, Rodrigues & Walker, 2018). However, it does not provide an explanation of how the firm avoids sharing of strategic and rare resources between firms that would threaten competitive advantage of one firm (Koniordos, 2017). Logistics outsourcing practices entail the decision of the firm to form relationship with other third-party service providers. Such relationships are the foundation of this network theory. Success of logistics outsourcing practices was dependent on the established relationships between the firm and the service providers. The theory was used to explain how forming relationship during logistics outsourcing influences firm performance.

2.2.3 Resource Based View

Developed by Penrose (1959), this theory argues consider an entity as bundle of resources which are utilized so as to remain competitive in a given establishments. The theory notes that a firm should be able to secure resources from the environment that would enable it to compete well (Yang & Lirn, 2017). There are two arguments that provide the basis of this theory. First, a firm leverages on its resources so as to perform. Secondly, these resources possessed by the firm are assumed to be hard for others to copy them, rare, valuable and without clear substitutes (Al Shibli, Daud & Karim, 2019). A firm with these unique attribute of resources were definitely remain to be more competitive (Oliveira-Neto, Godinho-Filho, Gonçalves, Costa, Silva & Amorim, 2018).

The RBV has attracted some criticisms arising from its assumptions. The RBV fails to provide an explanation of how to identify the resources that can be regarded as being valuable (Hitt, Xu & Carnes, 2016). The RBV also fails to provide a threshold of establishing the resources that can be rendered as being rare (Davis & Simpson, 2017). RBV has also been criticized on ground that it explain more on past performance of the firm (static) hence failing to incorporate the dynamic environment (Lambourdière, Rebolledo & Corbin, 2017).

Despite these criticisms, the RBV is suitable to this study as logistics outsourcing helps the firm to have access to other resources of the service providers including their unique capabilities (Sameera, 2018) that are available locally in the business. These gives an organization a competitive edge. The RBV views logistics outsourcing as a strategic decision made by the firm that help the firm to bridge the gaps in capabilities and resources that are not in place.

2.3 Logistics Outsourcing Practices

A firm can outsource major logistic services from the third-party service providers. Some of the services that can be outsourced include the management of inventories, transportation services, the services relating with processing of orders, packaging activities, warehousing, handling and management of the flow of information and material handling activities (Wu, Goh, Yuan & Huang, 2017). This section was focus on some of the commonly outsourced logistics management practices as discussed in subsequent sections. Inventories are required both for the manufacturing and the service organization (Bahha, Hdidou & Kartit, 2015). In a service-oriented organization, inventories are required on the daily operations and they include the materials covering saleable outputs. Outsourcing the inventory management practice helps an organization to maintain a lean system of inventory and it can best be accomplished through vendor managed inventory (VMI) system (Yuan, Chu, Lai & Wu, 2020). In a VMI, the suppliers are given a responsibility of making all replenishment and restocking decisions on behalf of the firm. Furthermore, outsourcing of the inventory management practices helps the firm to maintain an efficient inventory base that would cushion against excess demands. Keeping too much inventories increases the costs of the firm including the opportunity cost of the tied-up capital in the inventory in store (Akbari, 2018).

Transportation management practice can be outsourced by the firm with the aim of reducing costs and increasing the level of satisfaction of the clients of the firm. Transportation management practice aim at optimization of the freight and this saves on costs in the firm (Çelik & Uçak, 2019). There are some global courier and freight firms that provide the services of transportation including G4S and DHL among other firms. Outsourcing of the transportation management practice helps the firm to save on costs like payment to the driver, fueling of the vehicles and maintenance of the fleets. Furthermore, outsourcing of the transportation services helps the firm to avail the required goods to the end users at the required place and time and this is likely to enhance the level of customer satisfaction (Zailani, Shaharudin, Razmi & Iranmanesh, 2017). A firm can outsource the services of material handling from the other providers. This includes the efforts to continuously improve on the fork lifts and loaders to enhance the safety of the handled materials (Rai, Verlinde, Macharis, Schoutteet & Vanhaverbeke, 2019). There are some items including materials that are flammable, the acids and chemicals that require a lot of caution where dealing with them and thus the need to outsource the services of material handling. This is because without proper handling of such items, they may result into hazards and risks to people in the firm. It is important for individuals handling such dangerous items to have the knowledge and awareness of the associated dangers. Some of the systems relevant during material handling include the conveyor belts, forklifts, scanners and loaders (König & Spinler, 2016).

According to Sigala and Wakolbinger (2019), outsourcing of the information flow management practice is an important activity that enhances performance of an entity. In fact, information has been viewed an important aspect of sound logistics management in the firm (Owuor & Zaman, 2019). Firms are continuously integrating information within themselves which has brought about reduction in costs, improved productivity and enhancing the level of customer services. There are four basic areas when it comes to outsourcing of the

information flow management in the firm. These include the degree of flexibility and integration, the hardware, communication and electronic data interchange (EDI) (Wang, Sadler & Shee, 2017). As shared by Min, Joo and Nicolas-Rocca (2016), outsourcing of the warehousing management practice may help the firm to reduce minimize the time spent by the customers in picking items from the warehouse after shipment. Depending on the warehouse layout, the firm may be able to enhance on the level of its efficiency

2.4 Firm Performance

There are different measures that can be used to gauge the level of performance at the firm level. Barney (2020) viewed performance in operational terms with a focus to measures like productivity, profitability and the cost efficiencies. Performance of the firm can also be viewed in terms of demand perspectives with the measures including responsiveness to the needs of the customers. Other scholars view performance of the firm on the supply perspective with the measures including distribution costs. Smith, Hillon, Hillon and Liang (2017) shared that the measures of performance of the firm can be expressed in qualitative or quantitative terms. According to Fowowe (2017), performance offer an organization a chance to ensure that the progress towards attainment of the state goals manage while having in place well defined indicators including the level of satisfaction of the end users of the products of the firm. During measurement of performance, Park, Lee and Chae (2017) noted that a comparison is made between a set of well-established indicators against the actual progresses attained in respect to the goals of the business. Yaghoobi and Haddadi (2016) indicated that the measures of performance are linked to the output as well as the outcome.

There are different frameworks that can be used to measure performance of an organization. These include the technique of the balance scorecard (BSC), shareholder value addition measures, competitive benchmarking and activity-based performance measurement frameworks (Ahmad & Zabri, 2016). The

essence of benchmarking is to establish the best practice in the industry that a firm relies on to gauge its performance against. Unlike the traditional financial measures of performance, the BSC is an integration of four key dimensions covering the internal processes of the firm, learning and growth prospects, customers and the financial aspect.

This study measured firm performance using customer satisfaction (Lucianetti, Battista & Koufteros, 2019). Customer satisfaction was looked at in terms of customer complaints, new customer referrals, defective items returned, Google rating, the ability of the firm to execute orders for the customers and the safety in delivery of the products to customers. More complaints of customers on the products and an increase in defective items returned by the customers clearly point out underlying issues of quality in the firm and thus poor performance. The number of new customer referrals may also give a picture of the level of satisfaction derived by old customers as far as the products of the firm are concerned (Smith *et al.* 2017). In most cases, new customer referrals arise from the satisfaction of the old customers in the firm. Satisfied customers were always ensure that the firm is positively rated on the Google. Thus, poor performing firms are negatively rated on most of their Google rating. To satisfy customers, the firm must always strive to execute orders within least time possible. The executed orders should be delivered to the customers without breakage or damage and this was enhance customer satisfaction in the firm (Park *et al.*, 2017).

2.5 Empirical Literature Review

A study conducted in firms in Malaysia by Zailani, Shaharudin, Razmi and Iranmanesh (2015) focused on key factors and their link with performance of the logistics outsourcing practices. Leveraging on the RBV with a response rate of 21%, it was shown that that different logistics outsourcing practices in the firm are influenced by inadequate physical and human capabilities and transaction uncertainty. In Russia, Dmitry

(2018) in outsourcing of the logistics services shared that the market for logistics outsourcing in the country was less compared to other parts of the developed countries around the world. While focusing on 3PLs firms in Italy, Evangelista, Santoro, Hallikas, Kähkönen and Lintukangas (2019) looked at logistics outsourcing incorporating the green aspect. It was shown that adopting green initiatives in the logistics outsourcing helps the firm to perform. An exploratory study conducted in the gas and oil sector of Nigeria by Etokudoh, Boolaky and Gungaphul (2017) focused on outsourcing of the 3PLs. The notable finding was that the capabilities of the vendors, the issues linked with the host community, the role played by joint ventures and the reactions of staff adversely affect the ability of international firms to implement outsourcing of the logistics management practices. Nzitunga (2019) focused on the mining sector in Namibian context where a direct link was documented between outsourcing of the function of logistic and the degree of the entity which an entity is able to performance. Kavčič et al. (2015) revealed that logistics outsourcing is an integral part of firm performance.

In an inquiry focusing on manufacturing entities in Kenya, Mageto et al. (2018) documented s direct link between LOPs and the degree which an entity is able to perform. The key factors driving outsourcing of the logistics practices among tea firms in Bomet, Kenya were explored by Ngonela *et al.* (2014) using survey design. It was shown that the most commonly outsourced logistics management practice by firms is transportation with others including warehousing, operations and management of fleets, distribution and transportation. In an inquiry seeking to provide a link between outsourcing of the logistics function and supply chain performance, Thoithi and Nondi (2017) did focus on firms that engage in manufacture of cement in Kenya. The specific focus of the study was on one firm which was the East African Portland Limited. Among the dimensions of logistics management outsourcing established by the study include the management of inventories, transportation, warehousing and ICT systems.

Njagi (2017) focused on outsourcing of the logistics and the role it plays as far as the third party service providers are concerned. The key areas of logistics management practices that had been outsourced as sought by the study include transportation, management of inventories and warehousing. Kyusya (2015) with a focus on Kenyan shipping firms had 76.2% as the response rate of the inquiry. It was argued that the desire for the firm to focus on key activities and enhance on operational performance drive the business to engage on logistics management outsourcing practices. Muiruri and Iravo (2015) focused on manufacturing entities in Kenya with key emphasis on Del Monte Kenya did adopt a case study design. It was argued that among the adopted logistic outsourcing practices by the firm include packaging, distribution and transportation, freight logistics and warehousing practices.

2.6 Summary of Literature and Research Gaps

Table 2.1: Summary of Literature and Research Gaps

(Authors)	Study	Finding	Gaps	Focus of Present Study
Evangelista et al. (2019)	logistic outsourcing incorporating the green aspect	adopting green initiatives in the logistic outsourcing helps the firm to perform	The study focused on green aspect of the logistics management	The present study focused on logistic outsourcing practices
Dmitry (2018)	outsourcing of the logistic services	the market for logistic outsourcing in the country was less compared to other parts of the developed countries around the world	The study was conducted in Russia creating a contextual gap	The present study was done in Somalia
Etokudoh et al. (2017)	focused on outsourcing of the 3PLs	capabilities of the vendors, the issues linked with the host community, the role played by joint ventures and the reactions of staff adversely affect the ability of international firms to implement outsourcing of the logistic management practices	The study was conducted in Nigeria in the oil industry,	the present study was conducted in Somalia
Mageto et al. (2018)	outsourcing of the logistic function and its role on ability of the firm to perform	A positive and significant link was documented between logistic outsourcing and the ability of the firm to perform	The focus of the study was on manufacturing SMEs and in Kenya	the present study was done among SMEs in Somalia
Muiruri and Iravo (2015)	Outsourcing logistic activities and operational efficiency with emphasis on Del Monte Kenya	Among the adopted logistic outsourcing practices by the firm include packaging, distribution and transportation, freight logistics and warehousing practices.	This was a case study hence a methodological gap	the present study was cross sectional

2.7 Conceptual Framework

Figure 2.1 is the conceptual framework of the study.

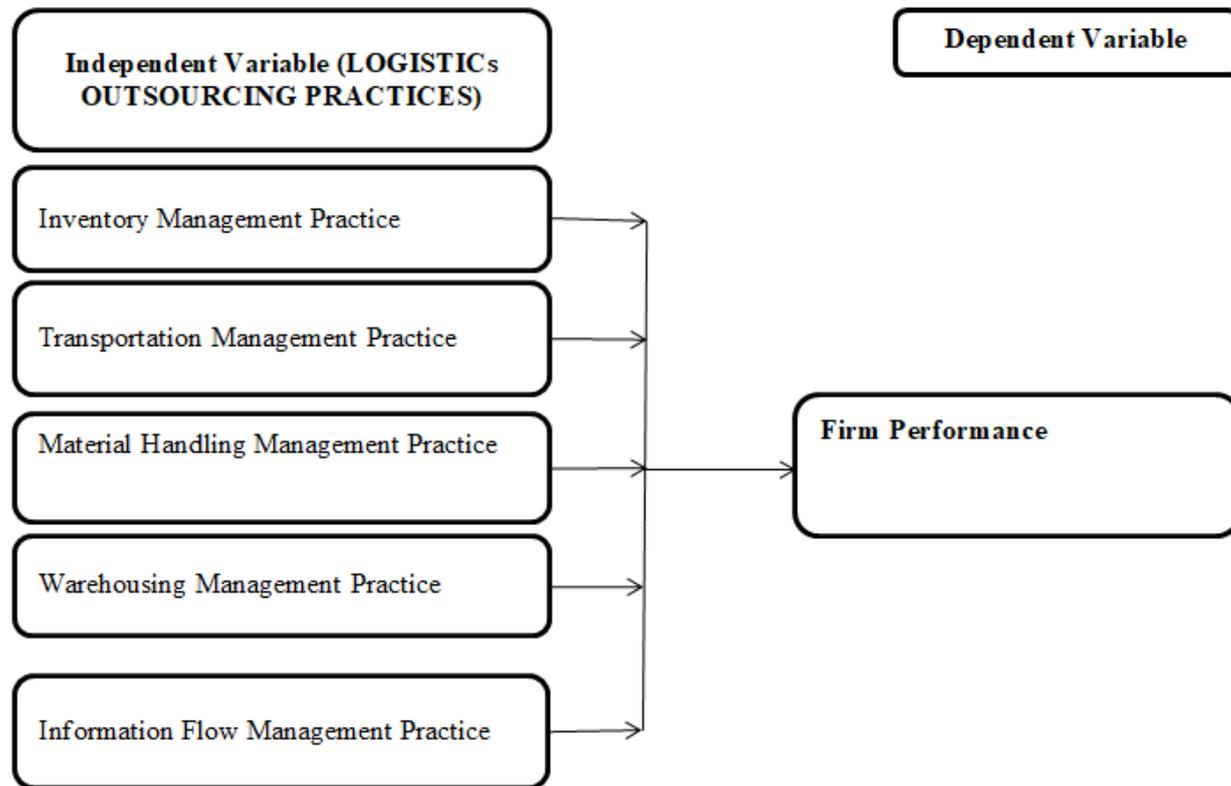


Figure 2.1: Conceptual Framework

Source: Author (2020)

From Figure 2.1, the independent variable is logistics outsourcing practice which has five sub variables including Inventory management practice, transportation management practice, material handling management practice, warehousing management practice and information flow management practice. On the other hand, the dependent variable is firm performance with customer satisfaction as the indicators.

CHAPTER THREE: RESEARCH METHODS

3.1 Introduction

The chapter discusses the design that was used, the targeted respondents and the methods to be used in gathering information from the respondents. The techniques that were adopted in analyzing and presenting the results are also indicated in this chapter.

3.2 Research Design

The study adopted descriptive to achieve the objectives. Cross sectional survey helped to cover different SMEs operating in Mogadishu Somalia. On the other hand, survey design ensured that all the SMEs in Mogadishu Somalia have been included in the study. The advantage of descriptive design was that it reported things the way they existed in their original state. The reason for choosing the descriptive design was to be able to report the current logistics outsourcing practices and performance of Small and Medium Enterprises in Mogadishu, Somalia. There are similar past studies like Mageto et al. (2018) and Thoithi and Nondi (2017) who also adopted the descriptive design.

3.3 Target Population

The study targeted 78 SMEs operating in Mogadishu Somalia (appendix II) according to the statistics from the Ministry of Commerce and industry of Somalia (2020). Since the target population was relatively small, census was used and thus all the 78 firms were included in the study. Census ensured that detailed information had been collected from all the elements in the population. It also facilitated proper generalization of the findings of the study.

3.4 Data Collection

The study collected primary data with the help of semi-structured questionnaire. The questionnaire was divided into three sections. Section A covered the general information, section B had information on logistics

outsourcing practices that had been adopted by Small and Medium Enterprises in Mogadishu, Somalia section C covered information on performance. The questionnaire had close ended items to ease the process of analysis. The respondent were logistics officers or supply chain managers/procurement managers and finance officers or their equivalents from the respective organizations. The questionnaire was administered through online method because of the Corvuid-19 pandemic which calls for social distancing.

3.5 Data Analysis

The gathered views of the participants underwent coding through SPSS tool. This was followed by analysis using descriptive statistics like means and standard deviation. In order to draw inferences on LOPs and firm performance, this was modeled regressionally. The following model was used in the study:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where:

Y = Firm Performance

β_0 = constant

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ = beta coefficients

X_1 = Inventory Management Practice

X_2 = Transportation Management Practice

X_3 = Material Handling Management Practice

X_4 = Warehousing Management Practice

X_5 = Information Flow Management Practice

ε = Error term

Table 3.1 gives a summary of the data collection and analysis of the objectives:

Table 3.1: Summary of Collection and Analysis

Objective	Data Collection	Data Analysis
To establish the logistics outsourcing practices that have been adopted by Small and Medium Enterprises in Mogadishu, Somalia	Questionnaire	<ul style="list-style-type: none">• Descriptive Statistics (means & standard deviations)
To determine relationship between logistics outsourcing practices and performance of Small and Medium Enterprises in Mogadishu, Somalia		<ul style="list-style-type: none">• Descriptive Statistics (means & standard deviations)• Regression analysis

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

4.1 Introduction

The chapter is set out to present the findings of analysis as informed by the specific objectives that guided the study. Once data had been collected, it was cleaned where SPSS shaped the analysis. The objectives of the inquiry guided the analysis.

4.2 Response Rate

The researcher administered 78 questionnaires to the SMEs operating in Somalia out which 49 of them were dully filled and returned. This was equivalent to a response rate of 62.8% as represented in Table 4.1.

Table 4.1: Response Rate

	Frequency	Percentage
Response	49	62.8
Non Response	29	37.2
Total	78	100.0

However, in comparison to some empirical studies, it can be inferred that the response rate in the present study was relatively higher. For instance, a similar study conducted in Malaysia by Zailani *et al.* (2015) was supported by a response rate of 21% compared to what was recorded in the current study. However, Kyusya (2015) with a focus on Kenyan shipping firms had 76.2% as the response rate of the inquiry.

4.3 General Information

The study sought to establish the position held, the years of operation, the nature of products and the adoption of logistics outsourcing with the results as presented in subsequent sections.

4.3.1 Position Held

Table 4.2 gives the results of the positions held by the participants.

Table 4.2: Position Held

	Frequency	Percent
Logistic Officer	17	34.7
Supply Chain Managers	26	53.1
Procurement mgrs.	6	12.2
Total	49	100.0

The results in Table 4.2 indicate that while 53.1% of the respondents were supply chain managers, 34.7% were logistic officers and 12.2% were procurement managers. It can therefore be inferred that respondents of the study held positions that were related with logistics management practices and thus they shared the relevant information as sought by the study.

4.3.2 Years of Operations

The results of years of organizational operation were established and summarized as shown in Table 4.3.

Table 4.3: Years of Operations

	Frequency	Percent
Less than 3 years	12	24.5
4-6 years	17	34.7
7-9 years	14	28.6
Over 10 years	6	12.2
Total	49	100.0

The results in Table 4.3 indicate that majority of the studied SMEs (34.7%) had operated for 4-6 years, 28.6% for 7-9 years, 24.5% for less than 3 years and 12.2% for over 10 years. Hence, the larger proportion of the SMEs was still emerging at their infant stage probably because of the past civil wars that adversely affected the economy of Somalia. It is the infancy of most of these SMEs that Ahmed, Osman, Abdulle and Musse (2018) noted that they are facing challenges related with adequacy of resources and this make it hard to own capabilities that would enhance the level of efficiency in their operations..

4.3.3 Nature of Products

Table 4.4 details the nature of products that the studied SMEs dealt in.

Table 4.4: Nature of Products

	Frequency	Percent
Service	31	63.3
Manufacturing	18	36.7
Total	49	100.0

Table 4.4 shows that 63.3% of the studied SMEs were service oriented while 36.7% were in manufacturers. This implies that logistics outsourcing was relevant in one way or the other among the studied firms due to a number of reasons. First, given that some of the firms were manufacturers, they probably required some logistic services like inventory management. Secondly, the service firms also require logistic services like inventory management. Thus, the study was motivated to explore further on some of the logistic management practices that had been outsourced among these manufacturing and service oriented SMEs in Somalia.

4.3.4 Adoption of Logistic Outsourcing

Table 4.5 gives the results on whether the studied entities had in place LOPs.

Table 4.5: Adoption of Logistic Outsourcing

	Frequency	Percent
No	11	22.4
Yes	38	77.6
Total	49	100.0

The results in Table 4.5 indicate that majority of the studied SMEs (77.6%) had outsourced at least one of the logistic management practice. This means that for 22.6% of the other firms, logic management was done in-house. Since majority of the firms had adopted logistics outsourcing, the motivation of the present study was to establish these specific practices and how they related with performance at the firm level.

4.4 Logistics Outsourcing Practices

The first objective sought to establish the logistics outsourcing practices that have been adopted by SMEs in Mogadishu, Somalia. The study adopted descriptive statistics covering means and standard during analysis of this objective as indicated in subsequent sections.

4.4.1 Inventory Management Practice

Table 4.6 gives a summary of the findings on inventory management practice.

Table 4.6: Inventory Management Practice

	Mean	Std. Dev
Use of vendor managed inventory (VMI) system	3.85	.677
Maintaining a lean system of inventories	3.71	.790
Your suppliers have responsibility of making all replenishment decisions	3.48	.915
Suppliers decide on restocking decisions	3.81	.808
Being cushioned against excess demands	3.75	.722
Reliance on Economic Order Quantity (EOQ)	3.83	.687
Well established reorder levels in your firm	3.89	.742
Overall Score	3.76	.763

The results in Table 4.6 indicate an overall score as ($M=3.76$, $SD=0.763$), thus the studied SMEs agreed on outsourcing inventory management practices. Inventories are required both for the manufacturing and the service organization (Bahha, Hdidou & Kartit, 2015). In a service-oriented organization, inventories are required on the daily operations and they include the materials covering saleable outputs. Outsourcing the inventory management practice helps an organization to maintain a lean system of inventory and it can best be accomplished through vendor managed inventory (VMI) system (Yuan, Chu, Lai & Wu, 2020). In a VMI, the suppliers are given a responsibility of making all replenishment and restocking decisions on behalf of the firm. Furthermore, outsourcing of the inventory management practices helps the firm to maintain an efficient inventory base that would cushion against excess demands. Keeping too much inventories increases the costs of the firm including the opportunity cost of the tied-up capital in the inventory in store (Akbari, 2018).

4.4.2 Transportation Management Practice

The findings on transportation management practice were established and summarized as indicated in Table 4.7.

Table 4.7: Transportation Management Practice

	Mean	Std. Dev
Costs of maintaining drivers in your firm	3.65	1.011
Costs of fueling vehicles in your firm	3.77	1.046
Costs of maintaining the fleets in your firm	3.81	.754
Delivery of customer orders	3.71	.790
Delivery schedule	3.67	.851
Direct contact with customers in your firm	3.83	.553
Route planning in your firm	3.81	.726
Overall Score	3.75	.819

From Table 4.7, the overall mean score was ($M=3.75$, $SD=0.819$), which was interpreted to imply that the majority of the studied SMEs agreed that they outsourced transportation management practices. Transportation management practice can be outsourced by the firm with the aim of reducing costs and increasing the level of satisfaction of the clients of the firm. Transportation management practice aim at optimization of the freight and this saves on costs in the firm (Çelik & Uçak, 2019). Outsourcing of the transportation management practice helps the firm to save on costs like payment to the driver, fueling of the vehicles and maintenance of the fleets. Furthermore, outsourcing of the transportation services helps the firm to avail the required goods and this is likely to enhance the level of customer satisfaction (Zailani, Shaharudin, Razmi & Iranmanesh, 2017).

4.5.3 Material Handling Management Practice

Table 4.8 is a summary of the results on material handling management practice.

Table 4.8: Material Handling Management Practice

	Mean	Std. Dev
Management of the loaders	3.89	.871
Handling of highly flammable products	3.91	1.037
Maintenance of forklifts	3.73	1.016
Maximization on hygiene standards	4.00	.763
Coordinated material handling activities in your firm	3.77	.685
Handling of hazardous materials in your organization	3.85	.841
Standardized material handling methods in your firm	3.87	.927
Overall Score	3.86	.877

As indicated in Table 4.8, the overall score was ($M=3.86$, $SD=0.877$), which show that majority of the studied SMEs highly agreed on outsourcing material handling management practices. A firm can outsource the services of material handling from the other providers. This includes the efforts to continuously improve on the fork lifts and loaders to enhance the safety of the handled materials (Rai, Verlinde, Macharis, Schoutteet & Vanhaverbeke, 2019). There are some items including materials that are flammable, the acids and chemicals that require a lot of caution where dealing with them and thus the need to outsource the services of material handling. This is because without proper handling of such items, they may result into hazards and risks to people in the firm. It is important for individuals handling such dangerous items to have the knowledge and awareness of the associated dangers. Some of the systems relevant during material handling include the conveyor belts, forklifts, scanners and loaders (König & Spinler, 2016).

4.5.4 Warehousing Management Practice

The findings on warehousing management were established and summarized as shown in Table 4.9.

Table 4.9: Warehousing Management Practice

	Mean	Std. Dev
Storage of shipped orders for customers	3.69	.769
Design the warehousing layout	3.91	.786
Identification of suitable site for the warehouse	3.85	.841
Has outsourcing of warehousing management practice minimized the time spent by the customers in picking items from the warehouse after shipment?	3.85	.816
Storage costs	3.85	.889
Picking processes in the warehouse	4.04	.575
Order fulfillment in the firm	3.73	.700
Overall Score	3.85	.768

The results in Table 4.9 indicate the overall score as (M=3.85, SD=0.768), this was deduced to imply that most of the studied SMEs agreed on having outsourced warehousing management practices. As shared by Min, Joo and Nicolas-Rocca (2016), outsourcing of the warehousing management practice may help the firm to reduce minimize the time spent by the customers in picking items from the warehouse after shipment. Depending on the warehouse layout, the firm may be able to enhance on the level of its efficiency.

4.5.5 Information Flow Management Practice

The results on information flow as logistics management practice are as indicated in Table 4.10.

Table 4.10: Information Flow Management Practice

	Mean	Std. Dev
Cloud services	3.81	.808
Backing up information	3.79	.790
Use extranets in your firm	3.73	.930
Electronic data interchange	3.65	1.031
Enterprise resource planning (ERP) system	3.87	.857
Information quality in your firm	3.57	1.080
Information quantity in your firm	3.85	.735
Overall Score	3.75	.890

The results in Table 4.10 indicate an overall score of (M=3.75, SD=0.890), which infers that information flow management practice had been outsourced in the studied SMEs. According to Sigala and Wakolbinger (2019),

outsourcing of the information flow management practice is an important activity that enhances performance of an entity. In fact, information has been viewed an important aspect of sound logistics management in the firm (Owuor & Zaman, 2019). Firms are continuously integrating information within themselves which has brought about reduction in costs, improved productivity and enhancing the level of customer services. There are four basic areas when it comes to outsourcing of the information flow management in the firm. These include the degree of flexibility and integration, the hardware, communication and electronic data interchange (EDI) (Wang, Sadler & Shee, 2017).

4.5 Logistics Outsourcing Practices and Firm Performance (Customer Satisfaction)

The link between LOPs and ability of the entity to perform was explored regressionally with the results as detailed in subsequent sections.

4.5.1 Model Summary

The results of the regression model summary of the study were established and summarized as shown in Table 4.11.

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.849 ^a	.721	.689	1.15514

The results in Table 4.11 indicate the value of R as 0.849, which infers that logistics outsourcing practices have a far reaching implication on customer satisfaction as a measure of performance of the SMEs in Somalia. The value of R square is given as 0.721, which deduces that 72.1% variation in performance of the SMEs in Somalia is explained by their logistic outsourcing practices. These findings are consistent Kavčič, Gošnik, Bekerb and Suklan (2015) who looked at logistics outsourcing and its link with performance of the

organization where a positive relationship was noted. Kyusya (2015) revealed that outsourcing of logistics services helps the firm to focus more on the core activities which may enhance its customer satisfaction as a measure of performance. Gele (2019) noted that integration with suppliers is a key driver of the competitive positioning of the entity.

4.5.2 Analysis of Variance

The results of the ANOVA were established and summarized as indicated in Table 4.12.

Table 4.12: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	148.460	5	29.692	22.252	.000 ^b
Residual	57.377	43	1.334		
Total	205.837	48			

The results in Table 4.12 indicates that (F=22.252, P<0.05) which can be inferred that the overall model of the study was significant. Furthermore, it can be deduced that the logistics outsourcing practices that were covered had significant effect on customer satisfaction as an indicator of performance of the SMEs. This is in line with Njagi (2017) who focused on outsourcing of the logistics and the role it plays as far as the third party service providers are concerned where the key areas of logistics management practices that had been outsourced as sought by the study include transportation, management of inventories and warehousing. Kyusya (2015) with a focus on Kenyan shipping firms had 76.2% as the response rate of the inquiry and argued that the desire for the firm to focus on key activities and enhance on operational performance drive the business to engage on logistics management outsourcing practices.

4.5.3 Regression Coefficients and Significance

The results in Table 4.13 indicate the beta coefficients and the p-values on the variables.

Table 4.13: Regression Coefficients and Significance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.761	3.494		.790	.434
Inventory Management Practice	.385	.067	.826	5.746	.000
Transportation Management Practice	.157	.076	.162	2.066	.018
Material Handling Management Practice	.149	.039	.104	3.821	.010
Warehousing Management Practice	.181	.064	.122	2.828	.014
Information Flow Management Practice	.204	.081	.004	2.519	.013

Taking the level of significance as 5%, the study established that all the logistics outsourcing practices had p-values ($p < 0.05$), which infers that it was significant in effecting customer satisfaction as a measure of performance of the studied SMEs. This finding is empirically consistent with a number of studies. For instance, Zailani, Shaharudin, Razmi and Iranmanesh (2015) indicated that the different logistics outsourcing practices in the firm are influenced by inadequate physical and human capabilities and transaction uncertainty. Evangelista, Santoro, Hallikas, Kähkönen and Lintukangas (2019) noted that adopting green initiatives in the logistics outsourcing helps the firm to perform. Etokudoh, Boolaky and Gungaphul (2017) shared that the capabilities of the vendors, the issues linked with the host community, the role played by joint ventures and the reactions of staff adversely affect the ability of international firms to implement outsourcing of the logistics management practices. Nzitunga (2019) noted a direct and significant link between outsourcing of the logistics functions and the ability of an entity to perform. A study conducted in Slovenia by Kavčič et al. (2015) revealed that logistics outsourcing is an integral part of firm performance.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

A summary of the analyzed findings is presented in this chapter. The conclusions as informed by the key findings and objectives of the study are also indicated in this chapter. The recommendations are raised with relevant implication on policy and practice. The limitations and areas that require further research are also indicated in this chapter.

5.2 Summary of the Findings

The summary of the analyzed findings as guided objectives were present in this section.

5.2.1 Logistics Outsourcing Practices among Small and Medium Enterprises in Mogadishu, Somalia

The first objective of the study was to establish the logistics outsourcing practices that had been adopted among SMEs operating in Mogadishu, Somalia. In achieving this objective, the values of means and standard deviation as descriptive statistics were utilized. The highly adopted logistics outsourcing practice among these SMEs was material handling management practice followed by warehousing management practice and inventory management practice. The other logistics outsourcing practices that had been equally embraced by the SMEs in Mogadishu include transportation management practice and information flow management practice. These findings are consistent with the network theory that requires an organization to form relationship with other firms within a given industry as it seeks to survive. Outsourcing of logistics management practices among the SMEs in Mogadishu is the foundation of such established relationship between one firm and others in the environment.

5.2.2 Logistics Outsourcing Practices and Performance of Small and Medium Enterprises in Mogadishu, Somalia

It was showed that over half per cent variation in performance of the SMEs operating in Mogadishu is explained by changes in logistic outsourcing practices in place. The ANOVA results showed that logistics outsourcing practices significantly predict performance of the SMEs operating in Mogadishu, Somalia. Thus, it can be deduced that logistics outsourcing practices play a great and significant role in driving performance of the SMEs operating in Mogadishu, Somalia. Based on the findings of the regression beta coefficients, inventory management practice had the largest and significant effect on performance of the SMEs operating in Mogadishu, Somalia followed by information flow management practice, warehousing management practice, transportation management practice and material handling management practice.

5.3 Conclusion

Majority of the SMEs in Mogadishu have adopted logistics outsourcing practices as they seek to survive. Some of the logistics outsourcing practices that have been adopted among most of the SMEs in Mogadishu include material handling management practice followed by warehousing management practice and inventory management practice. The other logistics outsourcing practices that had been equally adopted by the SMEs in Mogadishu include transportation management practice and information flow management practice.

The study further concludes that the adopted logistics outsourcing practices have contributed towards performance of the SMEs operating in Mogadishu, Somalia. In fact, the adoption of logistics outsourcing practices has significantly enhanced performance of the SMEs in Mogadishu. Among the adopted logistics outsourcing practices, inventory management practice has greatly and significantly boosted performance of

the SMEs in Mogadishu followed by information flow management practice, warehousing management practice, transportation management practice and material handling management practice.

5.4 Recommendations of the Study

The logistic and supply chain managers working among the SMEs in Mogadishu Somalia should embrace transportation management practice and information flow management practice since they were the ones that were least adopted. The logistic managers of the SMEs operating in Mogadishu should focus more on inventory management practice, information flow management practice and warehousing management practice since they have the greatest contribution towards their overall performance.

The policy makers in the Ministry of Commerce and Industry, Somalia should formulate and implement the guidelines that would support and promote logistics outsourcing practices of the SMEs. The policy makers of the respective SMEs operating in Mogadishu should equally formulate sound policies that encourage logistics outsourcing practices that have been adopted. The policies formulated among the SMEs in Mogadishu by the policy makers should focus more on inventory management practices and information flow management practices since this would greatly enhance performance.

The various practitioners in the field of logistic management should embrace and recommend logistics outsourcing practices for their clients since it contributes towards performance. In recommending logistics outsourcing practices for clients, these practitioners should give more consideration on inventory management and information flow management practice since they greatly lead to performance of the firm. The supply chain practitioners should also understand the need to adopt logistics outsourcing practices for better performance.

5.5 Limitations of the Study

Some of the enterprises had relocated their offices and tracing them was time consuming. Other firms had changed their contact details where the questionnaire sent through email could not go through. In this had, the researcher had to use Google Maps to locate some of the firms that had relocated. The Covid-19 pandemic also had an effect on collection of data as majority of the respondents were still adhering to the guideline of social distancing with minimal physical contact.

5.6 Suggestions for Further Research

Further studies should be done using a relatively larger sample size for better generalization of the findings. Future studies should embrace larger firms away from the SMEs so that a comparison of the findings would be possible. The focus of future studies should be on linking logistics outsourcing practices with other constructs like competitive advantage, financial performance or operational performance.

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APPENDICES

Appendix I: Questionnaire

My name is Abdirizak Abdullahi Ibrahim, a Masters student at the University of Nairobi. I am currently undertaking an academic research titled **LOGISTICS OUTSOURCING PRACTICES AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN MOGADISHU, SOMALIA**. You are therefore requested to fill in this questionnaire. Kindly note that all your responses were treated with utmost confidentiality and was only be used for academic purpose. Kindly provide appropriate responses by ticking (√) in the provided spaces.

SECTION A: GENERAL INFORMATION

1. Kindly indicate position that you hold in your organization?

Logistic Officer ()

Supply Chain mgrs. ()

Procurement mgrs. ()

Finance officers ()

Other..... Specify

2. Kindly indicate the number of years which your firm has been in operation

Less than 3 years ()

4-6 years ()

7-9 years ()

Over 10 years ()

3. Kindly indicate the nature of products that your firm deals in?

Service

Manufacturing

Other..... Specify

4. Does your organization seek for logistic services of the third parties?

No

Yes

SECTION B: LOGISTICS OUTSOURCING PRACTICES

5. To what extent do you agree with the following statements concerning inventory management practice of your organization? Use a scale of 1-5, where 1=not at all, 2=little extent, 3=moderate extent, 4=larger extent and 5=very larger extent.

Statement on Inventory Management Practice	1	2	3	4	5
Use of vendor managed inventory (VMI) system					
Maintaining a lean system of inventories					
Your suppliers have responsibility of making all replenishment decisions					
Suppliers decide on restocking decisions					
Being cushioned against excess demands					
Reliance on Economic Order Quantity (EOQ)					
Well established reorder levels in your firm					

6. To what extent has transportation management practice resulted into the following benefits in your firm?

Use a scale of 1-5, where 1=not at all, 2=little extent, 3=moderate extent, 4=larger extent and 5=very larger extent.

Statement on Transportation Management Practice	1	2	3	4	5
Costs of maintaining drivers in your firm					
Costs of fueling vehicles in your firm					
Costs of maintaining the fleets in your firm					
Delivery of customer orders					
Delivery schedule					
Direct contact with customers in your firm					
Route planning in your firm					

7. To what extent has your firm outsourced the following material handling management practice of your organization? Use a scale of 1-5, where 1=not at all, 2=little extent, 3=moderate extent, 4=larger extent and 5=very larger extent.

Statement on Material Handling Management Practice	1	2	3	4	5
Management of the loaders					
Handling of highly flammable products					
Maintenance of forklifts					
Maximization on hygiene standards					
Coordinated material handling activities in your firm					
Handling of hazardous materials in your organization					

Standardized material handling methods in your firm					
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8. To what extent do has your organization outsourced the following warehousing management practices?

Use a scale of 1-5, where 1=not at all, 2=little extent, 3=moderate extent, 4=larger extent and 5=very larger extent.

Statement on Warehousing Management Practice	1	2	3	4	5
Storage of shipped orders for customers					
Design the warehousing layout					
Identification of suitable site for the warehouse					
Has outsourcing of warehousing management practice minimized the time spent by the customers in picking items from the warehouse after shipment?					
Storage costs					
Picking processes in the warehouse					
Order fulfillment in the firm					

9. To what extent has your firm outsourced the following information flow management practices? Use a scale of 1-5, where 1=not at all, 2=little extent, 3=moderate extent, 4=larger extent and 5=very larger extent.

Statement on Information Flow Management Practice	1	2	3	4	5
Cloud services					
Backing up information					
Use extranets in your firm					

Electronic data interchange					
Enterprise resource planning (ERP) system					
Information quality in your firm					
Information quantity in your firm					

SECTION C: FIRM PERFORMANCE

10. Kindly indicate the fraction of the budget of your firm that is utilized in logistic outsourcing?

- Less than 20% ()
- 20-40% ()
- 40-60% ()
- Over 60% ()

11. To what extent do you agree with the following statements concerning performance of your organization?

Use a scale of 1-5, where 1=not at all, 2=little extent, 3=moderate extent, 4=larger extent and 5=very larger extent.

FIRM PERFORMANCE	1	2	3	4	5
Number of customers complains in the firm					
New customer referrals in your firm					
Number of defective items returned by customers in your firm					
The overall Google rating of customer satisfaction					
Execution of customer orders					
Safety in delivery of goods to customers in your firm					

THANK YOU

Appendix II: List of Small and Medium Enterprises in Mogadishu

Number	Names
1	SAHAN Mineral Water
2	ZAMZAM FOOD INDUSTRY
3	HORSET SOFT DRINKING
4	FURAAT MINERAL WATER
5	BARWAAQO GENERAL INDUSTRY
6	IQRA Mineral Water industry
7	SOMALI FURNITURE FACTORY
8	SAFA Mineral Water industry
9	JED GROUP COMPANY
10	ASAL Mineral Water Industry
11	PANORAMA GROUP OF INDUTRY
12	HAYAAT Mineral Water Industry
13	MUDAN MULT FACTORY
14	AL-NACIIM Mineral Water Industry
15	DUCO Company LTD
16	JEMA Mineral Water Industry
17	JUBBA Mineral Water Industry
18	MAWARID COMPANY
19	AFI MINERAL WATER Industry
20	SOMALI CHALK INDUSTRY

21	IJAABO Mineral Water Industry
22	DALSAN Mineral Water industry
23	SOUTHERN GAS SOMALIA (SGS)
24	DHEEF Mineral Water COMPANY
25	SOMALI TISSUE
26	UNIGAS SOMALIA
27	SIMAN SPIRING Water Industry
28	HOUSE OF TOBACCO SOMALIA (LTD)
29	ADORA PAPER PRO, MANUFACTURINGT
30	SOMALI INDUTRIAL MANUFACTURES
31	WARSHADDA BIYAHA COCOCOLA
32	ROYAL PAINTS MANUFUCTUTING
33	HORYAL SOAP FACTORY
34	TAQWA LIQUID FACTORY
35	JAZEERA TOP TRASTING & INDUSTRY
36	UDUG DETERGENTS FACTORY
37	PHARM THERAPY BIO- MEDICAL COOPERATION
38	AMIIRA Factory
39	SOFT CARE PRODUCTION COMPANY
40	AFRICAN SOLUTION FACTORY
41	MOONLIGHT TISSUE PAPER
42	KULMIS ENTERPRISE INDUSTRY

43	SOMALI SPICES INDUSTRY
44	SOMALI SESIMA HULDIN AND OIL FACTORY
45	KAAFI INDUSTRY GROUP
46	DANAB LIMITED FACTORY
47	OOG DAIRY FACTORY
48	Somali National Food
49	SOMALI BANANA
50	SOMALI JUICE PRODUCTION COMPANY
51	SASAME OIL FACTORY
52	SOMALI TOMATO FACTORY
53	ITOP JUICE FACTORY
54	IRMAAN DAIRY LTD
55	AL. SAFA DAIRY FACTORY
56	QAAYIB Grin millers
57	G & M GENERAL COMPANY
58	GCL MILLERS SERVICE
59	BAIDOA MILLS Industry
60	Som Fresh Fruit
61	SHIBU FIRMS
62	Wadani Food
63	Sommilk company
64	Dhaashi Outlets Firm

65	SAHRA Seafood Limited
66	IRMAN Agro-crops
67	City Design & construction Company
68	BEYDAN Repair industry
69	Daaus Advertising Company
70	Midnimo Supermarket
71	Lizmiran company
72	Rajab food stuff company
73	Amman Farm
74	Horn fishing company
75	SARA event management
76	Somali national fishing
77	Somali seafood product
78	OOG dairy plant

Source; Ministry of Commerce and Industry, Somalia (2020)