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**EFFECTS OF LOGISTICS EFFECTIVENESS ON COMPETITIVE ADVANTAGE
OF KENYAN IMPORTERS OF DURABLE CONSUMER GOODS FROM BRAZIL**

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MBA/55087/18

**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS AT
STRATHMORE UNIVERSITY BUSINESS SCHOOL**



OCTOBER 2021

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

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LIST OF ACRONYMS/ABBREVIATIONS

ANOVA	Analysis of Variance
FMCG	Fast Moving Consumer Goods
ICT	Information Communication and Technology
IT	Information Technology
NACOSTI	National Commission for Science and Technology
SMEs	Small and Medium Enterprises
SPSS	Statistical Packages for Social Scientists



OPERATIONAL DEFINITION OF KEY TERMS

Competitive Advantage	Competitive advantage is organization's master plan aimed at attracting and retaining more customers, surviving external threats and pressures and cannibalizing rivals market share (Thompson, Strickland & Gamble, 2010).
Customs	Refers to importers' clearance procedures characterized by inspection, electronic customs and changes in taxation policies (Joo & Shuh, 2017; Prasanna & Shrinivas, 2014).
Durable Goods	These are goods such as furniture, kitchenware, home improvement and fixtures, sporting equipment, plastics, agricultural, construction and automotive hand tools and electronics that can be used for more than two years.
Infrastructure	Refers to the quality of infrastructure adopted for inbound and out-bound logistics of goods (Sandra, 2013; Zhang, 2017).
Logistics Effectiveness	This is the outcome of cost, process and time linked with transportation of goods. The process has effect on trading volume between its partners. Moreover, trading volume is dependent to attractiveness of originating country and demand for destination. Logistics performance is an outcome of customs, infrastructure, shipment and timeliness in the process of importation from port of origin to destination (Hausman, Lee & Subramanian, 2012).
Shipment	These are scheduling of goods, routine planning and tracking criterion while goods are on transit (Timna, 2017).
Timeliness	This refers to efficiency, effectiveness and reliability of logistics process adopted by an organization (Kamel & Murad, 2014).

ABSTRACT

Pursuance of business is meant to optimize shareholders' wealth and profitability. However, organisations often fail to adopt measures that are aimed at achieving competitive advantage in order to improve their profitability. Competitive advantage would lead to an increase in their market share, sales, profitability and minimize advertising costs. To explore the benefits of competitive advantage, this study examined the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. The specific objectives of the study were to determine the effect of customs, infrastructure, shipment and timeliness on the competitive advantage of Kenyan importers of durable consumer goods from Brazil. The study was based on Resource based view and Game theory. The study adopted correlation research design. Simple random sampling was adopted in selection of 67 importers. Primary data was gathered through issue of questionnaires. Reliability was examined through Cronbach's Alpha. Descriptive and inferential statistics were used for data analysis. The former had mean, frequencies, standard deviation and percentages while the later had correlation and multiple regression. Data analysis was carried out using SPSS version 22. Study findings indicated positive and significant influence of customs, infrastructure, shipment and timeliness on competitive advantage of Kenyan importers of durable goods from Brazil. Hence, there is need for optimization of customs, infrastructure, shipment and timeliness so as to enhance competitiveness of Kenyan importers of durable goods from Brazil. The study was limited on the choice of the target population. This was managed through seeking of importers of goods from Brazil embassy and a list of 205 firms was compiled. Importers of durable goods are located in different parts, to locate them snowball approach was adopted.

Key words: Logistics effectiveness, Customs, Infrastructure, Shipment, Timeliness, Competitive Advantage.



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Globalization and electronic commerce have been credited for easing business networking, because of them, it is easier for traders worldwide to order goods (Totonchi & Manshady, 2012). They have influenced the demand for logistics services since ordered goods ought to be transported to their ports of destination and physically delivered to customers (Carallo, 2013). Hence, importing firms should pursue transportation of their goods as a strategic, cross functional and global tool for competitive advantage, failure to which their competitive advantage would be eroded (Frehe, Mehmam & Teuteberg, 2017). According to Nikfalazar, Amiri & Khorshidi, (2014) pursuance of logistics effectiveness professionally is anchored on conviction that it can be a tool for economic wealth creation, cost savings and organization competitiveness. This would be possible through a firm's response via innovative and customized criterion.

Logistics effectiveness can be described through the use of value chain. Stakeholders such as suppliers of raw materials, distributors of finished goods, government players and marketers have to create symbiotic and harmonized relationships failure to which they would erode value gain and competitiveness (Berghaus, 2015). This calls for fragmentation of value chain process since it cannot operate optimally if customs, infrastructure, timeliness, shipments, competence and tracking are disjointed (Nikfalazar, et al., 2014). To reap future gains from this process then there is need for proper planning. This will accommodate challenges such as delayed port inspections, changes in criterion for goods inspection and cushion firms against higher storage and warehousing costs (Carallo, 2013).

Global logistics environment is characterised by complexities and parameters that signifies shape of business environment. These parameters are hailed for shaping logistics landscape and shifting environmental risks and limitations that may constrain or create agile decision-making opportunities. Durach, Straube and Wieland (2014) allude that logistics performance

is dependent on customer expectations, network economy, cost pressure, globalization complexity, volatility, sustainability, increase in risk and disruption, technological advancement, reliability of logistics infrastructure, government regulation and cultural challenges. Logistics strategies are deemed to promote talent management, end to end integration, global visibility, governance and process standards, horizontal and vertical cooperation, frequent network adoption, government cooperation and outsourcing or insourcing.

Proponents of resources-based theory argues that organization performance is dependent on extrinsic and intrinsic aspects. To achieve competitive advantage there is need for importers of durable goods from Brazil in Kenya to examine their response to customs, shipment, infrastructure and timelines that may have effect on their competitiveness. There is need for cooperation between different stakeholders involved in importation of durable goods from Brazil to Kenya. This will be tandem with game theory that calls for cooperation. Optimal cooperation would enhance likelihood of achieving competitive advantage.

1.1.1 Logistics Effectiveness

Logistics is a subset of supply chain involved in forward and backward flow of goods, information and services (Mwangangi, 2016). The process include transportation, warehousing, order management and distribution (Stevenson, 2009). According to Ittmen and King (2010) logistics incorporates activities aimed at aiding in movement of goods through management of raw materials, production, storage and delivery of goods to respective customers. Hence, logistics is involved with customer-based activities aimed at delivery of goods and services with assurance of quality and quantity. Historical development of logistics is traced to 1960s where it has been perceived to be contingent to intrinsic and extrinsic factors such as regulations, competitive pressures, profit maximization and globalization (Ittmen & King, 2010). According to Mwangangi (2016) logistics management aims at optimization the size, number, geographical coverage, transportation methods and control while distributing goods and services. Consequently, logistics management may lead to efficient and effective logistics process.

Logistic effectiveness refers to internal functioning of logistics that may be operationalized through proportionate evaluation of internal and external outputs. Logistic process ought to provide the best comparative net value of customers. This would enhance organization competitiveness. Owing to centrality of logistics to customer value then logistic activities should be perceived as differentially superior to competitors in homogeneous market segment. Value contribution of logistics in economic performance have been credited globally through its effects on cost and structure of procurement process (Mwangangi, 2016). Moreover, logistics management have been noted in different sectors. Roman, Parlina and Veronika (2013) argued that logistics management can be adopted in an organization as a source of competitive advantage. Furthermore, Spillin, Maginnis and Liu (2013) argued that logistics management have metamorphosized from cost minimization approach to a key ingredient of firm competitiveness. Consequently, the need to manage it to reap benefits associated with it. Initially, logistics was associated with service delivery, cost optimization and minimization of capital tie up. Customers have changed their trust to reduced lead time and accuracy of service provision while enhancing flow of goods and services.

According to World Bank (2010) logistics performance have causal effect on competitiveness of global logistics network. This is because logistics performance is causally linked to trade diversification, export amplification, capacity to attract foreign direct investment and propel economic growth and development. Moreover, WB developed logistics performance as a tool for identification of trade threat and opportunities in different countries. Logistics Performance Index (LPI) is weighted average of logistics on customs, infrastructure quality, shipment, service quality, tracking and timelines of shipment. The current study limited its examination on the effect of customs, infrastructure, shipment and timeliness on competitive advantage of importers of durable consumer goods from Brazil.

LPI has a rating scale ranges from 1 to 5 with 5 the best. Comparative analysis indicates that African countries are lagging with Europe leading on logistics effectiveness. Ranking as at 2018 indicates that the top five countries were Germany (4.20), Sweden (4.05), Belgium (4.04), Austria (4.03) and Japan (4.03). The last five were Sierra Leone (2.08), Niger (2.07), Burundi (2.06), Angola (2.05) and Afghanistan (1.95). Brazil and Kenya had scores of 2.99

and 2.08 respectively. Effectiveness of logistics is paramount in international trade since free flow of goods is contingent to cost, variability and time aspects of trading activities. This culminates in pursuance of trade between countries. According to Hausman, *et al.*, (2012) process, cost and time associated with transportation of goods has significant effect on trade volume between trading partners. Moreover, trading volume is dependent on attractiveness of originating country and demand at destination country.

Poorly managed logistics process may erode gains and opportunities associated with efficient delivery of goods and services. This may constrain inventory management procedures since both purchasers and suppliers would injure the supply chain process (Hausman *et al.*, 2012). Further, it has been argued that inefficient supply chain process has inverse effect on firms' productivity and competitiveness. Corporations hailing from developing economies and have access to healthy investment climate have higher odds for attracting foreign direct investment and creation of investment hubs by multinationals.

Global investment statistics has portrayed developing economies as a catalyst for economic development through attraction of foreign direct investment (Raballand, Beuran & Isik, 2012). Despite this, there are challenges towards its achievement due to logistic effectiveness related challenges. Millar (2014) argues that optimal logistics effectiveness may not be achieved due to poor infrastructure, poorly connected physical locations and have influence on distribution of imported goods and services. This has individual and collective influence on increased operational costs that are transferred to customers and they have trickling down effect on competitive advantage (Onyemejor, 2015).

Logistics effectiveness pitfalls is associated with underdevelopment and age of transport infrastructure, government policies, rigid regulations, local protectionist policies and use of out-dated handling equipment (Lean, Huang & Hong, 2014). These issues are blamed for erosion of trade competitiveness due to delayed customs and ports clearance and movement (Hausman *et al.*, 2012). Measures should be put in place to achieve benefits associated with efficient procurement processes. This is because reduction in port clearance period by 1% would increase trade benefits by 1.39%. Kenyan importers source goods from different

continents with dominance being from the Asian continent. The distance from Brazil ports which is in South America to the Kenyan port is longer and transshipment ports are utilised as there is no direct route between the two countries causing shipment delays. The study examined effects of customs, infrastructure, shipment and timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil.

1.1.2 Competitive Advantage

Business operating environment is not only volatile but also competitive as corporations aim to outdo each other. Organization capacity to survive is anchored on its capacity to develop and maintain competitive advantage. Competitive advantage is an organization's master plan aimed at attracting and retaining more customers, surviving external threats and pressures and cannibalizing rivals' market share (Thompson, Strickland & Gamble, 2010). Considering competitive advantage, an organization would pursue and develop its own market environment that is not only sustainable but also poses a threat to new entrants (Atikiya, 2015). Moreover, pursuance of competitive advantage would increase the odds for exploration of opportunities available due to rivals' exits.

According to Sultan and Mason (2010) after development of business strategies their need for creation of value for customers. This is achievable through cost leadership by presentation of products and services at appropriate prices. Further, it is achievable through differentiation ability of a firm to respond to customer needs effectively as compared to their rivals. Hence, the need for a firm to differentiate itself fully from its rivals. Competitive advantage is a trinity of the three generic strategies; cost leadership, differentiation and focus. These approaches are credited with creation of economic values among customers (Barney & Hesterly, 2010).

Business environment turbulence calls for adoption of either pure, hybrid or a combination of both to amplify their performance. Adoption of pure strategies is anchored on organization adoption of any of Porter's (1980) strategies that include differentiation, cost leadership, and focus strategies. The choice of these strategies is anchored on environmental characteristics that may support or constrain their desired benefits. Hybrid strategic approach in an

organization is skewed towards low cost and differentiation strategies (Shinkle, Kriauciunas & Hundley, 2013). Through it an organization would derive more monetary resources through satisfaction of customer needs and wants. Moreover, they are commonly applied due to their flexibility (Shinkle, et al., 2013). Blending pure and hybrid strategies aids in complementing short comings associated with each of them. According to Hansen, Nybakk and Panwar (2015) an organization that is in pursuance of high market share for distributing its high-quality products may consider adoption of low-cost strategy that would trigger high trading volumes.

This study will examine three competitive strategies: cost leadership, focus and differentiation strategies. Empirical studies have examined their adoption in different sectors (Atikiya, Mukulu, Kihoro & Waiganjo, 2015; Ozdemir & Mecikoglu, 2016). Cost leadership strategy is characterised by reduction of costs in the value chain process of delivering goods to customers. Differentiation strategy is characterised by adoption of customized marketing strategies to attract specific customers. Focus strategy is aimed at segmenting market share as per customer needs.

1.1.3 Importers of Durable Goods in Kenya

With time trade liberalization have been adopted as mechanism to enhance trade engagement among countries. This is not withstanding setbacks associated with global crisis such as financial crisis in 2008 and COVID 19 in 2020. Emerging and developed economies are actively participating in multilateral, regional and bilateral trade negotiations and concessions. Participation in trade liberalization have benefited developing economies. Growth of international trade have shared welfare gains and improvement on the quality of life. Exporters and importers in less developed economies are exposed to complex administrative and trade requirements. They include; information asymmetry in regulations and trade support services, low adoption of technology and access to capital. Moreover, they are technical and non-technical issues associated with import and export transactions. Technical aspects include conformity with product specific features like tolerance limits, labelling and transportation. This calls for certification to authenticate their conformity with

minimum requirements. Non-technical issues are charges, taxes, tariffs, quality control, licensing and pre-shipments inspection (Trade Impact report, 2019).

Import destination of durable consumer goods from Brazil domicile sub-Saharan Africa with an estimated population of 47 million. The average per capita Gross Domestic Product (GDP) of \$ 40 Billion and has been growing at an average of 5% per annum. Sporadic growth has been associated with internal and external shocks. The role of international trade is notable through creation of linkages with different economic sectors such as agriculture, service and manufacturing. The trade gap widens with time since the growth of imports is higher than exports in Kenya. Leading exports from Kenya are tea, horticulture and coffee, and imports into Kenya are mineral oils, machineries and electronic equipment's. Import statistics indicate that at least 22% are fuel and 27% of durable goods. Moreover, 18% were sourced from European Union countries, 12% from United Arab Emirates and 11% in India (Trade Impact, 2019).

1.2 Problem Statement

According to Penrose (1950) resources-based view allude that competitiveness of an organization is contingent to internal and external resources. Access to these resources would enable importers of durable goods from Brazil to venture into competitive opportunities. This poses theoretical gap since the level of resources endowment may not be certain across entities. In line with game theory there is need for cooperation of different stakeholders who are involved in import and export business opportunities. Through cooperation importers would derive value from customs, infrastructure, shipment and timely importation of durable goods. Export and import businesses are dependent on legal norms in the country of origin and destination. In addition, there are other hurdles that may limit success and profitability of a given firm. Key among issues to be considered are geography, transportation, methods of payments, legal requirements, language differences and customs and cultural differences (Joo & Shuh, 2017; Prasanna & Shrinivas, 2014; Zhang, 2017). Importation of durable goods from Brazil to Kenya would be exposed to these challenges.

Several approaches can be deemed to promote competitive advantage and they include innovation, customs clearance, infrastructure, shipment and timeliness (Timna, 2017; Wanjiku & Mwangangi, 2017). Their combined effect would be value additive if importers of goods and services pursue online marketing, adopt new technology in goods inspection and customs clearance, and devise new methods of market penetration and distribution of goods. This would be possible if an organization would create economies of scale, customer loyalty, superior technology and positive organization culture (Kinuthia, 2014).

Past studies such Akbar, Mohamed, Murali and Serene (2013) found that market orientation, government regulation and competitive advantage. In the study competitive advantage was considered as moderator as compared to response variable currently. This presents conceptual gaps. Fiorini, Marco and Asha (2018) reported significant contribution of infrastructure on performance of Ethiopian importers. They are contextual differences between Kenya and Ethiopia owing to difference in governance mechanism that may have implications on access to infrastructural facilities. Wanjiku and Mwangangi (2017) documented significant contribution of logistics management on performance of fast-moving consumer goods in Kenya. Since the study considered companies that were domiciled in Kenya the findings may not be generalized among importers. There were glaring methodological gaps among these studies since despite of them adopting parametric data analysis techniques justification through reporting on diagnostic tests was not provided.

Competitive advantage goals are forecasted with the purpose of strategically positioning an organization (Milao, 2018). To achieve it, then there is need for harmonized integration and coordination of internal and external business procedures and enhance performance of all suppliers (Sembiring, 2018). Notable business processes in importation process are timely customs clearance, seamless shipment of goods either direct or indirect, real time delivery of goods and provision of reliable infrastructure for transport of goods and services. Importers ought to develop communication, coordination and cooperation skills to be deployed among other value chain players till delivery of goods to specific customer and consumer (Bettencourt, Lusch, & Vargo, 2014). Hence, the purpose of this study was to examine the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable

consumer goods from Brazil. To achieve this, quantitative approach was applied and primary data gathered from importers of durable goods from Brazil.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the study was to examine the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Brazil.

1.3.2 Specific Objectives

Specific objectives were:

- i. To determine the effect of customs on competitive advantage of Kenyan importers of durable consumer goods from Brazil,
- ii. To establish the effect of infrastructure on competitive advantage of Kenyan importers of durable consumer goods from Brazil,
- iii. To examine the effect of shipment on competitive advantage of Kenyan importers of durable consumer goods from Brazil,
- iv. To evaluate the effect of timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil.

1.4 Research Questions

Study research questions were:

- i. What is the effect of customs on competitive advantage of Kenyan importers of durable consumer goods from Brazil?
- ii. Does infrastructure affect competitive advantage of Kenyan importers of durable consumer goods from Brazil?
- iii. Does shipment have effect on competitive advantage of Kenyan importers of durable consumer goods from Brazil?

- iv. Does timeliness affect competitive advantage of Kenyan importers of durable consumer goods from Brazil?

1.5 Significance of the Study

The study may be beneficial for policy makers, management of firms importing goods from Brazil and academicians. To policy makers and the government, the study may guide on development of regulations guiding customs operations and inspection criterion to be adhered to. Due to changes in quality of goods imported there is need for policy makers to understand its changes and reflect them in quality inspection criterion.

To management of firms importing durable goods from Brazil the study may be beneficial to them since they may understand the measures to be undertaken to enhance their competitive advantage. Prolonged lead time would lead to increase in storage and warehousing costs that would be transferred to customers. The choice of shipment criterion would affect efficiency on delivery of goods. Consequently, the study would be appropriate in guiding on the best shipment to be adopted by firms importing consumer goods from Brazil.

To academicians, empirical evidence documented would examine its congruence or variation with past studies. The study will yield methodological research gaps since it adopted quantitative data though future scholars may adopt qualitative data.

1.6 Scope of the Study

Study was executed in July 2020 in Nairobi County. The study examined the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable goods from Brazil. Logistic effectiveness was operationalized as customs, infrastructure, shipment and timeliness. The study's target population comprised of 205 Kenyan importing firms that are listed by Invest & Export Brazil website that is maintained by the Brazilian government. The study was anchored on resources-based view and game theory.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter documented empirical and theoretical literature. Empirical evidence presents past studies that have documented the influence of logistics effectiveness on competitive advantage of firms. Conceptual framework will present hypothesized effect of logistics effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Brazil.

2.2 Theoretical Review

Theoretical anchorage of the study was on resources-based view and game theory. Their proposition, empirical development and relevance in the study are discussed in this chapter.

2.2.1 Resources Based View

Resources based view theory (RBV) was documented by Peteraf and Barney (1991). The theory argues that there is need for an organization to understand its resource capabilities and constraints that may contract its capacity to achieve competitive advantage. According to Wolf (2013) although an organization should optimize its resources gathering strategies so as to minimize odds of resource spillage and pilferage of their capacity and capabilities. Organization productivity capacity will be dependent on its capacity to convert internal and external resources into sources of competitive advantage (Hooley & Greenley, 2005). Moreover, firms should accumulate rare resources that may be sourced from human skills and non-depleting resources that may guide an organization while operating in a volatile environment.

RBV model postulates that firms operating in a certain industry have capacity to pursue resources that may lead to competitive advantages. This will be possible through resource heterogeneity that may differ across different sectors. The heterogeneity of resources is

considered as a main tool for creation of competitive advantage. RBV creates interdependence on internal resources, strategy and organization performance. To sustain competitive advantage within an organization there is need for alignment of organization goals in line with firm's capacity to generate and integrate data into different sectors. The theory is appropriate for the study since there is need for importers of durable goods to evaluate their internal and external resources that would have effect on customs, infrastructure, timeliness and shipment of their goods. This would ultimately have an effect on the competitive advantage of importers of durable consumer goods.

2.2.2 Game Theory

Game theory is a formal decision-making criterion where players make choices subject to different options i.e., it's a choice of conflict and cooperation (Xu, Pan & Ballot, 2013). According to Dai and Chen (2012) game theory applies when actions of heterogeneous individuals, groups and firms are interdependent. Game theory provides structure formulation, analysis and adaption of strategic scenarios. Game theory can be grouped as cooperative or non-cooperative. In cooperative games all stakeholders achieve mutual benefits through cooperation.

According to Drechsel and Kimms (2010) cooperative approach aids in improving global logistics performance. Cooperative game can be horizontal or vertical and in logistics situation it ought to create efficiency and reduce logistics costs. Pan, Ballot, Fontane and Hakini (2012) although there are advantages with horizontal cooperation there is need for examination of each stakeholder's role in decision making process. Thus, cooperative game theory can easily evaluate logistics effectiveness as a yard stick for competitive advantage. Cooperation among stakeholders would provide heterogeneous approaches for profit allocation and stabilization of coalition formulation that would optimize the outputs of a game (Dror, Hartman & Chang, 2012). These cooperative opportunities may be deployed in logistics process through information sharing and resources optimization (Drechsel & Kimms, 2010). Logistics efficiency can be improved through cost reduction, evaluation of extraneous factors in the logistics process and adoption of methods that would enhance

logistics performance index attributes such as customs, infrastructure, timelines and shipment. This theory therefore helps to explain how firms are able to check on changes in customs rules, track shipment, communicate on timeliness and track transportation of its goods and services within the logistics system.

2.3 Empirical Review

In this section, past empirical studies on the influence of logistic effectiveness on competitive advantage will be presented. In each study objectives, methodology, findings and gaps will be presented and approach to be adopted in the current study to bridge gaps.

2.3.1 Customs and Competitive Advantage

Akbar, et al., (2013) investigated the effect of market orientation, government regulation, competitive advantage and internalization of SMEs in Malaysia. The study relied on primary data and applied descriptive research design. Univariate, bivariate and multivariate techniques analyzed the data. Study findings documented significant effect of market orientation, government regulation, competitive advantage and internalization. The study examined moderating effect of competitive advantage as compared to the current study that considered it as an outcome. Thus, there are conceptual difference in the duo studies. Further, there are contextual issues since the study was carried out in Malaysia whose political and economic status differs from Kenya.

Joo and Shuh (2017) examined the effect of government regulations on export of corporate performance hedging against international environment regulations. Cross sectional research design was applied. Cluster sampling was used to select 350 and 320 SMEs exporters from Korea and China respectively. Study findings indicated that government support had positive and significant effect on corporate performance. There was weak and positive effect of education, and tax on corporate performance. Eco-innovation had the highest motivation on SMEs performance. The study was comparative among two economies which are more developed as compared to Kenyan perspective. Further, the study drew respondents among exporters as compared to the current that will consider importers in developing economy.

Karungani and Ochiri (2015) investigated the effect of policy and regulatory framework on performance in Nairobi County. Descriptive research design was adopted. Purposive sampling was applied to select 87 employees hailing from procurement department in Nairobi County. It was found that policy and regulatory framework has significant effect on performance. Policy and regulatory framework were credited with creation of improved transparency, ethical compliance, openness, quality decision making and impartiality. The study should have considered incorporation of diagnostic tests prior to regression modelling. This may have increased the odds of having best linear unbiased estimators on the effect of regulatory framework and performance.

Prasanna and Shrinivas (2014) investigated the effect of regulations on performance of manufacturing small and medium enterprises in India. Particularly, the study examined the effect of inspection method, tax policies, product legal proceedings and organization performance. Study findings indicate that there was positive association between inspection method, product legal proceedings, frequency of tax policy changes, rules and procedures, bureaucracies and organization performance. The study was limited to manufacturing companies exporting goods in India. Thus, its findings may not be generalized in local perspective and importation of goods from Brazil to Kenya.

Muthoni, Theuri and Sang (2018) investigated the effect of supported regulations on performance of listed companies in Nairobi Securities Exchange. It was found that there was positive and significant association between supported regulations and performance of listed firms. There is need to examine the degrees of customs regulations support on performance of importing firms in Kenya. Most importers of durable goods from Brazil are not listed hence their findings may not mirror those of listed companies.

Shirsavar and Masumeh (2016) investigated the effect of electronic tax administration in facilitating export activities in Iran. Particularly the study examined the effect of facilitation of formalities, identification of new opportunities, curtailing of transaction turnover on reducing transaction costs that enhanced competitive advantage. Results of the study revealed inverse effect of facilitating formalities and reduction of transaction costs. Identification of

new opportunities effectively reduced transaction costs. There was significant association between effective reduction of transaction cost and competitive advantage. The economic and political environment in Iran differs from Kenya thus the findings may not be generalized in Kenya thus the need for a localized study.

2.3.2 Infrastructure and Competitive Advantage

Fiorini, Marco and Asha (2018) investigated the effect of trade liberalization, infrastructure and firm performance in Ethiopia. Proper infrastructure was credited with decreased transportation costs and enhanced competitiveness of institutional goods and positively impacts demand for goods. Contingent to strength of distribution channels, improved transport would optimize firm returns and amplify gains from tax tariffs and subsidies. It was found that those firms that were operating in areas with better road coverage had superior returns as compared to their rivals. There is need to examine the contribution of infrastructure on competitiveness of firms importing goods from Brazil in Kenya.

Zhang (2017) examined direct and indirect effect of infrastructure development on firm's productivity in China. It was found that the dominant infrastructures in China were road, cable and telecommunication servers and they have significant effect on firm productivity. Through agglomeration modelling infrastructure, modelling impacted positively on firm productivity. Sandra (2013) investigated the effect of infrastructure investment on firm performance in South Africa. Particularly the study assessed the effect of railway access on firm sale. Further, the study explored the differences in access to railway line after its repairs. It was found that there was competitive advantage achieved by firms that were close to railway transport and they had high likelihood of monopolization. The distance from port of destination to Kenya as compared to South Africa differs and the state of customs management may not be homogeneous thus there is need for a localized study that would examine the effect of infrastructure on competitive advantage of durable goods importers in Kenya.

Sukati, Abu, Baharun, Alifiah and Anuar (2012) investigated the effect of competitive advantage through supply chain competitiveness and integration. Results of the study

indicates positive and significant association between supplier integration and competitive advantage. Internal integration affected competitive advantage positively. This study examined mediation and direct effect of supply chain competitiveness and competitive advantage. Currently, there is a direct effect of infrastructure on competitive advantage in a developing country perspective. Waithira (2016) investigated the effect of supply chain management on competitive advantage in Nairobi County. It was found that F&B firms have adopted supply chain collaboration, agile supply strategy and had supplier integration to achieve competitive advantage. The study should have adopted inferential statistics so as to examine causality between supply chain management and competitive advantage. Food and beverage manufacturers in Kenya may have to rely on importers of durable goods through creation of horizontal or vertical cooperative platforms. Consequently, the need for sector specific study.

2.3.3 Shipment and Competitive Advantage

Musau, Namusonge, Makokha and Ngeno (2017) evaluated the effect of transport management practices on organization performance in Kenya. Convergent mixed research design was adopted in the study. Transport management practices has positive and significant effect on performance of manufacturing and textile companies in Kenya. Some entities may have to outsource their Natasha, Shasho and Vladimir (2017) investigated the impact of logistics management practices on organization performance in Macedonia. Results of the study indicates that inventory, warehousing, transport and information management has significant effect on logistics costs in Macedonia. Consequently, there is need for corporations to optimize costs so as to maximize on business effectiveness, customer satisfaction, competitive advantage and efficiency. Timna (2017) investigated the effect of logistics and transportation on performance of New Kenya Cooperative Creameries. There was significant association between logistics and transportation practices and operational performance of new KCC. Logistics and transportation were challenged by budgetary constraints and quality of human capital.

Lomeendra, Ashley and Deveshika (2015) investigated the effect of supply chain management on competitive advantage and operational performance of four-star hotels in Mauritius. Regression analysis findings revealed positive and significant effect of supply chain management on competitive advantage. Wanjiku and Mwangangi (2017) investigated the influence of logistics management on performance of fast-moving consumer goods in Nairobi County. The findings indicate that inventory management, order processing management, information flow and transport management had significant influence on distribution performance of FMCG. It was recommended that there is need for adoption of information sharing platforms to enhance distribution of FMCG.

2.3.4 Timeliness and Competitive Advantage

Maulana, Ubud and Sumiati (2018) investigated the effect of supply chain management on competitive advantage of new Jombag sugar factory. Results of the study revealed that supply chain management has significant influence on competitive advantage of the Sugar Company. Kamel and Murad (2014) investigated the effectiveness of supply chain responsiveness on competitive advantage of manufacturing companies in Jordan. Supply chain responsiveness has positive and significant effect on competitive advantage of manufacturing companies in Jordan. Further, operating system responsiveness, logistics process responsiveness and supplier network responsiveness affected competitive advantage positively. Moreover, the findings indicate that higher levels of operating system responsiveness optimized competitive advantage due to dependable delivery, enhanced product innovation and least time to market. Higher levels of supplier network responsiveness enhanced corporate competitive advantage and lower operational costs. There is need for adoption of shipment procedures that would be in line with organization goals and objectives.

Chepkole and Deya (2019) examined the effect of strategic capability on competitive advantage of information communication technology in Nairobi County. The study indicates that human resources, financial resources, knowledge and cost efficiency has significant effect on competitive advantage of IT firms. Hossein, Amir and Shahrouz (2013) examined

determinants of competitive advantage in Iran agricultural sector using trade map index. Longitudinal research design was adopted, secondary data on export performance of agricultural sector was collected and trade map index estimated. The scale evaluated four issues that were winners in advanced markets, losers in advanced market, losers in declined market and winners in declined market. Study findings depicted that though there was a decline in competitive advantage of some agricultural products in Iran, there were notable gains. It was recommended that measures to be adopted to minimize likelihood of losing market share.

Logistics effectiveness is dependent on level of reliability of supply chain process. Internationally and locally, there is need for certainty in delivery process so as to minimize costs associated with excessive and minimal stock holding costs. According to Arvis et al., (2018) shippers of goods are prepared to pay premium costs so as to enhance the reliability of goods delivery. African statistics on logistics effectiveness ranks South Africa as the leading. Further, there is a positive causality between quality of service and logistics effectiveness. Despite of positive trajectory there was an inverse trend in 2018.

To enhance competitiveness with local and multinational companies, Kenyan based firms have consistently pursued efficiency in their production and distribution process (Atikiyi et al., 2015). According to Nehemiah (2017) business operations depends on purchasing, customer services and logistics. Gichuru, Iravo and Arani (2015) asserted that supply chain practices are crucial tools for information gathering and resources sharing to enhance production. Though, empirical literature exists on the role of logistics and performance. There is limited enquiry on the effect of customs, timeliness, infrastructure and shipment and competitiveness of importers of durable goods in Kenya. Thus, the current study evaluated the effect of logistics effectiveness on competitiveness of importers of durable goods from Brazil to Kenya.

2.4 Research Gaps

Past empirical evidence on the effect of logistics effectiveness on competitive advantage has not been conclusive due to recording of mixed findings. These differences can be associated

with the contextual, conceptual, geographical and methodological gaps. Methodologically, past studies have relied on descriptive statistics alone that may have limited capacity to examine causality between logistics performance and competitive advantage. Further, those that have used classical regression modelling did not carry out its assumptions. Geographical studies have been carried out in developing economies that may have clearer logistics management as compared to the Kenyan perspective (Akbar et al., 2013; Joo & Shuh, 2017; Natash et al., 2017; Fiorini et al., 2018).

Conceptually, logistics effectiveness has been operationalized via alternative approaches as compared to the current study that examines the effect of customs, infrastructure, shipment and timeliness on competitive advantage of importers of durable consumer goods from Brazil. Most studies have not considered the effect of logistics effectiveness on competitive advantage of importers of goods from Brazil to Kenya. Thus, their findings may not be generalized in the Kenyan perspective (Kamel & Murad, 2014; Lomeendra et al., 2015; Maula et al., 2018).

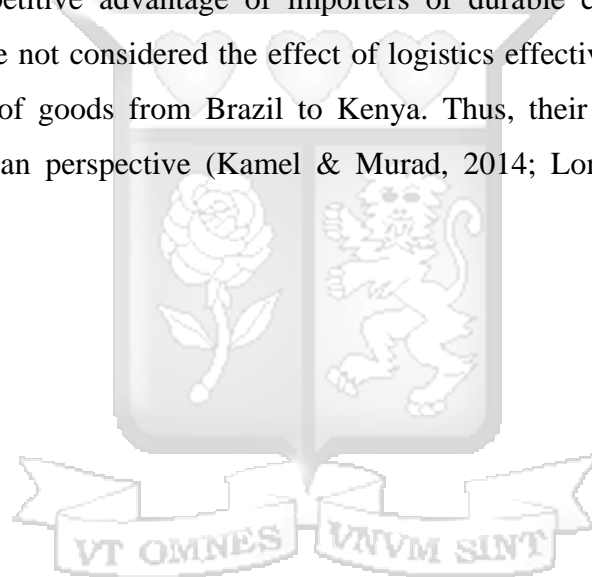


Table 2.1 Summary of Empirical Literature and Research Gaps

Author(s)	Objectives/Purpose	Key Findings	Research Gaps	Focus of this Study
Akbar et al., (2013)	To examine the effect of market orientation, government regulation, competitive advantage and internalization of SMEs in Malaysia.	Significant effect of market orientation, government regulation, competitive advantage and internalization.	There are conceptual differences since competitive was a moderator as compared to the current study that considered competitive as a dependent variable.	The study examined the direct effect of logistic effectiveness on competitive durable goods importers from Brazil in Kenya.
Joo and Shuh (2017)	To establish the effect of government regulations on export of corporate performance hedging against international environment regulations.	Government support had positive and significant effect on corporate performance.	The study only considered the effect of regulations on performance. There are other aspects that may have effect on performance of corporate entities.	The current study examined the joint effect of customs, infrastructure, shipment and timeliness on competitive advantage of durable goods importers from Brazil.
Prasanna and Shrini vas (2014)	To determine the effect of regulations on performance of manufacturing small and medium enterprises in India.	There was positive association between inspection method, product legal proceedings, frequency of tax policy changes, rules and procedures, bureaucracies and organization performance.	The study did not report on diagnostic that guided the choice of data analysis procedure.	The study adopted regression analysis and carried out diagnostic tests before fitting the model.
Fiorini et	The effect of trade liberalization, infrastructure	Proper infrastructure was credited with decreased transportation costs	The study was carried out in Ethiopia whose	The study fitted regression model to examine the

al., (2018)	and firm performance in Ethiopia.	and enhanced competitiveness of institutional goods and positively impacting demand for goods.	state of economic and political development differs from Kenya.	effect of customs, infrastructure, shipment and timeliness and competitive advantage.
Zhan (2017)	Examined direct and indirect effect of infrastructure development on firm's productivity in China.	The dominant infrastructures in China were road, cable and telecommunication servers and they have significant effect on firm productivity.	The study drew the data from China whose state of economic and political development differs from Kenya.	The study examined the direct effect of logistic effectiveness on competitive advantage of Kenyan importers of durable goods from Brazil.
Musa et al. (2017)	The effect of transport management practices on organization performance in Kenya.	Transport management practices has positive and significant effect on performance of manufacturing and textile companies in Kenya.	The study considered the direct effect of transport on performance. Performance of a firm can be affected by other extraneous factors.	The current study examined the joint effect of customs, infrastructure, shipment and timeliness on competitive advantage of durable goods importers from Brazil.
Lome endra et al. (2015)	The effect of supply chain management on competitive advantage and operational performance of four-star hotels in Mauritius.	Positive and significant effect of supply chain management on competitive advantage.	The study did not report on diagnostic tests prior to regression modelling.	The current study examined the joint effect of customs, infrastructure, shipment and timeliness on competitive advantage of durable goods importers from Brazil.
Chepkole & Deya (2019)	The effect of strategic capability on competitive advantage of information communication technology in Nairobi County.	The study indicates that human resources, financial resources, knowledge and cost efficiency has significant effect on competitive advantage of IT firms.	The study did not report on diagnostic tests prior to regression modelling.	The current study examined the joint effect of customs, infrastructure, shipment and timeliness on competitive advantage of

)				durable goods importers from Brazil.
Hosse in et (2013)	To establish determinants of competitive advantage in Iran agricultural sector using trade map index.	The findings depicted that though there was a decline in competitive advantage of some agricultural products in Iran, there were notable gains.	The study drew the data from Iran whose state of economic and political development differs from Kenya.	The study adopted regression analysis and carried out diagnostic tests before fitting the model.



2.5 Conceptual Framework

This is a schematic framework depicting causality between independent and dependent variables. In this study logistics effectiveness has effect on competitive advantage of Kenyan importers of durable goods from Brazil. Logistics effectiveness is operationalized as customs, infrastructure, shipment and timeliness and competitive advantage is operationalized as cost, differentiation and focus.

The role of logistics on economic development is paramount and those organizations that are successful world-wide have robust logistics performance which is value additive (Njambi & Katuse, 2013). Hence, its contribution on economic development cannot be ignored. World Bank (2010) posited that proper logistics performance is contingent to trade expansion, attraction of foreign direct investment, support of international trade and promotion of economic competitive advantage.

Value contribution of logistics was necessitated by globalization, penetration to new markets, discovery of production efficiencies and technological advancement (World Bank, 2012). Due to competition and cannibalization of market shares, there is need for all firms to develop measures aimed at increased demand creation and production efficiency while ordering goods and services. This will catalyze the flow of materials, information and products in hierarchical levels of production process. This will not only make logistics performance value additive but also a source of competitive advantage. The relationship is as shown in Figure 2.1.

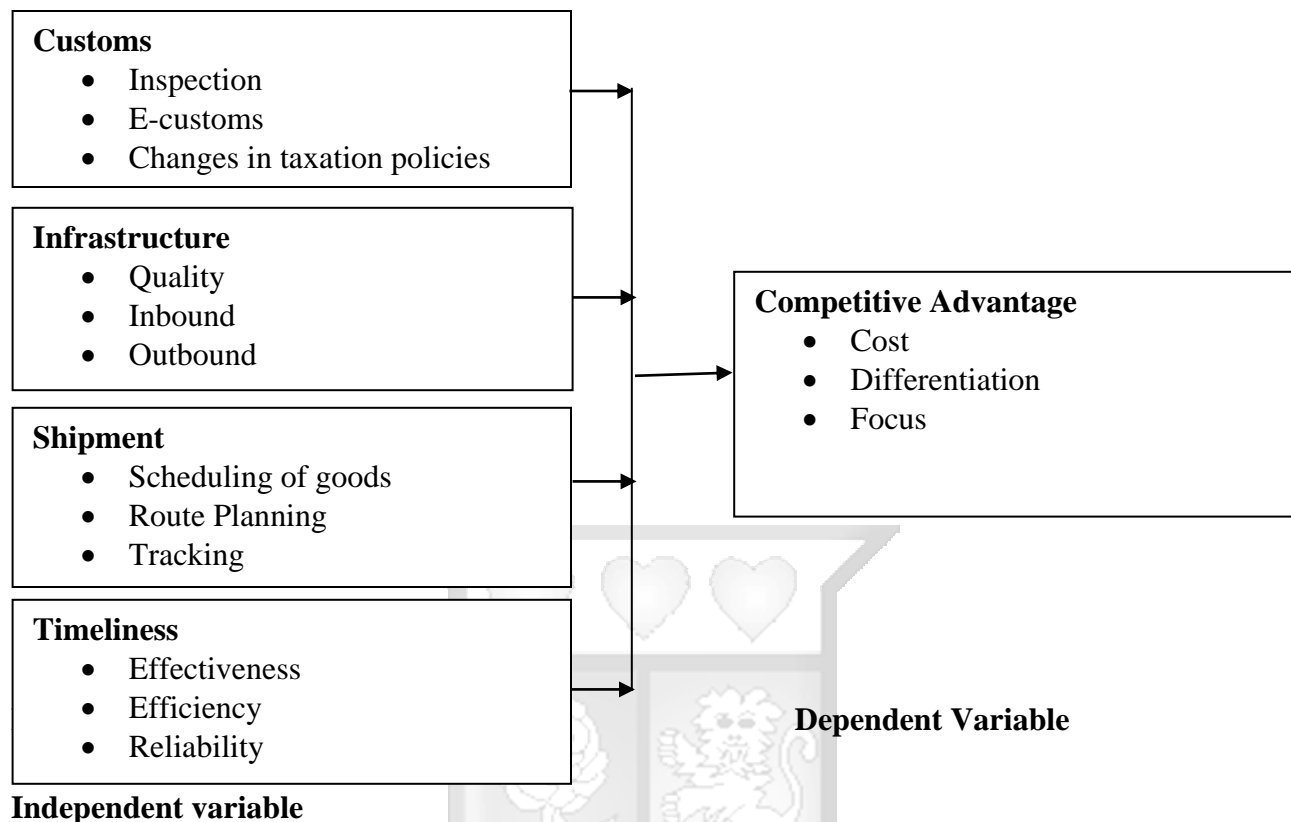


Figure 2.1 Conceptual Framework

2.6 Operationalization of Variables

Owing to the role of logistics effectiveness on competitive advantage, several stakeholders have a contribution hence the need for good coordination. According to Njambi and Katuse (2013) logistics management has several activities that include customer service, order processing, transportation, packaging, demand and forecasting, distribution, facility location and production planning. To have viable outcomes there is need for provision of information and formation of mechanisms that would aid in customs clearance, provision of reliable infrastructure, aid in shipment of goods and enable in timeliness compliance while goods are on transit. Variable's operationalization is as shown in Table 2.2.

Table 2.2 Operationalization of Variables

Objective	Variable	Attributes	Scale	Data Analysis
To determine the effect of customs on competitive advantage of Kenyan importers of durable consumer goods from Brazil,	Competitive Advantage	Cost Differentiation Focus	5-point Likert	Descriptive
	Customs	Inspection E-customs Changes in taxation policy	5-point Likert	Descriptive Correlation Regression
To establish the effect of infrastructure on competitive advantage of Kenyan importers of durable consumer goods from Brazil,	Infrastructure	Quality Inbound Outbound	5-point Likert	Descriptive Correlation Regression
To examine the effect of shipment on competitive advantage of Kenyan importers of durable consumer goods from Brazil,	Shipment	Scheduling of goods Route planning Tracking	5-point Likert	Descriptive Correlation Regression
To evaluate the effect of timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil.	Timeliness	Effectiveness Efficiency Reliability	5-point Likert	Descriptive Correlation Regression

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter detailed research methodology applied in the study is discussed. In it research design, sampling and population, research quality, ethical consideration and data analysis. Research methodology choices and justification will be discussed.

3.2 Research Design

This is a detailed procedure on how a study was conducted (Saunders, Lewis & Thornhill, 2014). They can be perceived as set of beliefs and assumptions that guides execution of a study (Kombo & Tromp, 2012). This study deployed correlation research design, so as to examine the causal effect of logistics effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. Quantitative research design was adopted through gathering of quantifiable data. Further, the study aimed at generalizing its findings in a wider population from which the data was gathered.

3.3 Population and Sampling

3.3.1 Target population

This is a complete count of elements and individuals being considered in a study. The study population is of utmost importance given the findings may be generalized on it (Cooper & Schindler, 2013). The target population was 205 Kenyan importers of durable consumer goods from Brazil and they are based in Nairobi County. The study's target population comprised of 205 Kenyan importing firms that are listed by Invest & Export Brazil website that is maintained by the Brazilian government. In this study unit of analysis was Brazilian importers and unit of analysis were procurement managers and/or personnel in respective firms that were importers of durable goods from Brazil. Brazilian importers were considered owing to the distance of port of origin as compared to dominant importers from Asian

Continent. In addition, the researcher focuses on Brazil importers as a way of investigating a business challenge in her line of work.

3.3.2 Sampling Technique and Sample Size

A sample is a representative of the target population (Kothari, 2014). Sampling technique is the criterion of choosing representative of the target population (Cooper & Schindler, 2013). Sampling technique can be probabilistic when all elements under considerations can be selected with equal chances. It will be non-probabilistic if there is an inclusion and exclusion procedure that ought to be complied with (Sekaran & Bougie, 2013). The number of importers of goods and services to be considered in the study was estimated using simple random sampling and the size was determined using the Yamane formula (Yamane, 1967) as follows; $n = N / [1 + N (e)^2]$ Where n is the sample size, N is the population size, and e is the level of precision. The sample size estimation approach was based on the known population. Similar approach for sample size selection was adopted by (Musau, et al., 2017; Chepkole & Deya, 2019).

$$n = 205 / [1 + 205 (0.10)^2] = 67$$

3.4 Data Collection

3.4.1 Data Collection Instruments

The main tool adopted for data collection was a questionnaire. It may be considered because it is easy to administer, cost effective and provides consistency in the questions adopted to test study variables (Kothari, 2014). The questionnaire took into account the study objectives. The study adopted semi-structured questionnaires. The questionnaire was developed from past studies. The first part consisted of questions on the respondent's demographic information. The second part sought information on logistics effectiveness and the last part was on competitive advantage. Demographic information was measured using nominal scale while logistic effectiveness and competitive advantage was measured using five-point likert scale. The questionnaire was developed from past empirical literature review. Demographic

information was in nominal scale. Logistics effectiveness and competitive advantage was measured in five-point likert scale. All questions in the questionnaires were closed ended.

3.4.2 Data Collection Procedure

Ethical approval was sought from Strathmore University Business School and research approval from National Commission for Science and Technology (NACOSTI). Two research assistants were recruited and trained and aided in distribution and collection of questionnaires. The questionnaires were collected through drop and pick approach.

3.5 Data Processing and Analysis

Data collected was analyzed with the aid of Statistical Packages for Social Sciences (SPSS version 22). Prior to data entry, it was cleaned, checked for completeness and coded. Descriptive and inferential statistics analyzed the data. Descriptive statistics include mean, frequencies, standard deviation and percentages. Inferential statistics include Product moment correlation and multiple regression model. Product moment correlation examined the strength of the effect of logistics effectiveness on competitive advantage while multiple regression examined the nature of the effect of logistics effectiveness on competitive advantage. Figures and tables presented the data. Prior to multiple regression modelling, normality, linearity and multicollinearity were tested. Normality was tested using histogram and normally distributed data should have a bell-shaped curve (Sekaran & Bougie, 2013). Linearity was examined through use of scatter plots. Multicollinearity was examined using variance inflation factors and tolerance limits. Presence of multicollinearity can be indicated by variance inflation factors greater than 10 and tolerance limits less 0.1 (Saunders et al., 2014). If the data have multicollinearity issues, then highly correlated variables should be dropped from the model. The multiple regression model was of the form:

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

Where;

Y is Competitive Advantage

β_0 is a constant

β_1 to β_4 are regression coefficients of independent variables and represents change in Y per unit change in X

X₁ is Customs

X₂ is Infrastructure

X₃ is Shipment

X₄ is Timeliness

ε is the error term

3.6 Research Quality

Prior to issuing questionnaires were piloted in April among eight Kenyan importers of durable goods from Brazil operating in Kiambu County. According to Kothari (2011) piloting is carried out to examine the capacity of research instruments to respond to research questions. Through piloting shortcomings associated with research instruments would be identified and corrective measures undertaken prior to actual study. Sekaran and Bougie (2013) argues that failure to undertake research instruments corrections may lead to gathering of information that may fall short of research expectations.

3.6.1 Reliability Analysis

Reliability is the ability of research instruments to have consistent results when administered to different groups (Bryman & Bell, 2015). Further, Copper and Schindler (2014) is the capacity of heterogeneous group of respondents giving consistent responses. Cronbach Alpha examined the internal consistency. Though, its coefficient ranges from 0 to 1, those research instruments with at 0.7 are reliable least 0.7 (Sekaran & Bougie, 2013).

Reliability was examined through use of Cronbach's Alpha coefficients, study findings in Table 3.1 indicates that the highest coefficient was for timeliness (0.823), followed by customs (0.803) and the least was competitive advantage (0.722). Since the reliability were greater than 0.7, the research instrument was reliable. In line with Sekaran and Bougie (2013), the higher the reliability coefficient the more reliable the research instrument.

Table 3.1 Reliability Analysis

Variable	Number of Items	Cronbach's Alpha
Customs	6	0.803
Infrastructure	6	0.732
Shipment	6	0.734
Timeliness	6	0.823
Competitive advantage	9	0.722

3.6.2 Validity Analysis

This is the extent to which a research concept is measured accurately (Kombo & Tromp, 2012). Both content validity and construct validity were used in the development of the research instrument. Sekaran and Bougie (2013) regards content validity as the measure of whether the research instrument adequately covers the content that it is meant to cover taking into account the variables of the study.

On the other hand, construct validity tests whether the researcher can draw inferences from the test scores as related to the concepts that are being measured in a study (Kothari, 2014). In this regard, the development of the questionnaire ascertains whether it covers the whole domain as related to the study's variables that the researcher seeks to measure. The development of the questionnaire took into account the practicability of drawing inferences from the responses that may be provided using the tool.

3.7 Ethical Considerations

Research ethical clearance was sought from Strathmore University Business School and research license to be applied from NACOSTI. All items used in the study were properly acknowledged and referenced. Participation in the study was voluntary and participants may exit at any stage. In all phases, confidentiality was maintained.

The researcher sought for consent from participants in the study. Prior to questionnaires administration the respondents were inducted on their rights in line with participation in the study. According to Saunders et al., (2014) research studies should conform to voluntary

consent principle through allowing respondents to willingly participate in a study and withdraw at their own choice. Moreover, participant's confidentiality was upheld and there was no misrepresentation of facts. Further, intellectual property rights were complied with through acknowledgements and citations of all citations in the documents.



CHAPTER FOUR

FINDINGS AND INTERPRETATION

4.1 Introduction

Data analysis, interpretation and discussion of findings are presented. The chapter has response rate, reliability analysis, and descriptive statistics on customs, infrastructure, shipment, timeliness, competitive advantage. Moreover, correlation and regression were used as inferential statistics. Assumptions of multiple regression modelling are presented.

4.2 Response Rate

Out of 67 issued questionnaires only 55 were completely filled and returned. As shown in Table 4.1, this gave a response rate of 82%. The response rate was acceptable, since Sekaran and Bougie (2013) argues that a response of at least 60% is reliable in social sciences. This response rate was achieved through establishment of working relationship between respondents and researcher through acquisition of requisite research permits and licenses that depicted honesty of the research.

Table 4.1 Response Rate

	Frequency	Percent
Returned and correctly filled questionnaires	55	82
Non-returned	12	18
Total	67	100

4.3 Background Information

Respondents background information sought include gender, age of respondents, and the highest level of education attained, marital status and period in business. Descriptive statistics; frequency and percentage for data analysis.

4.3.1 Gender

Study findings in Table 4.2 indicates that 85.5% of respondents were male and 14.5% were female. Hence, male were the largest importers from Brazil.

Table 4.2 Gender

	Frequency	Percent
Male	47	85.5
Female	8	14.5
Total	55	100

4.3.2 Age of Respondents

The highest number of respondents aged between 31 to 40 years (36.4%) followed by 30.9% who aged between 41 to 50 years and 18.2% aged between 21 to 30 years. This indicates that majority of respondents were aged below 40 years, which implies that the majority of people pursuing business are aged below 40 years. There is need for provision of an environment that is conducive for business so as to create employment opportunities.

Table 4.3 Age of Respondents

	Frequency	Percent
21 to 30 years	10	18.2
31 to 40 years	20	36.4
41 to 50 years	17	30.9
51 to 60 years	8	14.5
Total	55	100

4.3.3 Highest Level of Education

Concerning education level, findings in Table 4.4 indicates that majority 52.7% were undergraduate degree holders, followed by 25.5% who had post graduate degrees and 21.8% were college graduates. This shows that majority of importers from Brazil had requisite education that would aid them in understanding measures that can be adopted to enhance the likelihood of achieving competitive advantage.

Table 4.4 Highest Level of Education

	Frequency	Percent
College	12	21.8
Undergraduate	29	52.7
Post graduate	14	25.5
Total	55	100

4.3.4 Marital Status

Further, study findings in Table 4.5 indicate that 76.4% of respondents were married followed by 23.6% who were single. This indicates that there were higher chances of business success when family members were involved in management of their business enterprises.

Table 4.5 Marital Status

	Frequency	Percent
Single	13	23.6
Married	42	76.4
Total	55	100

4.3.5 Period in Business

Moreover, period in business study findings in Table 4.6 indicate that 49.1% had been in business for above 10 years, followed by 38.2% who had pursued business between 5 to 10 years and 12.7% had been in business for at most five years. This indicates that most enterprises could understand measures that would be adopted to improve logistics effectiveness and enhance achievement of competitive advantage.

Table 4.6 Period in Business

	Frequency	Percent
Below 5 years	7	12.7
Between 5 to 10 years	21	38.2
Above 10 years	27	49.1
Total	55	100

4.4 Descriptive Statistics on Customs Effectiveness

The first objective of the study sought to determine the effect of customs on competitive advantage of durable goods importers from Brazil. To achieve this the respondents were requested to indicate their level of agreement on competitive advantage on five-point Likert scale ranging from strongly disagree to strongly agree. Descriptive statistics that include frequency, percentage, mean and standard deviation were used for data analysis are in Table 4.7.

Majority (85.4%) agreed and 1.8% disagreed that inspection criterion is clarified during shipment of goods. This indicates that there is clarification on inspection procedure during shipment of durable goods from Brazil. Majority 87.2% agreed that there is a clear policy framework to be followed during shipment inspection and it's known to importers of goods from Brazil. This shows that importing agents of goods from Brazil have clear framework that they follow during importation of durable goods. Further, majority 76.3% agreed and 10.9% disagreed that there is timely communication of taxation policies. This indicates that Kenya Revenue Authority clarifies customs issues on time to minimize inconveniences during importation of durable goods from Brazil.

In addition, majority, 76.4%, agreed and 9.1% disagreed that use of information technology in customs has enhanced efficiency. It implies that automation of customs clearance process would enhance efficiency and access of KRA services among importers of durable goods from Brazil. Majority (78.2%) agreed and 12.7% disagreed that there is clear policy on how tax is implemented. This shows KRA has clear policy guidelines and avails information to importers of durable goods from Brazil. Majority (74.5%) agreed and 14.6% disagreed that customs clearance procedures has enhanced capacity of importers of durable goods from Brazil to compete effectively. On overall majority agreed mean = 4.1, standard deviation = 1.0, that customs have effect on competitive advantage of durable goods imported from Brazil.

Table 4.7 Descriptive Statistics on Customs Effectiveness

	n=55					Mean	Std. Dev
	SD	D	N	A	SA		
Inspection criterion is clarified during shipment of goods	0	1.8	12.7	50.9	34.5	4.2	0.7
There is a clear policy framework to be followed during shipment inspection, which is known to us.	3.6	3.6	5.5	43.6	43.6	4.2	1.0
There is timely communication of taxation policies changes	3.6	7.3	12.7	41.8	34.5	4.0	1.1
Use of information technology in customs process has enhanced its efficiency	5.5	3.6	14.5	29.1	47.3	4.1	1.1
There is a clear guideline on how tax policies are implemented	1.8	10.9	9.1	38.2	40	4.0	1.1
Customs clearance procedures has enhanced capacity of us to compete effectively	9.1	5.5	10.9	21.8	52.7	4.0	1.3
Overall average						4.1	1.0

4.5 Descriptive Statistics on Infrastructure Effectiveness

The second objective of the study sought to establish the effect of infrastructure on competitive advantage of importers of durable goods from Brazil. To achieve it the respondents were requested to indicate their level of agreement on five-point Likert on effect of infrastructure on competitive advantage. Descriptive statistics was used for data analysis as shown in Table 4.8.

Study findings indicate that majority (74.5%) agreed and 5.5% disagreed that the available infrastructure for transportation of their goods are flexible. Availability of alternative modes of transport for durable goods to customers would aid in achievement of competitive advantage. Majority (60%) agreed and 12.7% disagreed that their infrastructure is transparent to all stakeholders. There is need for higher level of transparency so as to minimize monitoring and agency costs while goods are on transit. Thirdly, 40% neither agreed nor

disagreed, 41.9% agreed and 18.2% disagreed that their infrastructure have capacity to create strategic assets.

Further, majority (61.8%) agreed and 25.5% disagreed that their infrastructure accommodates demand plan and forecasting. This implies that importers of durable goods from Brazil should optimize their infrastructure to optimize on demand management strategy. Moreover, majority (67.2%) agreed and 7.3% disagreed that their infrastructure meets customer needs and satisfaction. This implies that importers of durable goods from Brazil satisfy their customer demands. Finally, 60% agreed and 18.2% disagreed that their infrastructure minimized logistics handling and operational costs. On overall majority mean = 3.6, agreed that infrastructure have an effect on competitive advantage among importers of durable goods from Brazil.

Table 4.8 Descriptive Statistics on Infrastructure Effectiveness

	SD	D	N	A	SA	Mean	Std. Dev
Available infrastructure for our goods is flexible	0.0	5.5	20	34.5	40	4.1	0.9
Our infrastructure is transparent to all stakeholders	1.8	10.9	27.3	38.2	21.8	3.7	1.0
Our infrastructure has capacity to create strategic assets	5.5	12.7	40	36.4	5.5	3.2	0.9
Our infrastructure accommodates demand plan and forecasting	5.5	20	12.7	49.1	12.7	3.4	1.1
Our infrastructure meets customer needs and satisfaction	1.8	5.5	25.5	54.5	12.7	3.7	0.8
Our infrastructure minimized logistics handling and operational cost	9.1	9.1	21.8	36.4	23.6	3.6	1.2
Overall average						3.6	1.0

4.6 Descriptive Statistics on Shipment Effectiveness

The third objective of the study sought to examine the effect of shipment on competitive advantage of importers of durable goods from Brazil. To achieve this objective, the

respondents were requested to indicate their level of agreement on a five-point Likert scale ranging from strongly disagree to strongly agree. Descriptive statistics were used for data analysis as shown in Table 4.9.

Study findings indicated that 67.3% agreed and 12.8% disagreed that they have sufficient space for shipment of goods. Secondly, 60% agreed and 23.7% disagreed that their current ships scheduling have improved distribution of durable goods that they import from Brazil. This implies that importers of durable goods from Brazil have low chances of running out of stock. Majority 61.9% agreed, 20% neither agreed nor disagreed and 18.2% disagreed that Kenyan importers conduct intensive route planning. This implies that there is need for proper logistics planning to minimize likelihood of holding too much resources on inventory.

Further, 43.6% neither agreed nor disagreed, 34.6% agreed and 21.8% disagreed that they have placed in place proper shipment plan to deal with random delays. This calls for proper planning of importation of durable goods from Brazil so as to optimize on stock management approach adopted by respective firms. Majority (63.6%) agreed and 16.4% disagreed that they have a system in place for management of shipment fleet. Finally, 50.9% agreed and 27.3% disagreed that they can manage to track shipment while on transit. On overall majority agreed mean = 3.5 and standard deviation = 1.1, that shipment have effect on competitive advantage of importers of durable goods from Brazil.

Table 4.9 Descriptive Statistics on Shipment Effectiveness

	n=55					Mean	Std. Dev
	SD	D	N	A	SA		
There is sufficient space for shipment of goods	5.5	7.3	20	47.3	20	3.7	1.1
Current ships scheduling has improved distribution of durable goods	7.3	16.4	16.4	47.3	12.7	3.4	1.1
Kenyan importers conduct intensive route planning	5.5	12.7	20	36.4	25.5	3.6	1.2
We have placed in place proper shipment plan to deal with random delays	3.6	18.2	43.6	27.3	7.3	3.2	0.9
We have system in place for management of shipment fleet	7.3	9.1	20	43.6	20	3.6	1.1
We can manage to track our shipment while on transit	7.3	20	21.8	29.1	21.8	3.4	1.2
Overall average						3.5	1.1

4.7 Descriptive Statistics on Timeliness Effectiveness

The fourth objective of the study evaluated the effect of timeliness on competitive advantage of importers of durable goods from Brazil. To achieve this, the study sought the level of agreement on five-point Likert scale ranging from strongly disagree to strongly agree. Descriptive statistics findings are shown in Table 4.10.

Majority (70.9%) agreed and 9.1% disagreed that they receive accurate information during shipment of durable goods from Brazil. There is need for provision of all information that would aid in planning and inventory management while goods are on transit. Secondly, 76.4% agreed and 10.9% disagreed that they were accorded helpful information during shipment of goods. Thirdly, 69.1% agreed and 12.8% disagreed that during shipment they get successful feedback on conflicts management. There is need for provision of conflict management procedures that would aid in resolutions of unforeseen incidences that would alter importation of durable goods from Brazil.

Further, 56.4% agreed and 12.8% disagreed that shipment of durable goods from Brazil is reliable. Majority (61.9%) agreed and 14.6% disagreed that there are limited cases of pilferage of goods while on transit. This implies that there is assurance of security of goods while on transit. This would minimize likelihood of running out of stock since importers can have reliable lead time. Majority (50.9) agreed and 23.7% disagreed that professional approach is complied with while goods are on transit. On overall majority (mean = 3.7), agreed that timeliness have effect on competitive advantage of importers of durable goods from Brazil.

Table 4.10 Descriptive Statistics on Timeliness Effectiveness

	SD	D	N	A	SA	Mean	Std. Dev
We receive accurate information during shipment of goods	1.8	7.3	20	58.2	12.7	3.7	0.8
We are accorded helpful information during shipment of goods	0.0	10.9	12.7	36.4	40	4.1	1.0
During shipment we get successful feedback on conflicts management	7.3	5.5	18.2	45.5	23.6	3.7	1.1
Shipment of goods is reliable	5.5	7.3	30.9	38.2	18.2	3.6	1.1
There are limited cases of pilferage of goods while on transit	5.5	9.1	23.6	45.5	16.4	3.6	1.0
Professional approach is complied with during shipment of goods	5.5	18.2	25.5	40	10.9	3.3	1.1
Overall average						3.7	1.0

4.8 Descriptive Analysis on Competitive Advantage

Further, the study analyzed the level of agreement on competitive advantage of importers of durable goods from Brazil. Descriptive analysis findings are summarized as shown in Table 4.11. Study findings indicated that 43.6% agreed and 36.4% disagreed that their prices were lower compared to competitors. Secondly, 67.3% agreed and 18.1% disagreed that they

continuously pursue cost reduction strategies. Majority 54.6% agreed, 23.6% neither agreed nor disagreed and 21.8% disagreed that they strive to reduce cost in importation process.

Further, 49.1% agreed and 34.5% disagreed that they serve specific market segmentation. Majority (69.1%) agreed and 16.3% disagreed that they customize imports in line with customers' demand. Moreover, 81.9% agreed and 9.1% disagreed that they quickly respond to customer demands. Majority (78.2%) agreed and 9.1% disagreed that they have broad selection for their clients. Majority (63.7%) agreed and 16.4% disagreed that they respond to product innovation faster than their competitors. Finally, majority (70.9%) agreed and 12.8% disagreed that they introduce goods first as compared to their competitors.

Table 4.11 Descriptive Analysis on Competitive Advantage

	n=55					Mean	Std. Dev
	SD	D	N	A	SA		
Our prices are low compared to competitors	7.3	29.1	20	21.8	21.8	3.2	1.3
We continuously pursue cost reduction strategies	3.6	14.5	14.5	60	7.3	3.5	1.0
We strive to reduce cost in importation process	1.8	20	23.6	27.3	27.3	3.6	1.2
We serve specific market segmentation	21.8	12.7	16.4	32.7	16.4	3.7	1.0
We customize our imports in line with customers demand	3.6	12.7	14.5	50.9	18.2	3.1	1.4
We quickly respond to customers demand changes	1.8	7.3	9.1	56.4	25.5	4.0	0.9
We have broad selection for our customers	0	9.1	12.7	41.8	36.4	4.1	0.9
We respond to product innovation faster than our competitors	7.3	9.1	20	25.5	38.2	3.8	1.3
We introduce goods first as compared to our competitors	5.5	7.3	16.4	29.1	41.8	4.0	1.2
Overall average						3.6	1.1

4.9 Correlation Analysis

Product moment correlation coefficient was carried to show the strength of the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable goods from Brazil. Study findings in Table 4.12 indicates that there was positive and significant effect of customs on competitive advantage ($\rho = 0.847$, p value < 0.05). Secondly, there was positive and significant effect of infrastructure on competitive advantage ($\rho = 0.836$, p value < 0.05). Thirdly, there was positive and significant effect of shipment on competitive advantage ($\rho = 0.843$, p value < 0.05). Finally, there was strong positive effect of timeliness on competitive advantage of Kenyan importers of durable goods from Brazil ($\rho = 0.854$, p value < 0.05).

Table 4.12 Correlation Analysis

		Y	X ₁	X ₂	X ₃	X ₄
Competitive Advantage (Y)	Pearson Correlation	1				
	Customs (X ₁)	Pearson Correlation	.847**	1		
	Sig. (2-tailed)	0.00				
	N	55	55			
Infrastructure (X ₂)	Pearson Correlation	.836**	.180**	1		
	Sig. (2-tailed)	0.00	0.00			
	N	55	55	55		
Shipment (X ₃)	Pearson Correlation	.843**	.203**	.185**	1	
	Sig. (2-tailed)	0.00	0.00	0.00		
	N	55	55	55	55	
Timeliness (X ₄)	Pearson Correlation	.854**	.212**	.317**	.255**	1
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	
	N	55	55	55	55	55

4.10 Regression Analysis

Regression modeling was carried to show the nature of the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable goods from Brazil. The assumptions tested were on normality, linearity and multicollinearity.

4.9.1 Regression Assumption

Normality

Normality test of the error term was tested through use of histogram. Pictorial presentation in Figure 4.1 indicates that the data was normally distributed since the error term had a mean of 0 and standard deviation of 1.

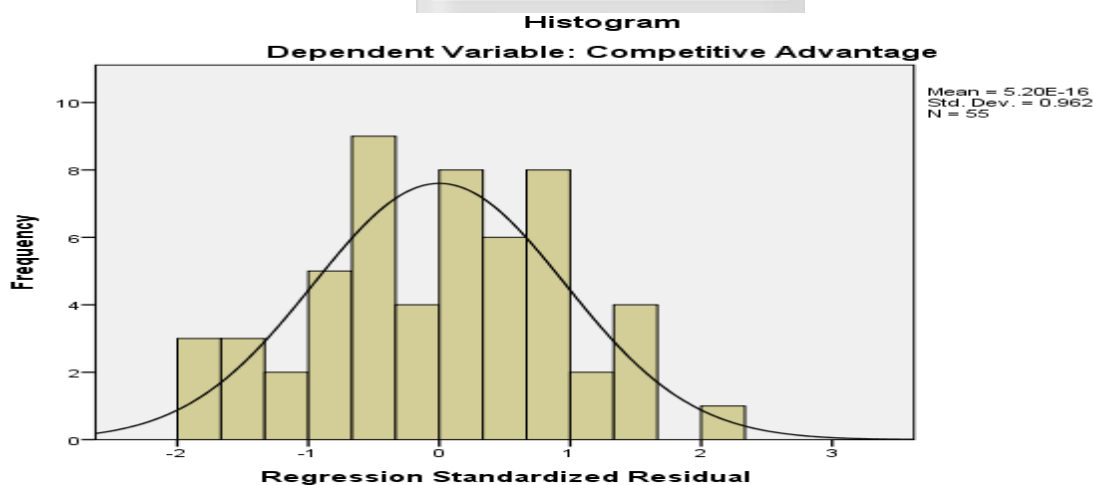


Figure 4.1 Normality Test

Linearity Test

Linearity test was examined through scatter plots. Study findings in Figure 4.2 depicts that customs, infrastructure, shipment, timeliness and competitive advantage of Kenyan importers from Brazil had positive effect.

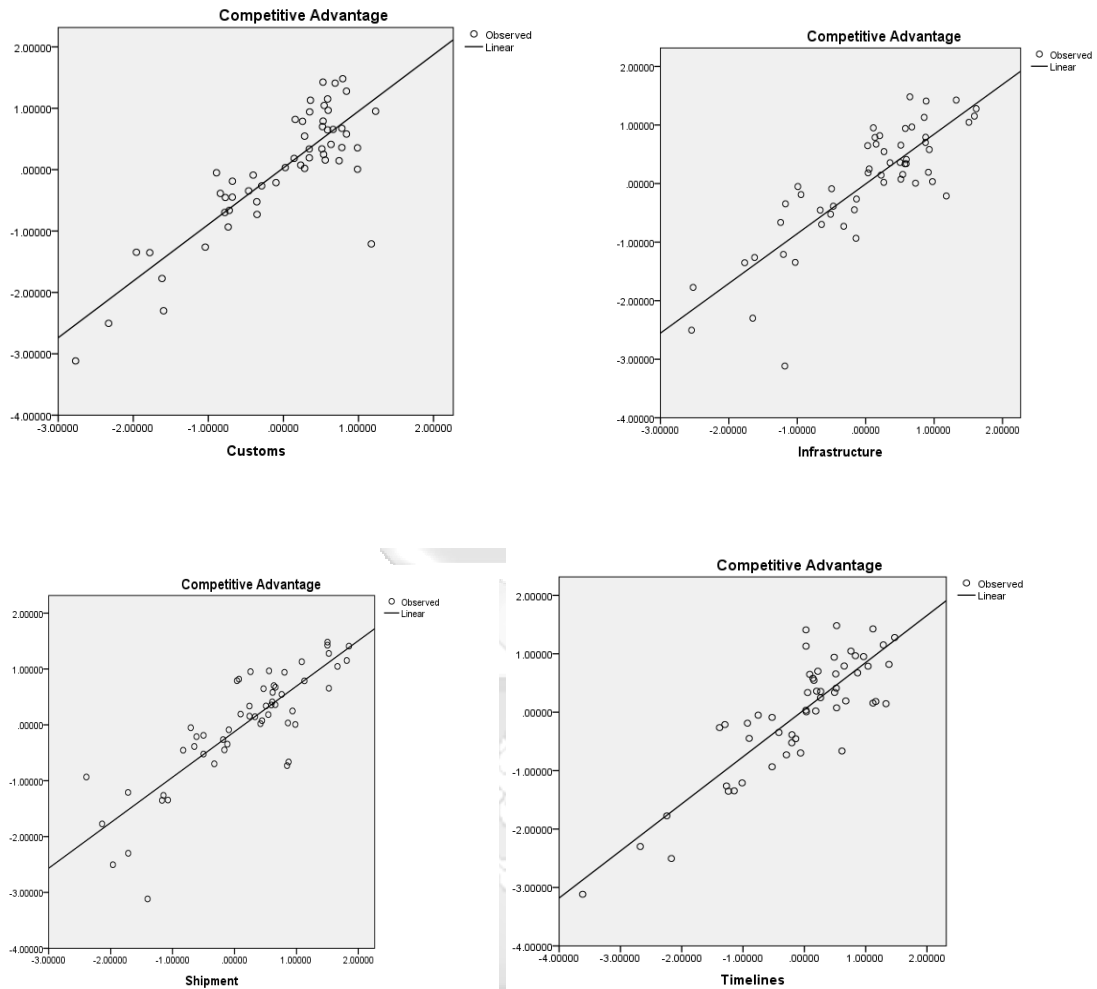
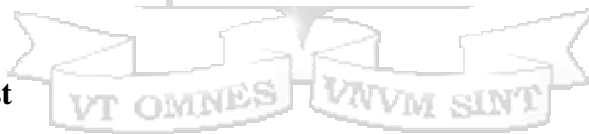


Figure 4.2 Linearity Test



Multicollinearity

Multicollinearity is a condition in which there is high correlation between independent variables. It was tested using Variance Inflation Factors and tolerance limits. Since VIF were less than 10 as shown in Table 4.13 then there was no multicollinearity and no need for dropping any variable or model specification.

Table 4.13 Multicollinearity Test

	Collinearity Statistics	
	Tolerance	VIF
Customs	0.28	3.59
Infrastructure	0.29	3.48
Shipment	0.31	3.27
Timeliness	0.30	3.31

4.9.2 Regression Findings

Regression coefficients in Table 4.14, B indicates the nature of the effect of logistics effectiveness on competitive advantage of Kenyan importers of durable goods from Brazil. T statistics and sig (p value) indicates the significance of the effect of customs, infrastructure, shipment and timeliness on competitive advantage. In model, an R squared of 0.717, indicates that 71.7% of changes in competitive advantage of importers of durable goods from Brazil can be explained by customs. Customs have positive and significant effect on competitive advantage of importers of durable goods from Brazil in Kenya ($\beta = 0.922$, p value <0.05). In model 2, infrastructure explains 69.9% of changes in competitive advantage among importers of durable goods from Brazil. There was a positive and significant effect on competitive advantage among importers of durable goods from Brazil in Kenya ($\beta = 0.85$, p value <0.05). In model 3, 71% of changes in competitive advantage among importers of durable goods from Brazil to Kenya can be accounted for by shipment. There was a positive and significant effect of shipment on competitive advantage of importers of durable goods from Brazil to Kenya ($\beta = 0.815$, p value <0.05). In model 4, timelines accounted for 72.9% of changes in competitive advantage among importers of durable goods from Brazil in Kenya. Timelines have positive and significant effect on competitive advantage among importers of durable goods from Brazil ($\beta = 0.806$, p value <0.05).

In model 5, an R squared of 0.872, which indicates that 87.2% of changes in competitive advantage of Kenyan importers of durable goods from Brazil can be accounted for by customs, infrastructure, shipment and timeliness while the remaining percentage can be accounted for by other factors excluded from the model. Analysis of variance indicates that logistic effectiveness; customs, infrastructure, shipment and timeliness have significant effect

on competitive advantage of Kenyan importers of durable goods from Brazil ($F= 85.387$, P value = 0.00).

Results indicated that customs have significant positive effect on competitive advantage of Kenyan importers of durable goods from Brazil ($\beta = 0.264$, p -value = 0.015). This indicates that unit increase in customs while there is no change in infrastructure, shipment and timeliness increases competitive advantage by 0.264 units. Since p value is 0.015, which is less than 0.05. Hence, it is an indication that customs effectiveness has significance on competitive advantage. Results documented that infrastructure has significant positive effect on competitive advantage of Kenyan importers of durable goods from Brazil ($\beta = 0.225$, p -value = 0.023). This indicates that unit increase in infrastructure while there is no change in customs, shipment and timeliness increases competitive advantage by 0.225 units. Since p value is 0.023, which is less than 0.05. Hence, it is an indication that infrastructure have significant on competitive advantage.

Results indicated that shipment has significant positive effect on competitive advantage of Kenyan importers of durable goods from Brazil ($\beta = 0.256$, p -value = 0.005). This indicates that unit increase in shipment while there is no change in customs, infrastructure and timeliness increases competitive advantage by 0.256 units. Since p value is 0.005, which is less than 0.05. Hence, it is an indication that shipment have significant on competitive advantage. Results indicated that timeliness have significant positive effect on competitive advantage of Kenyan importers of durable goods from Brazil ($\beta = 0.286$, p -value = 0.002). This indicates that unit increase in shipment while there is no change in customs, infrastructure and shipment increases competitive advantage by 0.286 units. Since p value is 0.002, which is less than 0.05. Hence, it is an indication that timeliness has significant on competitive advantage.

Results regression model is of the form:

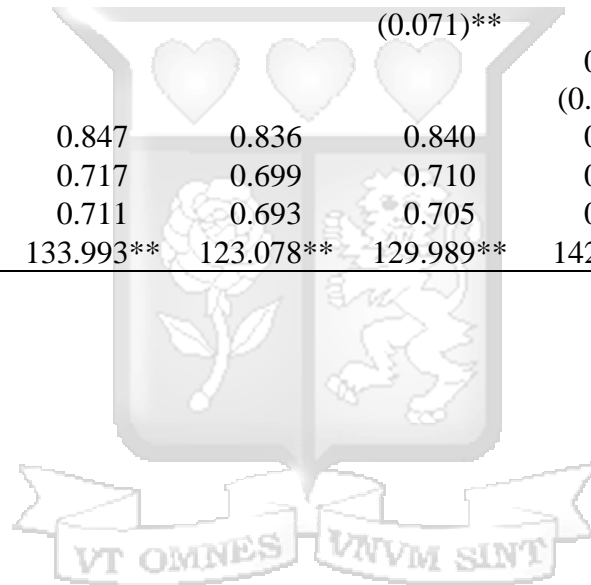
$$Y = -0.016 + 0.264X_1 + 0.225X_2 + 0.256X_3 + 0.286X_4$$

Where Y= Competitive advantage, X₁= Customs, X₂= Infrastructure, X₃= Shipment, X₄= Timeliness

Table 4.14 Regression Findings

Dependent Variable Independent Variables	Competitive Advantage				
	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	0.029 (0.073)	-0.006 (0.075)	-0.122 (0.074)	0.043 (0.071)	-0.016 (0.052)
Customs	0.922 (0.080)**				0.264 (0.104)**
Infrastructure		0.85 (0.077)**			0.225 (0.096)**
Shipment			0.815 (0.071)**		0.256 (0.088)**
Timeliness				0.806 (0.067)**	0.286 (0.0087)**
R	0.847	0.836	0.840	0.854	0.934
R Square	0.717	0.699	0.710	0.729	0.872
Adjusted R Square	0.711	0.693	0.705	0.724	0.862
F	133.993**	123.078**	129.989**	142.582**	85.387**

** p value <0.05



CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter summary of the major findings, conclusion and recommendations from the study will be drawn.

5.2 Summary

The main objective of the study was to examine the effects of logistics effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. Specifically, the study examined the effect of customs, infrastructure, shipment and timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. The study was anchored on descriptive research design and primary data was gathered through administration of questionnaires. Data was analyzed through descriptive statistics, correlation and multiple regression analysis. The main findings of the study indicate that there was positive and significant effect of customs, infrastructure, shipment and timeliness on competitive advantage of Kenya importers of durable consumer goods from Brazil.

5.3 Discussion

The tradeoff between logistics effectiveness and competitive advantage have attracted attention among scholars and policy makers. This can be associated with expected benefits to be derived from pursuance of competitive advantage. Achievement of competitive advantage would aid an organization in market penetration and dominance. Global, regional and local studies examining effect of logistics effectiveness on competitive advantage have been documented. However, these studies have not been conclusive due to empirical, theoretical, methodological, conceptual and contextual gaps. In Kenya, measures have been adopted to enhance logistics effectiveness through customs, infrastructure, shipments and timeliness.

Descriptive statistics that included mean, standard deviation, frequency and percentages. Further, multiple regression and correlation analysis were adopted as inferential statistics.

5.3.1 Customs Effectiveness and Competitive Advantage

The first objective of the study sought to determine the effect of customs on competitive advantage of Kenyan importers of durable goods from Brazil. Study findings indicate that customs have positive and significant effect on Kenyan importers of durable goods from Brazil. The study findings replicated Akbar et al., (2013) who reported that government regulations have significant effect on competitive advantage in Malaysia. The study confirmed Joo and Shuh (2017) who found positive effect of government support on corporate performance in Korea and China. Further, the study supported Karungani and Ochiri (2015) who documented that policy and regulatory framework have significant effect on performance of corporations. The findings mirrored Prasana and Shrinivas (2014) who documented positive significant effect of regulation on performance of small and medium enterprises in India. Muthoni et al., (2018) documented positive and significant association between regulations and performance of listed companies in Kenya. Moreover, the study concurred with Shirsavar and Masumeh (2016) who found significant effect of electronic tax administration in export performance in Iran. The findings were in agreement with game theory and then need for stakeholders in importation of durable goods from Brazil to cooperate so as to optimize the odds of achieving competitive advantage.

5.3.2 Infrastructure Effectiveness and Competitive Advantage

The second objective of the study sought to establish the effect of infrastructure on competitive advantage of Kenyan importers of durable goods from Brazil. The study found positive and significant effect of infrastructure on competitive advantage of Kenyan importers of durable goods from Brazil. The findings were in agreement with Fiorini et al., (2018) who documented that transport infrastructure in Ethiopia enhanced competitiveness of goods through transport cost reduction. Zhang (2017) documented that dominant infrastructure impacted positively on productivity of firms in China. Further, Sandra (2013) reported significant effect of infrastructure investment on firm performance. In addition, the

findings agreed with Sukati et al., (2012) who found positive effect of supply chain integration on firm competitiveness. The study concurred with resources-based view since availability of reliable infrastructure would aid in distribution of goods and services and aid in achievement of corporate objectives.

5.3.3 Shipment Effectiveness and Competitive Advantage

The third objective of the study examined the effect of shipment on competitive advantage of Kenyan importers of durable goods from Brazil. Study findings indicated positive and significant effect of shipment on competitive advantage of Kenyan importers of durable goods from Brazil. The findings supported Musau et al., (2017) who found significant effect of transport management practices on organization performance. Further, the study confirmed Natash et al., (2017) who reported positive effect of logistics management on organization performance in Macedonia. The findings were in support of Timna (2017) who found positive significant effect of logistics and transportation of new KCC. The findings concurred with game theory and supported the need for cooperation among different stakeholders who are involved in logistics process of goods from Brazil to port of destination. The findings support game theory and adoption of participatory approach by different stakeholders so as to enhance competitive advantage by importers of durable goods from Brazil.

5.3.4 Timeliness Effectiveness and Competitive Advantage

The fourth objective of the study evaluated the effect of timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. The study found positive significant effect of timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. The findings are in support of Maulana et al., (2018) who documented significant effect of supply chain management practices on competitive advantage of sugar factory. Further, the study supported Kamel and Murad (2014) who found positive effect of supply responsiveness on competitive advantage of manufacturing companies in Malaysia. Moreover, the study supported Wanjiku and Mwangangi (2017) who documented significant positive effect of logistics management on performance of FMCG.

5.4 Conclusion

The first objective of the study examined the effect of customs on competitive advantage of Kenyan importers of durable consumer goods from Brazil. Study findings indicated that there was positive and significant effect of customs on competitive advantage of Kenyan importers of durable consumer goods from Brazil. It can be concluded that there is a clear custom framework, reliable communication, adoption of information communication technology and clear taxation policies. These aspects have impacted imported products prices, pursuance of cost reduction strategies, and reduction of importation cost and enhanced response to innovations.

The second objective of the study examined the effect of infrastructure on competitive advantage of Kenyan importers of durable consumer goods from Brazil. Study findings indicates that there was positive significant effect of infrastructure on competitive advantage. It can be concluded that there is available infrastructure, to support inbound and outbound logistics. Available infrastructure has created strategic capital for importers. The available infrastructure accommodates demand planning and forecasting amongst importers.

The third objective examined the effect of shipment on competitive advantage of Kenyan importers of durable consumer goods from Brazil. Study findings indicates that there is a significant positive effect on competitive advantage. It can be concluded that current shipment has improved distribution of Brazilian durable consumer goods, there is clear shipment plan to address delays and systematic procedures for shipment fleet.

The fourth objectives examined the effect of timeliness on competitive advantage of Kenyan importers of durable consumer goods from Brazil. The study indicates that there is a positive significant effect on competitive advantage of Kenyan importers of durable consumer goods from Brazil. It can be concluded that importers had accurate information during shipment. During shipment process importers were accorded accurate information and conflicts were amicably addressed.

5.5 Recommendations

To ensure that products imported from Brazil are competitive on price points in the market where there is stiff competition, the management needs to ensure they follow the customs procedures and look into areas of cost cutting to ensure their products have good prices.

From the study findings we see that infrastructure plays a crucial role in attaining competitive advantage of importers of durable consumer goods from Brazil. Management should continuously explore strategic options that ensure they attain value for money in investments to reduce the costs associated with infrastructure adoption and consequently be more competitive in terms of final price.

The management should continuously adopt shipment options that enable them to have their goods within a reasonable time frame to attend to their demand levels and customer needs as and when needed. This will ensure that they gain an edge of their competitors as a result of attaining efficiency in delivery.

Timeliness, according to the study findings also show a positive and significant effect on the competitive advantage of the importers of durable goods from Brazil. Management should therefore ensure that they are up to date with shipment of goods and address any issues that may lead to delays at the time of shipping to be more competitive.

Since logistics effectiveness have effect on the competitive advantage of a firm. In that light then, management of the importers of durable consumer goods from Brazil should ensure that they achieve excellence in all the 4 areas in order to have their products be competitive price wise by aiming at cost reduction areas associated with customs procedures and choice of infrastructure.

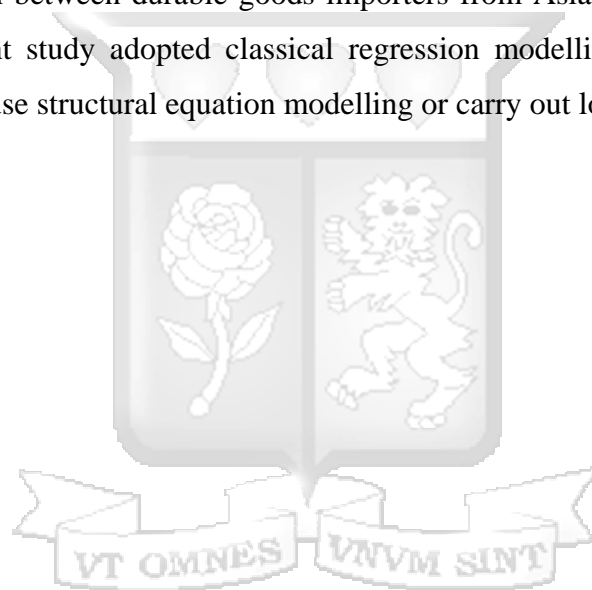
5.6 Limitations of the Study

The study was limited on the choice of the target population. This was managed through seeking of importers of goods from Brazil embassy and a list of 205 firms was compiled. Importers of durable goods are located in different parts, to locate them snowball approach

was adopted. The study relied on multiple regression model to examine the effect of logistics effectiveness on competitive advantage. There is need for adoption of exploratory factor analysis and structural equation modelling. Further, the study relied on quantitative data, there is need for incorporation of qualitative data to complete quantitative information gathered.

5.7 Suggestion for Further Studies

Future empirical scholars should examine the effect of logistic effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Asian countries. Moreover, comparative examination between durable goods importers from Asia and Brazil should be carried out. The current study adopted classical regression modelling and primary data, subsequent studies may use structural equation modelling or carry out longitudinal studies.



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APPENDICES

Appendix I Letter of Introduction

Dear Sir/ Madam,

RE: REQUEST FOR RESEARCH DATA

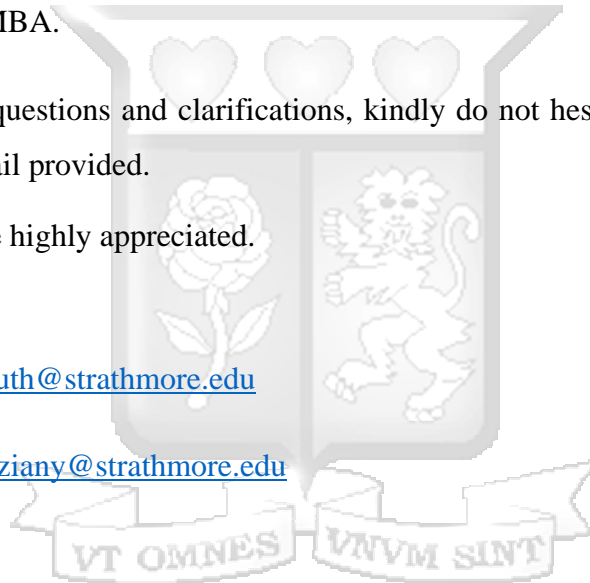
I humbly request for your assistance in data collection in your organization. I am an MBA student at Strathmore University Business School currently undertaking my research project entitled “Effect of logistics Effectiveness on competitive advantage of Kenyan importers of durable consumer goods from Brazil”. My study finding are conducted as part of the requirement to fulfil an MBA.

If you have any further questions and clarifications, kindly do not hesitate to contact me or my Supervisor in the email provided.

Your assistance would be highly appreciated.

Ruth Mutuku – mutuku.ruth@strathmore.edu

Dr. Vitalis Ozianyi – VOziany@strathmore.edu



Appendix II Questionnaire

SECTION 1: Demographic Characteristics

- 1. Gender: Male Female
- 2. Age in years
 21-30 31-40 41-50 51-60
- 3. Highest education level attained
 Primary Secondary College Undergraduate Post graduate
- 4. Marital status
 Single Married Separated Widow/(er)
- 5. For how long have you been in business?
 Below 5 years Between 5 to 10 years
 Above 10 years

Section B: Logistics Effectiveness

On a five point Likert scale kindly rate the following attributes on the effect of customs on competitive advantage of importers of durable goods from Brazil. The scale ranges from 1- Strongly disagree 2- Disagree 3- Neutral 4- Agree 5- Strongly agree.

	1	2	3	4	5
Inspection criterion is clarified during shipment of goods					
There is a clear policy framework to be followed during shipment inspection, which is known to us.					
There is timely communication of tax policies changes					
Use of information technology in customs process has enhanced its efficiency					
There is a clear guideline on how tax policies are implemented					
Customs clearance procedures has enhanced capacity for us to compete effectively					

On a five-point Likert scale kindly rate the following attributes on the effect of infrastructure on competitive advantage of importers of durable goods from Brazil. The scale ranges from 1- Strongly disagree 2- Disagree 3- Neutral 4-Agree 5- Strongly agree.

	1	2	3	4	5
Available infrastructure for our goods is flexible					
Our infrastructure is transparent to all stakeholders					
Our infrastructure has capacity to create strategic assets					
Our infrastructure accommodates demand plan and forecasting					
Our infrastructure meets customer needs and satisfaction					
Our infrastructure minimizes logistics handling and operational costs					

On a five-point Likert scale kindly rate the following attributes on the effect of shipment on competitive advantage of importers of durable goods from Brazil. The scale ranges from 1- Strongly disagree 2- Disagree 3- Neutral 4-Agree 5- Strongly agree.

	1	2	3	4	5
There is sufficient space for shipment of goods					
Current ship scheduling has improved distribution of durable goods					
Kenyan Importers conduct intensive route planning					
We have put in place proper shipment plan to deal with random delays					
We have a system in place for management of shipment fleet					
We can manage to track our shipment while on transit					

On a five point Likert scale kindly rate the following attributes on the effect of timeliness on competitive advantage of importers of durable goods from Brazil. The scale ranges from 1- Strongly disagree 2- Disagree 3- Neutral 4-Agree 5- Strongly agree.

	1	2	3	4	5
We receive accurate information during shipment of goods					
We are accorded helpful information during shipment of goods					
During shipment we get successful feedback on conflicts management					
Shipment of goods is reliable					
There are limited cases of pilferage of goods while on transit					
Professional approach is complied with during shipment of goods					

Section C: Competitive Advantage

On a five point Likert scale kindly rate the following attributes of competitive advantage among importers of durable goods from Brazil. The scale ranges from 1- Strongly disagree 2- Disagree 3- Neutral 4-Agree 5- Strongly agree.

	1	2	3	4	5
Our prices are low compared to competitors					
We continuously pursue cost reduction strategies					
We strive to reduce cost in importation process					
We serve specific market segments					
We customize our imports in line with customers demand					
We quickly respond to customers demand changes					
We have a broad selection for our customers					
We respond to product innovation faster than our competitors					
We introduce goods fast as compared to our competitors					

.....End of Questionnaire.... Thank you.....

Appendix III List of Kenyan Importers from Brazil

	Importers Name
1	Unighir Limited
2	Uniglobe Lets Go Travel Limited
3	Unilever Kenya Limited
4	Unitech Industrial Agencies Limited
5	Victoria Courts Limited
6	Virtual Works East Africa Limited
7	Walibhai Karim & Co. Limited
8	Wanji's Food Industries Limited
9	Wise Consult Africa Limited
10	World Brands (K) Ltd
11	Xxl Beauty Shop
12	Timsales Limited
13	Tiriki Electronics Limited
14	Total Kenya
15	Toyota Tsusho East Africa Ltd
16	Tradematix Limited
17	Transchem Pharmaceuticals Limited
18	Transwide Pharmaceuticals Limited
19	Tri-Clover Industries Limited
20	Tripac Limited
21	Virtual Works East Africa Limited
22	Tropikal Brands (Afrika) Limited
23	Turea Limited
24	Sai Office Supplies
25	Sunesis Consulting Limited
26	Surgilinks Limited
27	Surgipharm Limited
28	Tata Africa Holdings
29	Tabaki Freight Services International Limited
30	Tetrapak Limited

31	The Kikoy Company Limited
32	The Mater Hospital
33	The Nairobi Hospital
34	Thika Cloth Mills Limited
35	Tile & Carpet Centre
36	Tusker Mattresses Limited
37	Sametract - Cassini & Tonolo Limited
38	Searock Limited Tours And Travel
39	Shumuk Investment Limited
40	Simlaw Seeds Company Limited
41	Skyton Distributors
42	Sparkling Beverages Limited
43	Specialised Power Systems Limited
44	Spinknit Limited
45	Spinners And Spinners Limited
46	Springbox Kenya Limited
47	Statpack Industries Limited
48	Supercommodity Limited
49	Premier Textile Industries Limited
50	Procter & Gamble East Africa Limited
51	Pz Cussons East Africa Limited
52	R.M Patel & Partners Limited
53	Randon Trailers (East Affrica) Limited
54	Real Beverages (Epz) Limited
55	Rhino Agrimac
56	Rivatex East Africa Limited
57	Rochman Group
58	Roshni Distributors Limited
59	Saj Ceramics Limited
60	Pampa Grill Churrascaria Kenya
61	Panafrican Business Enterprises Ltd
62	Paperbags Limited

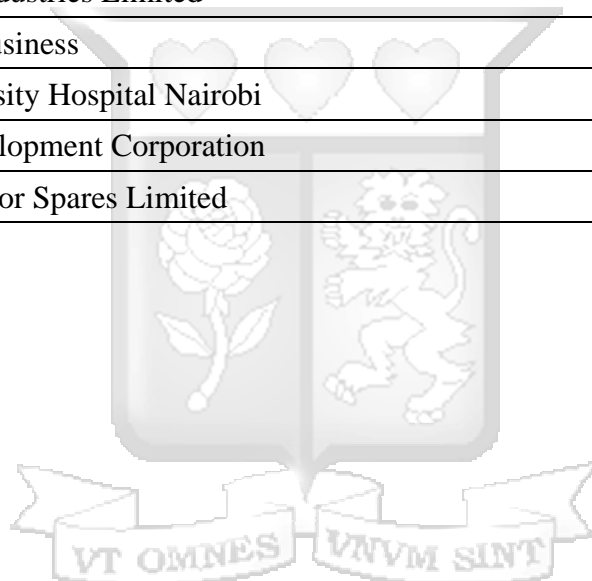
63	Pewin Group Limited
64	Pharm Access Africa Limited
65	Pharmaceutical Manufacturing Co. (K) Limited
66	Plysales (K) Limited
67	Power Controls Limited
68	Power Technics Limited
69	Premier Foods Industries Limited
70	Nemchand Anand Company Limited
71	Netcentric Innovations Limited
72	New World Stainless Steel Limited
73	Nexpower Limited
74	Nightrose Cosmetics (1972) Limited
75	Novelty Manufacturing Limited
76	Octopus Ict Solutions Limited
77	Omaera Pharmaceuticals Limited
78	Oriflame East Africa Limited
79	Osho Chemicals Industries
80	Oshwal Wholesalers (K) Limited
81	Premium Tools And Equipment Ltd
82	Pacico Ea Limited
83	Laboratory And Allied Limited
84	Laborex Kenya Eurapharma Limited
85	Langata Hospital
86	Linkage Africa
87	Machines For Africa Limited
88	Magnum International Limited
89	Meridian Equator Hospital
90	Multitrade Industrial Suppliers Limited
91	Muthaiga Travel Limited
92	Nabico Enterprises Limited
93	Nestle Equitorial African Region Limited
94	Kenya Highland Seed Co. Ltd

95	Kenya Information Communication And Technology Authority
96	Kenya Medical Supplies Agency
97	Kenya Suit Case Manufacturers Limited
98	Kenya Tourism Board
99	Kipflo Tours And Travel Company Limited
100	Kirinyaga Construction (K) Limited
101	Kitchen Professionals Limited
102	Kobo Safaris Limited
103	Kulal International Limited
104	Interconsumer Products Limited
105	Interior Evolution (K) Limited
106	Intex Construction (K) Limited
107	Kachra Jirvaj (K) Limited
108	Ken-Knit (Kenya) Limited
109	Kentrac Ltd
110	Kenwest Cables Limited
111	Kenya Airways Limited
112	Kenya Association Of Travel Agents
113	Kenya Builders And Concrete Limited
114	H Young & Co (Ea) Limited
115	Haco Tiger Brands (Ea) Limited
116	Hardi Kenya Limited
117	Hayer Bishan Singh & Sons Limited
118	Healthy U
119	High Chem Pharmaceuticals Limited
120	Highlands Mineral Water & Co. Limited
121	Honda Motorcycle Kenya Limited
122	Hot Point Appliances Limited
123	Ict Associated Centre Limited
124	Insta Products Ltd
125	Isuzu East Africa Limited
126	Fast Choice Limited

127	Flame Tree Africa Limited
128	Fmd East Africa Limited
129	Fogo Gaucho Churrascaria Kenya
130	Four Seasons Agri-Auto Limited
131	Freshco Seeds Kenya
132	G. North & Son
133	Ganatra Plant And Equipment Limited
134	Gertrude's Children's Hospital
135	Glacier Products Limited
136	East African Cables Limited
137	Electric International Limited
138	Electrical And General Appliances Limited
139	Elite Tools Limited
140	Engineering And Hydraulics East Africa Limited
141	Eureka Technical Services Limited
142	Excelsior Firm
143	Factory Automation Systems Limited
144	Farmers Choice Limited
145	Davis And Shirtliff Limited
146	Dawa Limited
147	Deacons Kenya Limited
148	Debonair Travel Limited
149	Delvis Exclusive
150	Dodhia Packaging Limited
151	Doshi & Co (Hardware) Limited
152	Dune Packaging Limited
153	East African Packaging Industries Limited
154	Car & General (K) Limited
155	Charleston Travel Limited
156	Chartem Limited
157	Choda Fabricators Limited
158	Cmc Motors Group Limited

159	Coast Anglomeats Limited
160	Comity Travel Limited
161	Convex Commercial Logistics Limited
162	Cooper K-Brands Limited
163	Cooper Motor Corp (K) Limited
164	Cosmos Limited
165	Dapco Pharmaceuticals Limited
166	Bestly Cosmetics Shop Limited
167	Beta Health Care International Limited
168	Biodeal Laboratories Limited
169	Bloom Consultancy Limited
170	Bogani Industries Limited
171	Brazafic Enterprises Ltd
172	Budget Shoes Limited
173	C&P Shoe Industries Limited
174	Carlson Wagonlit Travels Limited
175	Chandaria Industries Limited
176	Atlas Copco Eastern Africa Limited
177	Automatic Controls Limited
178	Avenue Group Of Healthcare Providers
179	Bags & Bailers Manufacturers (K) Limited
180	Banbros East Africa
181	Bata Shoe Company (K) Limited
182	Bcd Travel Limited
183	Bedi Investments Limited
184	Beiersdorf East Africa Limited
185	Agro Chemical And Food Products
186	Agro Irrigation & Pump Services Limited
187	Alibhai Shariff & Sons Limited
188	Alpha Knits Limited
189	Alpha Medical Manufacturers Limited
190	Amiran Kenya Limited

191	Autoexpress Limited
192	Aquva Agencies Limited
193	Asl Limited
194	Associated Construction Co. (K) Limited
195	Athi River Mining Limited
196	Association Of Kenya Suppliers
197	360 Microsystems Limited
198	Africa Export Services
199	Africa Practice East Africa Limited
200	African Boot Company Limited
201	African Cotton Industries Limited
202	African Health Business
203	Aga Khan University Hospital Nairobi
204	Agricultural Development Corporation
205	Agricultural Tractor Spares Limited



Appendix IV Ethical Clearance



22nd September 2020

Ms Mutuku, Ruth
mutuku.ruth@strathmore.edu

Dear Ms Mutuku,

RE: Effects of Logistics Effectiveness on Competitive Advantage of Kenyan Importers of Durable Consumer Goods from Brazil


This is to inform you that SU-IERC has reviewed and **approved** your above research proposal. Your application approval number is **SU-IERC0840/20**. The approval period is **22nd September 2020 to 21st September 2021**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-IERC.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-IERC within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-IERC within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-IERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://oris.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,


Dr Virginia Gichuru,
Secretary; SU-IERC

Cc: Prof Fred Were,
Chairperson; SU-IERC



Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email info@strathmore.edu www.strathmore.edu

Appendix V NACOSTI Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
RefNo: 378633	Date of Issue: 30/July/2020
RESEARCH LICENSE	
	
This is to Certify that Miss.. RUTH Nzilani MUTUKU of Strathmore University, has been licensed to conduct research in Nairobi on the topic: EFFECTS OF LOGISTICS EFFECTIVENESS ON COMPETITIVE ADVANTAGE OF KENYAN IMPORTERS OF DURABLE CONSUMER GOODS FROM BRAZIL for the period ending : 30/July/2021.	
License No: NACOSTI/P/20/6031	
378633 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	