THE IMPACT OF REVERSE LOGISTICS ON SUSTAINABILITY IN SUPPLY CHAIN MANAGEMENT: A CASE STUDY ON JUMIA UGANDA

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J22B12 / 118

A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF PROCUREMENT AND LOGISTICS MANAGEMENT OF UGANDA CHRISTIAN UNIVERSITY

September, 2024

UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

I **Namulondo Britah** declare that this research report is my own with my initiative and it has never been submitted to my university for any academic award of any kind

Signature ..... Date .....15th/09/2024.....

NAMULONDO BRITAH MUKOBI

APPROVAL

I certify that this research is submitted with my approval as the research supervisor and is worth the award of a bachelor's degree in Procurement and Logistics Management.

Signature ..... Date 18/09/2024

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Academic Supervisor

Madam Mackline Kabugho

DEDICATION

I dedicate this research to my beloved family and all the employees who contributed their time, efforts, and insight to the organization of this report. Your commitment and resilience inspired me in the pursuit of knowledge.

ACKNOWLEDGEMENT

In my quest to undertake this study and produce the findings within the context of my research, several people have been of indispensable assistance, cooperation, and encouragement. I thought it to be of great importance that I express my gratitude for their help rendered to me throughout the research period.

To begin, my sincere appreciation goes out to my supervisor Madam Mackline Kabugho for her guidance through the research process. Her skillful guidance, constructive criticism, patience and suggestions, and high commitment support her successful completion of this research paper.

The employees of Jumia who took time out of their busy schedules to attend to my questionnaires are highly appreciated.

Last but not least, my greatest appreciation goes to the Almighty God for giving me the strength, health, a soul mind, and all that He provided during this period,

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ABSTRACT

As an online shopper, I've seen how e-commerce in Uganda has grown a lot, thanks to companies like Jumia. Jumia, based in Lagos, Nigeria, is now very popular and offers many products to Ugandan customers. But this fast growth in online shopping has also changed how things are moved and delivered in the country. One significant shift is the growing importance of reverse logistics, which involves managing returns and other backward movements within the supply chain.

Reverse logistics, which involves managing the return of products from customers to the seller or manufacturer, can greatly affect the sustainability of e-commerce supply chains. This process decides how products, materials, and resources are dealt with when they reach the end of their useful life, impacting the environmental, economic, and social aspects of these operations. As a student of procurement and logistics sat Uganda Christian university am eager to explore the impact of Jumia's reverse logistics practice on the sustainability of there supply chain management in Uganda .This research proposal aims to investigate how jumia,s reverse logistics process contributes to the company's overall sustainability performance. To accomplish this ,i will use a case study design ,with a focus on Jumia Uganda a unit of analysis .

I plan to collect data through a combination of questionnaires, interviews, and document analysis. Questionnaires will be distributed to Jumia employees across various departments, including logistics, procurement, and sustainability, to gather insights on the company's reverse logistics practices and their impact on sustainability. In-depth interviews will be conducted with key decision-makers and managers to gain a deeper understanding of the strategic and operational aspects of reverse logistics within Jumia's I think the results of this study will give us important information about how reverse logistics can help make e-commerce supply chains in Uganda more sustainable. This research will add to what we already know about managing supply chains in a way that helps the environment. It will also give useful suggestions for Jumia and other e-commerce businesses in Uganda to make their reverse logistics better and their overall operations more sustainable. As a future logistics expert, I am excited about finding new ways to make the industry more sustainable. I believe this research plan will help me learn more and offer useful ideas that can help Jumia and the online shopping world in Uganda.

CHAPTER ONE

1.0 Introduction.

The influence of reverse logistics on sustainability in Supply Chain Management with a case at Jumia is the subject to be explored in this research. This chapter introduces the research by giving an overview of the background of the study, the problem statement, objectives of the study, research questions, research hypotheses, significance, scope of the study, conceptual framework, Justification and operational definitions of terms and concepts used.

1.1 Background of the study.

In the field of Reverse logistics, the integration of reverse logistics and sustainability has grown to be one of the hotly watched areas because it may have a potential effect on operational efficiency and cost reduction as well as on the care for the environment. Reverse logistics encompasses all activities that concern product returns, material recycling, and product end-of life management with the aim of recovering value and/or disposing responsibly (Rogers & Tibben-Lembke, 1999).

On the other hand, sustainability integrates environmental and social concerns with economic issues which ensure that business operations can survive in the long run but at minimal harm to stakeholders and the environment as well. Therefore, reverse logistics and sustainability are very significant factors within an organization since it is now a growing trend globally to engage in corporate social responsibility and take care of the environment as well. (Walker ,Di Sisto)

1.2 Theoretical Framework

The theoretical framework guiding research in this area often borrows from the Resource-Based View theory, or RBV. In RBV, the potential of a firm to realize a sustained competitive advantage rests with unique resources and capabilities, to include reverse logistics management and the integration of sustainability into operations. This theory emphasizes that the strategic resources will be critical to enhance performance at an operational level to achieve marketplace competitive advantage. (Barney, 1991)

Contextual Framework

Pragmatically, organizations like Jumia, one of the biggest e-commerce firms in Africa, highlight unique challenges and opportunities with regard to reverse logistics and sustainability. From the perspective of a company like Jumia, reverse logistics regarding

returning merchandise, reutilizing or recycling packaging, and using other techniques and initiatives toward the minimalization of waste and harm to the environment are pursued. Understanding the contextual subtlety of how Jumia integrates reverse logistics and sustainability practices advances insight into its operational strategies and competitive positioning within the ecommerce industry.(Nwabueze and Osiagor,2019)

Historical study.

The development of reverse logistics and sustainability in the context of supply chain management has been driven throughout history by increasing consumer awareness, regulatory pressures, and technological advances. Organizations have gradually accepted sustainability as a method that improves brand reputation, reduces costs, and simplifies compliance with environmental regulations (Srivastava, 2007). For Jumia, as a relatively young company established in 2012, historical insights into its approach to reverse logistics and sustainability reflect its adaptation to evolving market dynamics and organizational growth in the African ecommerce landscape.(Adebambo 2007)

This detailed information provides a comprehensive overview of the background, theoretical underpinnings, contextual implications, and historical evolution of reverse logistics and sustainability within the framework of supply chain management Srivastava,2007) Understanding these dimensions is critical for conducting meaningful research and addressing pertinent challenge and opportunities in contemporary organizational practices.(Srivastava,2007)

1.2 Statement of the Problem.

Existence of Reverse Logistics: The primary question addressed is whether reverse logistics practices are effectively implemented within Jumia's organizational framework. This involves examining how Jumia manages product returns, recycling initiatives, and end-of-life product disposal.(Dekker et al 2013)

Existing literature discusses the interplay between sustainability and reverse logistics, emphasizing their synergistic potential in enhancing environmental responsibility and operational efficiency (Dekker et al., 2013;).

The study investigates whether Jumia integrates sustainability principles into its reverse logistics processes. This includes analyzing company reports and case studies to assess the extent of their alignment with sustainable practices.(Srivasta,2007)

Despite the recognized benefits, organizations often face challenges in effectively integrating reverse logistics and sustainability. Potential issues include logistical complexities, inadequate infrastructure, regulatory compliance, and stakeholder alignment (Guide et al., 2010).

The gaps identified in Jumia's implementation of reverse logistics and sustainability practices may stem from a lack of strategic alignment, insufficient technological investments, unclear policies, or limited stakeholder engagement (Guide et al 2010).

1.3 Main objectives.

To assess the impact of reverse logistics on sustainability in supply chain management

1.4 Research Objectives.

To assess the relationship between Resource allocation and environmental sustainability in jumia.

To investigate the impact of consumer behavior in improving economic sustainability in jumia.

To determine the relationship between regulatory compliance and social sustainability.

1.5 Research question.

1. What's the relationship between resources allocation and environmental sustainability?

2. How does consumer behavior impact economic sustainability?

3.What is the relationship between regulatory compliance and social sustainability?

1.6 SCOPE OF THE STUDY.

1.6.1 Geographical Scope.

The research will be conducted at Jumia located at 5th street, industrial Area, Kampala, Uganda.

1.6.2 Time scope.

The study will be conducted in a period of four months (March-August) so as to give the researchers ample time to collect data and report findings. This duration will vary based on the present availability of data and the need for historical context.

1.6.3 Subject scope.

The research will concentrate on examining the impact of Reverse logistics on Sustainability in supply Chain Management with a case at Jumia.

1.7 SIGNIFICANCE OF THE STUDY.

It's hoped that the findings of the study may provide a basis, practical insight upon which the management of Jumia limited will enhance its sustainability performance and supply chain management(Lambert and Cooper,2001). This would lead to cost saving, process optimization policy implications and improved performance, hence addressing the challenges encountered at the organization.(Carter &Easton,2011)

It is anticipated that the findings of this study will be of great value to employees at the organization, and suppliers at Jumia Limited on improving their operations and making strategic decision making within the company(Rogers and Tibben-Lembke,1999). Helping them to align their logistics strategies within organizational goals and market demands hence a competitive advantage.(Lambert and cooper ,2000)

It's hoped that the findings of this study may be of great help to academicians who may be motivated to pursue take further inquiry or careers in this field and engage in outreach activities that rise awareness and providing empirical evidence on Reverse logistics on sustainability in supply chain Management thus enriching the theoretical understanding of this area with in the field of Business management and logistics.(Rogers and Tibben-Lembke,1999)

1.8 LIMITATIONS AND DELIMITATIONS OF THE STUDY,

It is anticipated that the study may be constrained by time limitations, affecting the in depth of data collection and analysis .

Researchers also anticipate Limited access to certain resources, such as financial data or proprietary information, may restrict the comprehensiveness of the research at Jumia .

1.8 CONCEPTUAL FRAMEWORK.

The conceptual framework is an analytical tool with several variations and contexts to organize linkages, between the independent and dependent variables.

Reverse logistics (IV) Sustainability in supply chain Management (DV)

Supply chain management (DV)

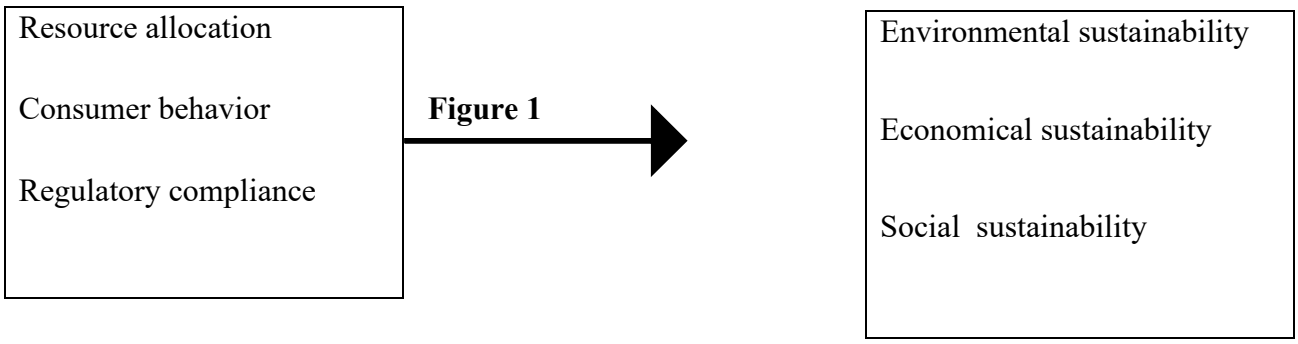


Figure 1 above emphasizes the integration of reverse logistics and sustainability in supply chain management. Reverse logistics considers organizational factors, regulatory compliance, consumer behavior, and cost management, highlighting the importance of efficient returns and recycling processes. This is directly linked to the broader goals of sustainability in supply chain management, which include environmental sustainability (focusing on reducing carbon emissions, improving resource use efficiency, and minimizing waste), social sustainability

(ensuring ethical labor practices, community engagement, and responsible sourcing), and economic sustainability (balancing profitability with sustainable practices).

Key terms

1.Reverse logistics

Reverse logistics refers to the process of moving good from their final destination back to the manufacturer or distributor for the purpose of capturing value or proper disposal .This can include returns, recycling ,refurbishment ,and disposal of products and materials .It is the opposite of traditional logistics ,which involves the flow of goods from the manufacturer to the consumer.

2. Sustainability:

Sustainability in the context of supply chain management involves the development and implementation of processes that meet present needs without compromising the ability of future generations to meet their own needs. It encompasses three main dimensions: environmental, economic, and social sustainability. Environmental sustainability focuses on reducing the negative impact on the natural environment, economic sustainability aims at maintaining profitable operations, and social sustainability seeks to enhance social well-being (Elkington, 1997).

3. Supply Chain Management (SCM):

Supply Chain Management refers to the management of the flow of goods and services, including all processes that transform raw materials into final products. It involves the active streamlining of a business's supply-side activities to maximize customer value and gain a competitive advantage in the marketplace. SCM encompasses the planning and management of all activities involved in sourcing, procurement, conversion, and logistics management (Mentzer et al., 2001).

4 Corporate social responsibility (CSR) is a business approach in which firms incorporate various social and environmental concerns into their operations and in interactions with stakeholders in such a way that the companies will be able to make a positive contribution to society, coupled with business success.

5 Consumer awareness refers to the extent of the information possessed by consumers and the understanding derived thereof concerning the ethical, social, and environmental effects of various products and services purchased by them. Collectively, CSR and consumer awareness compel companies toward more responsible and sustainable behavior since well-informed consumers show growing preference to support businesses demonstrating a commitment to ethical and environmental stewardship..

CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction.

This chapter presents reviews of the related literature on opinions of various scholars on the subject of the impact of reverse logistics on sustainability in supply chain structured according to the specific objectives of the study

2.1 Empirical review of the main objectives

2.1.1 Relationship Between Resource Allocation and Environmental Sustainability in Jumia

2.1.1.1 Positive Impacts:

At Jumia, how well resources are used is very important for making its operations more environmentally friendly. Good resource allocation helps Jumia use its resources in the best way possible, which reduces waste and lowers the environmental impact of its activities (Rogers & Tibben-Lembke, 1999). For instance, by using resources for energy-saving technologies and sustainable materials, Jumia can use fewer non-renewable resources and reduce its carbon footprint (Guide & Van Wassenhove, 2009). This helps not only to save valuable natural resources but also meets the global trends for sustainability through responsible consumption and production. Moreover, efficient resource allocation by Jumia will optimize the supply chain processes and decrease energy and raw material usage to produce, transport, and store merchandise. For instance, through investing in energy-efficient logistic systems and environmentally friendly packaging, Jumia will be able to reduce its carbon footprint by a large margin while simultaneously reducing the cost of operation concerning packaging and distribution of goods to customers. This business strategy will enhance the sustainability initiatives and overall competitiveness of the company in the marketplace, since more consumers would have a preference for companies showing concern for the environment. Moreover, Jumia pays close attention to resource optimization, which is, on one hand, reducing the environmental footprint of the company's activities by lessened volumes of waste generated along the value chain. This is very important in industries like e-commerce, whose rates of generation of such wastes can be high, given the volatility of both products moved and packaging materials used. It is by prioritizing efficient resource use that Jumia contributes to environmental sustainability, hence positioning itself in the race to reclaim leadership in sustainability in business and enhancing its brand reputation and customer loyalty in the process. This would likely give them financial returns in the long term because, in all cases,

waste reduction and resource efficiency generally yield cost savings. The efficient use of resources is, therefore, an important part of Jumia's sustainability strategy since through this path, it would be able to reduce its impact on the environment to a minimum while attaining operational and financial efficiencies.

Jumia's strategic investment in sustainable technologies plays an important role in boosting environmental considerations of sustainability. To this end, investment in the development of technologies that reduce energy use, limit waste, and promote the efficiency of resources helps to reduce environmental footprint while promoting global sustainability. Therefore, investments have been made in the uptake of energy-efficient logistics means that include electric delivery trucks and routing software, which could help cut carbon emissions that come from transportation of products by as high as 90 per cent. This way, Jumia manages to cut its carbon footprint but also positions itself in the transition to a low-carbon economy. Jumia went further in reducing environmental degradation by investing in environmentally friendly packaging solutions that reduced the use of plastics and other non-biodegradable materials. However, such investments in sustainable technologies are increasingly crucial as the trend unfolds toward a more environmentally conscious consumer base with an imperative for sustainable products and services. In this respect, Jumia meets the expectations of its consumers and at the same time gains a competitive advantage in the marketplace, since sustainability has become an important point of differentiation. This could, in effect, have long-term benefits to Jumia through improving brand reputation and securing customers for longer hence lowering operations costs as suggested by Stock et al. 2006.

Conclusion In essence, with this ideal strategic resource allocation into sustainable technologies it is easy for Jumia to meet its goals on environmental sustainability while gaining a competitive advantage to ensure long-term success as seen in Blumberg 1999. Jumia’s strategic allocation of resources towards sustainable technologies plays a significant role in advancing its environmental sustainability goals. By investing in technologies that reduce energy consumption, minimize waste, and enhance resource efficiency, Jumia is able to decrease

Jumia’s investment in developing sustainable products is a crucial component of its environmental strategy .By allocating resources towards the research and creation of eco

friendly product ,Jumia addresses the growing consumer demand for sustainable options while also reducing its environmental footprints (Rogers &Tibben-Lembke ,1999).For insistence ,the company has committed to producing items for recycled materials ,which not only conserves new resources but also closes the loop in its supply chain (Guide&Van Wassenhove,2009). Additionally Jumia focuses on designing products that are durable and easy to recycle ,further minimizing their environmental impact (Thierry et al,1995).This commitment to sustainability is particularly relevant as consumers become more environmentally conscious and seek products that align with their values(Blumberg,1999).By offering a range of eco -friendly products ,jumia attracts and retains customers who prioritize environmental responsibility ,enhancing its brand appeal and competitiveness(Mollenkopf et al,2007

This complete focus on sustainability helps Jumia reach its environmental targets and prepares the company to follow future rules about product sustainability (Guide et al., 2006).In conclusion, Jumia's strategic allocation of resources towards the development of sustainable products is a key component of its environmental sustainability strategy, enabling the company to reduce its environmental impact

2.1.1.2 Negative Impacts:

Although focusing resources on environmental sustainability at Jumia offers many advantages, it also presents considerable difficulties, especially due to the high initial expenses. Investing in sustainable technologies, renewable energy, and eco-friendly products demands a significant amount of money upfront, which can put a strain on the company's finances (Blumberg, 1999). For instance, installing solar panels on Jumia's distribution centers, while eventually lowering energy costs, involves a large initial investment for buying and setting up the equipment (Guide & Van Wassenhove, 2009). Likewise, switching to energy-efficient logistics systems and environmentally friendly packaging solutions requires substantial investment in new technologies and materials, which can be expensive (Rogers & Tibben-Lembke, 1999). The high starting costs can be especially difficult for businesses like Jumia that work in competitive and fast-moving markets, where having money available to spend is important for staying ahead (Mollenkopf et al., 2007). Also, making products that are good for the environment usually needs more costly materials and ways of making them, which makes the costs even higher for the company (Thierry et al., 1995). These money problems can get worse because the benefits from doing things that help the environment often take longer to show up, making it hard for companies to explain why they should spend money at first to people who care about making money quickly (Rogers et al., 2002Additionally, the significant expenses linked

to sustainability efforts might restrict Jumia's capacity to invest in other parts of its business, like marketing, research and development, and customer service. This could potentially slow down its overall growth and competitiveness (Guide et al., 2006

Another downside of focusing resources on environmental sustainability at Jumia is the possibility of operational issues. Effective implementation of sustainable practices frequently necessitates significant adjustments to existing systems, supply chains, and processes, which can lead to difficulties and inefficiencies throughout the transition (Rogers & Tibben-Lembke, 1999). Utilizing innovative technology, such as packaging that is environmentally friendly or logistics that use less energy, may require extensive staff retraining, which could disrupt regular work and reduce.

To make matters more challenging, integrating renewable energy sources like solar or wind power into Jumia's energy system may also require modifications to existing infrastructure or result in brief power outages (Guide & Van Wassenhove, 2009). In the fast-paced world of e-commerce, where efficient operations are essential to maintaining consumer satisfaction and outpacing rivals, these problems can be particularly challenging (Thierry et al., 1995).

There are opportunities and challenges associated with Jumia's commitment to concentrate on environmental sustainability. Positively, these efforts can have a lasting positive impact on the company by improving efficiency, strengthening the company's brand, and adhering to regulations (Rogers & Tibben-Lembke, 1999; Blumberg, 1999).Nevertheless, there are significant drawbacks to these initiatives as well, including expensive initial investments, potential operational disruptions, and the potential for charge. Jumia's long-term success depends on its commitment to integrating sustainability into its operations. Thorough preparation and a thorough approach to resource management are necessary for effectively managing both positive and negative effects. Sustainability initiatives must also align with the company's overarching business goals and stakeholder expectations (Rogers et al., 2002; Mollenkopf et al., 2007). Higher sales or higher pricing may not be able to immediately offset these higher costs, particularly in competitive marketplaces where consumers may not be able or ready to pay more for sustainable products (Thierry et al., 1995).

Furthermore, concentrating on sustainability may divert resources from other areas of the company, such as marketing, research, or luring in new clients, which could short-term hinder Jumia's expansion and financial success (Mollenkopf et al., 2007). These difficulties may

worsen if Jumia has to demonstrate consistent financial success to stakeholders and investors, as Jumia may struggle to strike a balance. its sustainability aims with the need to stay profitable (Guide et al., 2006).

In conclusion, Jumia's commitment to environmental preservation is commendable, but it may have an immediate impact on their financial results. In order to maintain stable finances and meet its long-term environmental goals, the corporation must handle this properly (Blumberg, 1999).

Investing in environmental projects at Jumia might meet opposition from different groups, which could slow down these efforts. These groups, like investors, workers, suppliers, and customers, might not all agree on how important and valuable sustainability is, causing disagreements and difficulties (Rogers & Tibben-Lembke, 1999). For instance, investors might focus more on quick profits than long-term environmental goals, making them resist plans that cost a lot upfront or lower profits (Blumberg, 1999).Likewise, workers might not like changes to how things are done, especially if it means more work, learning new skills, or changing their job duties (Guide & Van Wassenhove, 2009). Suppliers might also not like rules about being more eco-friendly, especially if it costs more, makes things more complicated, or changes how they work with others in the supply chain (Thierry et al., 1995). Also, customers might not want to use products or methods that are better for the environment, especially if they cost more, change the quality of the product, or make things less convenient (Rogers et al., 2002 spend money on new technology, methods, or materials to follow rules about carbon emissions, waste management, or product safety, which can raise costs and lower profits (Guide & Van Wassenhove, . Sustainable methods, like using less energy and making less waste, can cut costs and encourage new ideas, while also making customers more loyal and improving market position (Guide & Van Wassenhove, 2009; Thierry et al., 1995). But, these actions also have downsides, including high starting costs, possible disruptions, and the risk of being accused of greenwashing (Blumberg, 1999; Rogers & Tibben Lembke, 1999). Managing a complex supply chain and satisfying various stakeholders needs make achieving sustainability even harder (Guide & Van

Wassenhove, 2009; Thierry et al., 1995). Despite these difficulties, Jumia's dedication to including sustainability in its business operations is essential for its future success. To properly handle both positive and negative effects, strategic planning and a comprehensive approach to resource management are needed. This ensures that sustainability efforts match the company's overall objectives and stakeholder expectations (Rogers et al., 2002; Mollenkopf et al., 2007).

2.2 Impact of Consumer Behavior in Improving Economic Sustainability in Jumia

2.2.1 Positive Impacts

Growing Interest in Eco-Friendly Products: How people shop is very important for Jumia's long-term success, especially when it comes to buying sustainable products The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). Growing consumer concern over environmental issues has led to a shift in Jumia's product offerings and business practices (Schiffman & Kanuk, 2010). Jumia began stocking energy-efficient appliances and green packaging, for example, in response to consumer requests to lessen their environmental impact (Kotler & Keller, 2016). Jumia is able to accomplish its sustainability targets thanks to this shift in consumer preferences, which also presents new opportunities to draw in more environmentally conscious clients (Luchs et al., 2010). The increasing demand for eco-friendly products might increase revenue because many consumers are willing to pay more for goods that align with their values (Niinimäki & Hassi, 2011).In conclusion, Jumia has an excellent opportunity to enhance its financial stability and simultaneously take care of the environment due to the growing consumer demand for sustainable products (Schiffman & Kanuk, 2010).

Through sustainable methods that foster brand loyalty and distinguish Jumia in the market, consumer behavior contributes to the company's financial stability. When more customers pay attention to sustainability constructing the responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). Moreover, businesses that share these ideals can build more solid client connections (Kotler & Keller, 2016). Jumia's commitment to environmental preservation, demonstrated by the goods it offers and the way it conducts business, can enhance its reputation and help it stand out from other businesses. People who are concerned about the environment may find Jumia's efforts to offer environmentally friendly products and use greener delivery methods appealing. More devoted clients and increased revenue may result from this. Long-term success for Jumia depends on its ability to maintain strong client

loyalty, which can also provide a consistent stream of revenue and a competitive advantage. Furthermore, if clients observe work with suppliers who follow responsible sourcing practices, which helps reduce environmental impact and supports sustainable supply chains (Ellen MacArthur Foundation, 2013). To sum up, how customers act is very important for Jumia's growth and finding new ways to do business, helping the company stay strong financially by creating products and services that are good for the environment (Kotler & Keller, 2016).

How people shop has a big effect on making Jumia's business more sustainable. As more people want eco-friendly products and ways of doing things, Jumia changes what it offers to match what customers like, which makes people like the brand more and helps Jumia stand out in the market (Kotler & Keller, 2016). Also, when customers support ways of doing business that use things again and want to know more about where products come from, it helps Jumia use less money and resources (Geissdoerfer et al., 2017). The push for new ideas, driven by what customers want, opens up new chances for business and makes Jumia better than its competitors (Niinimäki & Hassi, 2011).

By using consumer behavior to improve its sustainability efforts, Jumia can ensure long-term economic stability while also taking care of environmental and social issues (Peattie & Crane, 2005. Ultimately, facilitating economic growth and upholding sustainable company practices need Jumia to align its business strategy with shifting consumer demands for sustainability (Schiffman & Kanuk, 2010).

2.2.2 Negative Impacts

Demands for more environmentally friendly and sustainable products from Jumia's customers may push up pricing. Jumia is under pressure to make investments in the creation and acquisition of goods that adhere to these standards as purchasers place a greater emphasis on sustainability (Kotler & Keller, 2016).Some greater costs might not always be covered by higher pricing or sales, particularly in competitive marketplaces where customers might not be ready to pay more for environmentally friendly goods (Geissdoerfer et al., 2017). A company's reputation and customer trust may be harmed by greenwashing, which happens when its sustainability promises are seen as false or overstated (Burbano & Delmas, 2011). Price-sensitive markets or consumers that do not place a high value on sustainable features may see a more marked manifestation of this price sensitivity (Geissdoerfer et al., 2017). Jumia may thus encounter resistance to its efforts to market more expensive sustainable items, which would cut sales volumes and decrease profitability (Kotler & Keller, 2016). Furthermore, it

might be difficult to maintain product quality while controlling costs when sustainability and affordability are balanced (Peattie & Crane, 2005). Customers' disapproval of price increases may also have the unintended consequence of casting doubt on business's sustainability commitment, as they may see premium pricing as a shady business tactic rather than a sincere attempt to promote environmental reasons.

(Niinimäki & (Niinimäki & Hassi, 2011). According to Schiffman and Kanuk (2010), Jumia's resources may be strained and its overall economic sustainability may be affected by the complexity and cost of maintaining transparent supplier chains. In conclusion, Jumia faces substantial expenses and hurdles as a result of consumer demand for supply chain transparency, which is a driving force for sustainability (Geissdoerfer et al., 2017).Customer behaviour may put Jumia under constant pressure to enhance its sustainability procedures, which could put a strain on resources and have an effect on the company's capacity to sustain itself economically.

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). Jumia's capacity to maintain its economic viability is greatly impacted by consumer behaviour, which offers both opportunities and problems. Demand from consumers for environmentally friendly goods and methods can spur innovation, strengthen brand loyalty, and create new business prospects (Kotler & Keller, 2016), but it also comes with increased prices, the possibility of greenwashing, and price sensitivity (Schiffman & Kanuk, 2010). The company faces more demands and expenses as a result of the requirement for openness and continual improvement (Geissdoerfer et al., 2017). Jumia must carefully manage its sustainability initiatives in order to balance the good and negative effects, while also keeping them in line with consumer expectations and preserving its financial viability (Peattie & Crane, 2005). To sum up, Jumia needs to successfully navigate the complexity of consumer behavior in order to meet its sustainability and financial objectives (Niinimäki & Hassi, 2011).

2.3 Relationship Between Regulatory Compliance and Social Sustainability in Jumia

2.3.1 Positive Impacts

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). By guaranteeing that Jumia complies with labour laws and workplace regulations, regulatory compliance plays a critical role in boosting social sustainability at the company, increasing working conditions and employee wellbeing (Smith & Crotty, 2008). Jumia guarantees that its workers are protected and supported by adhering to labour laws, which are essential to social responsibility. These laws cover things like fair salaries, working hours, and safety standards (Locke, 2013). Following these guidelines helps Jumia stay out of legal hot water and creates a happy workplace, which boosts productivity and lowers employee attrition. productivity (Glavas & Aguinis, 2012). For instance, adhering to occupational health and safety laws reduces the risk of accidents and injuries at work, enhancing worker wellbeing at Jumia (Smith & Crotty, 2008).

By strengthening stakeholder trust and improving corporate reputation, regulatory compliance has a major positive impact on Jumia's social sustainability. Acquiring the trust and confidence of customers, investors, and other stakeholders is contingent upon Jumia's adherence to ethical business practices and social responsibility, as demonstrated by its regulatory compliance (Doh & Guay, 2006). For example, Jumia's adherence to environmental laws ,which include waste management and emissions norms, demonstrates its commitment to reducing its environmental effect, which appeals to investors and socially conscious customers (Porter & Kramer, 2006). In order to advance moral supply chain practices and support Jumia's social sustainability, regulatory compliance is essential. According to Seuriering and Müller (2008), Jumia's supply chain functions in a socially responsible manner because of adherence to laws pertaining to fair trade, labour rights, and sourcing. For example, adherence to regulations that prohibit child labor and enforce fair wages helps jumia ensure that its suppliers uphold ethical labor practices, which is essential for maintaining social sustainability across the supply chain (Locke, 2013). By complying with these regulations, Jumia can mitigate the risk of human rights violations and labor exploitation within its supply chain, which could otherwise lead to reputational damage and loss of stakeholder trust (Porter & Kramer, 2006)

Through its support of social projects and community development, regulatory compliance has an impact on Jumia's social sustainability. Numerous laws mandate that businesses improve the well-being of the communities in which they conduct business, either by making direct investments or by reducing their negative effects (Porter & Kramer, 2011). For instance, Jumia is encouraged to participate in community development programs like education, healthcare, and infrastructure improvements by local rules requiring corporate social responsibility (CSR) efforts (Aguinis & Glavas, 2012).

Jumia's social sustainability is supported by regulatory compliance, which is essential for reducing social hazards and legal obligations. Following the rules enables Jumia to avoid legal issues related to labor rights, environmental protection, and consumer safety, which can have significant social and financial implications (Doh & Guay, 2006). To prevent labour disputes, strikes, and other social conflicts that could disrupt operations and damage the company's brand, Jumia, for instance, adheres to standards that safeguard workers rights and guarantee safe working conditions (Locke, 2013).

In summary, Jumia's social sustainability depends on reducing social hazards and legal obligations, both of which can only be achieved through regulatory compliance (Doh & Guay, 2006).

2.3.2 Negative Effects:

The responses show that jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). Jumia's capacity to fund social responsibility initiatives may be hampered by the increased operating expenses associated with adhering to laws and regulations. Adhering to labour, environmental, and consumer safety regulations frequently entails substantial financial outlays for things like infrastructure upgrades, technology purchases, and the installation of monitoring systems (Aguinis & Glavas, 2012).

Having to follow many different rules, sometimes that overlap, can cause paperwork issues and slow down decision-making (Porter & Kramer, 2006). For instance, making sure the company follows labor laws, environmental rules, and consumer protection laws means Jumia

needs to set up complicated systems and keep lots of records, which takes time and uses up resources (Seuring & Müller, 2008). This extra work can take away attention and resources from social responsibility projects, as staff spend more time on meeting legal requirements instead of working on new social programs (Doh & Guay, 2006 In summary, the complicated rules and paperwork needed to follow regulations can make it hard for Jumia to successfully start and keep up with programs that help society (Porter & Kramer, 2006).

Following rules can also limit how Jumia runs its business, which might hurt its efforts to be socially responsible. Companies often have to stick to certain rules and standards, which can make it difficult for them to quickly change and meet new social needs (Doh & Guay, 2006).

For example, rules that need a lot of paperwork or following very detailed environmental rules can cause big problems for Jumia in terms of time and money (Seuring & Müller, 2008). In the end, while rules are important to make sure businesses act ethically, too many or too strict rules can make it hard for Jumia to reach its goals for social sustainability (Smith & Crotty, 2008).Following all the rules can be very complicated, and if Jumia doesn't follow them, it could face serious social and legal issues. Not following rules about workers, the environment, or consumer safety can lead to fines, lawsuits, and damage to Jumia's reputation, which can hurt its efforts to be socially sustainable (Porter & Kramer, 2006). For example, if Jumia breaks labor laws, it might get sued by employees or unions, leading to money problems and bad publicity (Seuring & Müller, 2008).

This use of resources can make it harder for Jumia to do as well with its social efforts, as the company might find it difficult to keep up with both its social programs and its need to follow rules (Aguinis & Glavas, 2012). Also, focusing on following rules can change what the company thinks is important, making it less likely to plan ahead for social responsibility and more likely to just react to problems (Smith & Crotty, 2008). In the end, spending on following rules can make it harder for Jumia to keep doing its main social projects, which could make its overall social efforts weaker (Porter & Kramer, 2006). Following rules and regulations can sometimes cause problems for Jumia's efforts to be socially responsible, especially when it comes to smaller suppliers in its supply chain. Meeting strict rules often needs big investments in technology, equipment, and ways of working, which can be very hard for smaller suppliers who don't have much money (Seuring & Müller, 2008). These suppliers might find it tough to follow the rules set by Jumia, which could cause issues in the supply chain or even stop smaller

businesses from working with Jumia (Porter & Kramer, 2006). This can lead to bad social effects, because small and medium-sized businesses (SMEs) are very important for local economies and helping communities grow (Aguinis & Glavas, 2012). If these suppliers are left out, it can lead to people losing their jobs, fewer chances to make money, and weaker community strength, which goes against Jumia's goal of being socially responsible. (Doh & Guay, 2006). To sum up, following rules and regulations can be very difficult for smaller suppliers, which might make it hard for Jumia to support everyone's growth and happiness in the community (Seuring & Müller, 2008).

People might think Jumia is following too many rules, which could make them see the company's efforts to help society in a bad light. Even though following rules is important for being fair and legal, too many strict rules can make it seem like Jumia cares more about meeting the rules than actually making things better for people (Smith & Crotty, 2008).For instance, customers might see a lot of labels, certifications, or messages about following rules as too much paperwork or not sincere, making them doubt Jumia's efforts to be socially responsible (Porter & Kramer, 2006). This feeling of too much regulation can make customers less trusting and loyal, as they might prefer to support companies they believe are truly dedicated to social sustainability (Aguinis & Glavas, 2012).

Following strict rules can also slow down innovation at Jumia, possibly making it harder for the company to improve its social sustainability programs. Complying with rules often means sticking to existing methods and standards, which can limit the ability to try new ideas or create innovative solutions for social and environmental issues (Porter & Kramer, 2006).For instance, Jumia might find it hard to use new technologies or business ideas that could improve social sustainability if these changes don't fit well with current rules (Seuring & Müller, 2008). This might make Jumia focus more on following the rules than on trying bigger, more impactful social projects (Aguinis & Glavas, 2012). Paying too much attention to following the rules can also make the company less willing to take risks or be creative, as employees might worry more about not breaking the rules than about making big changes in social innovation (Doh & Guay, 2006

2.4 Conclusion

The connection between following rules and being socially responsible at Jumia is complicated, with both good and bad effects. On the good side, following rules improves working conditions, encourages fair practices in the supply chain, helps communities grow, and reduces social risks and legal problems. All these things help Jumia reach its goals for being socially responsible (Smith & Crotty, 2008; Locke, 2013; Aguinis & Glavas, 2012). But on the bad side, following rules can raise costs, make things more difficult, and sometimes go too far, which can limit Jumia's ability to be creative and carry out its plans for being socially responsible (Porter & Kramer, 2006; Seuring & Müller, 2008). The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020).). Furthermore, it may be more difficult for a business to concentrate on social sustainability if there is a corporate culture that places a high value on obeying regulations and consumer concerns about an excessive amount of regulation (Doh & Guay, 2006; Smith & Crotty, 2008). Thus, Jumia must carefully tackle these issues in order to develop a well-rounded and successful strategy for social sustainability, even though adhering to legislation is crucial for ethical business operations. The key to success is to ensure that regulatory measures enhance rather than impede Jumia's total social effect by combining compliance with a genuine commitment to social responsibility (Porter & Kramer, 2006; Aguinis & Glavas, 2012).

CHAPTER THREE
METHODOLOGY

3.1 **Introduction**.

This chapter provides a detailed explanation of the research methods that will be used to study the effect of reverse logistics on sustainability in Jumia's supply chain. It includes information on the research design, the group of people being studied (population) and the number of people chosen (sample size), how the people were selected (sampling procedures), how data was gathered, and the methods used to analyze the data. It also describes the tools used to collect data, tests to ensure the data is reliable and valid, how the data was managed and analyzed, the steps taken during the research, considerations about ethics, and how confidentiality was maintained.

3.2 Research design.

The study will adopt a correlation case study research design to analyze the relationship between reverse logistics and supply chain sustainability in Jumia. Correlation case study is best defined as an intensive study of a single unit with an aim to generalize a cross a larger set of units. (John Gerring 2004). The design is descriptive and explanatory aiming to describe the current state of reverse logistics and supply chain sustainability at Jumia and with the hope that the findings will be applicable to offer entities in Uganda and possibly elsewhere in the world.

3.3 Population and Sampling.

3.3.1 Target population.

Population is commonly defined under both the ecological paradigm which emphasizes demographic cohesion and the evolutionary paradigm which reproductive cohesion and find that none are truly operational. (Robin S. Waples and Oscar Gaggiotti). The target population for the study will be 110 respondents which includes the employees of Jumia who are involved in reverse logistics and supply chain management. This will be distributed as follows; 25 reverse logistics managers or committee, 25 supply chain experts, 20 Warehouse managers, 20 other important staff leaders and 20 customers.

3.3.2 Sampling Technique.

A cluster sampling will be used to ensure that various subgroups within the target population are adequately represented as it's similar to stratified sampling but it's more homogeneous. Cluster sampling is the only pracrca 1 solution for most surveys where the idea of taking a simple random sample of individuals would be practically impossible. (Steve Bennett and Tonney Woods 1991). The target population will be selected basing on Morgan and Krejcic (1970) sampling guidelines. Nonprobability sampling will be used when adequate sampling frames are not available and therefore the study will employ purposive sampling where the researcher will use his own judgement and experience in selecting elements in a sample who have more knowledge over other. It will be employed on board members and managers as it's in line with Amin (2005) and Sekaran (2003).

3.3.3 Sample size.

The study population will consist of 90 respondents which will include the employees from Jumia's supply chain departments, sustainability officers and Jumia reverse logistics management. The states sample size is seen good enough to provide a well briefed insights of the organization's practices and to ensure statistical significance in the findings (Yamane 1967).

Respondents	**Target Population**	**Sample size**
Reverse logistics managers	25	20
Supply chain experts	25	23
Warehouse Manager	20	15
Other Staff members	20	16
Customers	20	16
Total	**110**	**90**

3.4 Data collection methods.

This is the process of collecting data aiming to gain insights regarding the research topic. Data collection as a main stage in research can overshadow the quality for achieving results by decreasing the possible errors which may occur during research project. Therefore, a long a good design for the study, plenty of time should be spent in the collection of data to gain appropriate results since inaccurate data prevents accuracy of findings (Kabir 2016).

3.4.1 Primary Data collection

Primary Data will be obtained using questionnaire survey method as the questionnaires will be distributed to the sampled employees. This will have closed – ended questions where answers will be given and they select the appropriate one to their understanding as this is designed to gather quantitative data on reverse logistics, sustainability, supply chain and other related variables.

3.4.2 Secondary Data collection

This will be obtained and collected from academic journals, existing data at Jumia, performance records, combination, and comparison as well as company reports. The data can provide additional information on the primary Data collected (sekanan 2016)

3.4.3 Data collection instruments.

These are tools used by researchers to collect data in the research process. The common data collection instruments in research include questionnaire and interviews (Olefhile Mosweu and Tshepho Mosweu 2020). The primary Data collection instrument will be a structured questionnaire as it consists of a series of questions and other prompts for the purposes of gathering information from respondents. The questionnaire was invented by Francis Galton (DR.
Karim Abawi 2014).

3.5 Data Analysis Techniques.

This is a systematic process of investigating through varied technics, facts and figures to make conclusions about special topic. Data is available in many different forms and can be found in many different places (Crystal Chill man 2023). From the field, quantitative data will be checked and sorted to ensure completeness especially of questionnaires.

3.5.1 Quantitative data Techniques.

This will be analyzed using descriptive statistics technique of the mean, mode, and standard deviation. The correlation will be arrived at using inferential statics of Pearson product moment. The choice of this technique bases on the research design more over in social science research. The interest is in understanding and controlling relationships between variables than determining their cases (Mugenda 2003, Kothari 2003 and Amin 2005). Regression analysis of linear regression will be computed to determine the level of significance by looking at the strength of the relationship among the variables under study.

3.5.2 Data Presentation.

The findings will be presented using charts, tables to provide a clear and in-depth description of the outcome. This visual presentation will enable in the interpretation and summary of the results. (Miles and Saldana 2014).

3.6 Validity and Reliability.

3.6.1 Validity

The study will ensure the validity of the questionnaire as the items will first be tested on language clarity, relevance, and comprehensiveness to ensure the accuracy and meaningfulness of inferences in collecting accurate data (Creswell, 2014). A coefficient of validity index will be computed to ascertain the extent to which the content of the instrument corresponds to the concepts it will be designed to measure using the formula below.

Content Validity Index (CVI) =No. of items rated valid by all judges = 60 = 0.81

Total no. of items in the instrument 74

An instrument is valid when it has a content validity index of above 0.8 (Amin 2005).

3.6.2.Reliability.

This estimates, evaluates the stability of measurement instruments and interpreter reliability of instruments scores (Carol L. Kimberlin). The study will employ test- retest method of testing reliability. The researcher will use this method because it provides evidence that scores obtained on a test at one time are the same or close to the same when the test is re-administered some other time thus providing its reliability. The questionnaire will be pre- tested on selected respondents after which an internal consistency method of Cronbach's alpha will be employed

because the questionnaire will be designed in a liker scale type and data collected will be in intervals.

3.7 Ethical considerations.

3.7.1 Informed consent.

This will be obtained from different participants before administering the questionnaire. Participants will be informed about the purpose of the study and their role in it, their right to withdraw at any time and penalties (Bell and Bryman 2007).

3.7.2 Confidentiality.

This will be maintained through the study; personal identifiers will be removed from the data, and all inform will be stored accordingly. (Saunders 2016).

CHAPTER FOUR

DATA ANALYSIS INTERPRETATION AND PRESENTATION FINDINGS.

4.0 Introduction

This chapter presents findings concerning the biodata of the respondents and my objectives. It also provides a comprehensive presentation of data collected, often using graphs, tables, and statistical analyses to illustrate key points. Chapter 4 also discusses the significance of the results and how they align with or contribute to the existing literature on the topic. It's a critical selection that showcases the research's contribution to the field and lays the foundation for the concluding chapters.

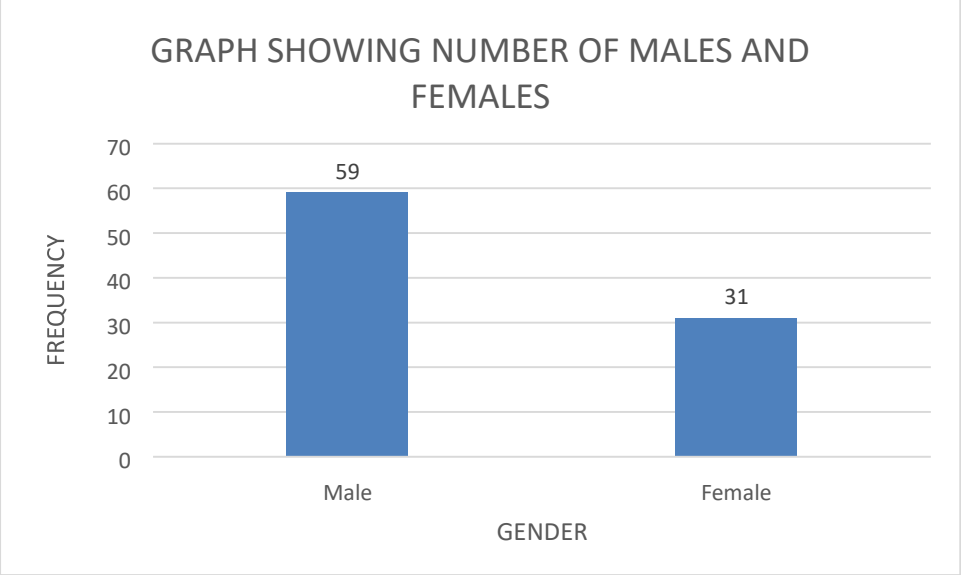
4.1 Section 1: Finding on the bio data on personal characteristics of the respondents

4.1.1 Table 1: Findings on the gender of respondents

Gender	Frequency(F)	Percentage
Male	59	66%
Female	31	34%
Total	90	100%

Source: Primary data

According to the table above, the male respondents are 66% and the female respondents are 34% at Jumia. This shows a predominance of male employees in jobs related to supply chain and logistics. This may reflect broader industry trends, where certain sectors, particularly logistics and reverse management, are male-dominated. Efforts could focus on increasing gender diversity to improve operational insights and innovative practices.



4.1.2 Findings on the departments of the respondents

Table 2: Showing findings on the departments of the respondents

Respondents	Frequency	Percentage%
Reverse logistics managers	20	22%
Supply Chain Experts	23	26%
Warehouse managers	15	17%
Other Staff members	16	18%
Customers	16	18%

Source: Primary data

According to the findings as presented in the above table, 22% of the respondents were reverse logistics managers, 26% of the respondents were supply chain experts, 17% were warehouse managers, 18% were other staff members like procurement officers, and the rest 18% were customers of Jumia. This shows that Jumia has a well-defined organized structure with clear objectives and roles.

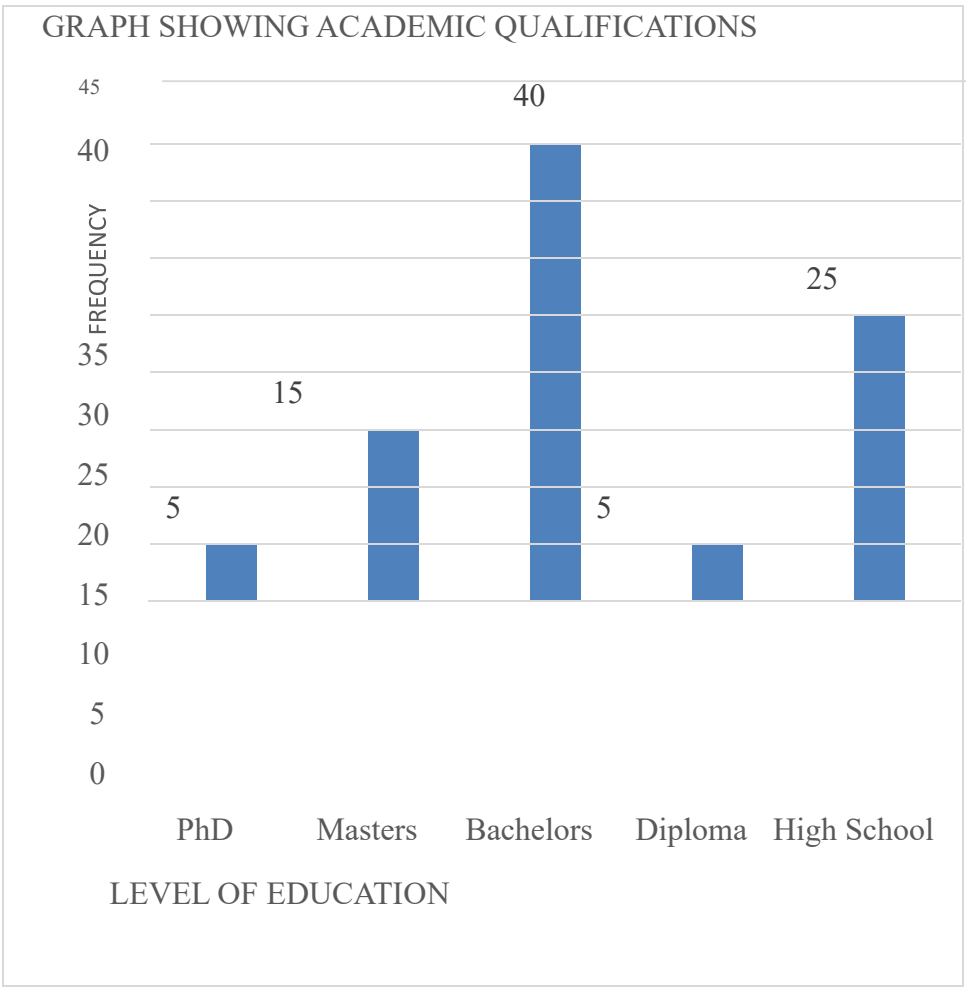
4.1.4 Findings on Academic Qualifications of the Respondents.

Table 3: Showing findings on the academic qualifications of the respondents.

Level of education	**Frequency**	**Percentage**
PhD	5	6%
Masters	15	17%
Bachelors	40	44%
Diploma	5	6%
High School	25	28%
Total	**90**	**100%**

Source: Primary data

Concerning the academic qualifications at Jumia, 6% have a PhD, 17% have a master's, 44% have a bachelor's, 6% have a diploma and 28% are high school students and dropouts. This indicates that the respondents know what they are doing and hence a high work rate productivity.



4.1.5 Findings on how long the respondents have worked at Jumia.

Table 4: Showing how long the respondents have worked at Jumia.

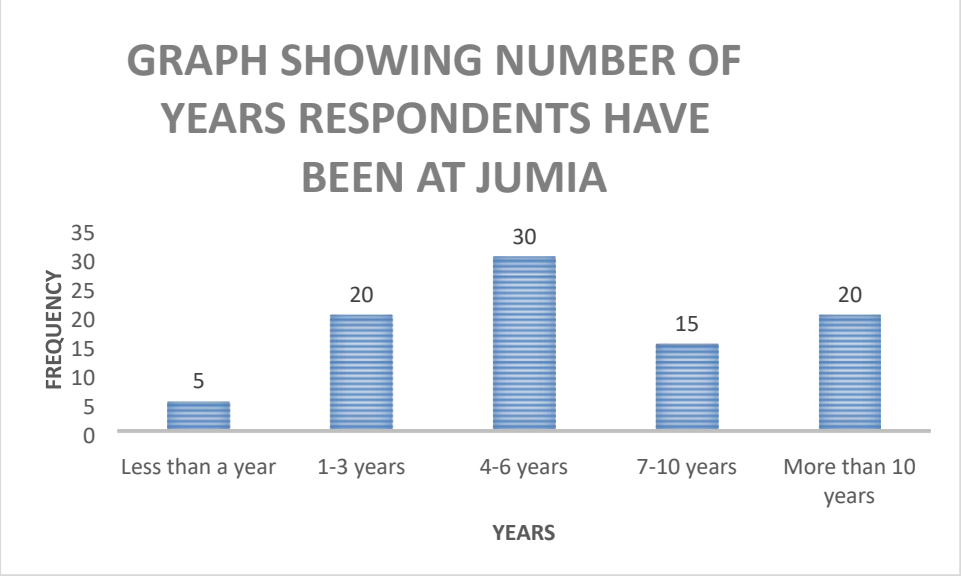
Years	Frequency	Percentage
Less than a year	5	6%
1-3 years	20	22%

47

4-6 years	30	33%
7 – 10 years	15	17%
More than 10 years	20	22%

Source: Primary data

Concerning experience at Jumia, the above table shows the number of years that the respondents have worked at Jumia. Less than a year it is 6%, 1-3 years it is 22%, 4-6 years it is 33% which are the majority thus indicating a stable workforce. 7 – 10 years is 17% and above 10 years it is 22%. This shows that Jumia has experienced workers who exactly know what they are doing hence good productivity.



4.2 Findings on relationship between resource allocation and environmental sustainability.

This study examines the perceived relationship between resource allocation and environmental sustainability of Jumia's supply chain as presented in the table below:

4.2.1 Table 5: Effectiveness of Resource Allocation For Environmental Sustainability

Response	Frequency	Percentage
1 (Very Ineffective)	5	6%
2 (Ineffective)	10	11%
3 (Neutral)	15	17%
4 (Effective)	30	33%
5 (Very Effective)	30	33%

Source: Primary data

According to the table above, 66% of the respondents at Jumia believed that resource allocation was effective or very effective in the support for environmental sustainability as 17% were neutral and 17% also thought of it as ineffective or very ineffective.

4.2.2 Table 6: Relationship between Resource Allocation and Environmental Sustainability

Response	Frequency	Percentages
1(Strongly disagree)	4	4%
2 (Disagree)	8	9%
3 (Neutral)	25	28%
4 (Agree)	38	42%
5(Strongly Agree)	15	16.7%

Source: Primary data

Furthermore, the findings also showed that 58% agreed or strongly agreed of the positive relationship between resource allocation and environmental sustainability. 28% were neutral, 13% disagreed or strongly disagreed. The respondents' perceptions suggest that Jumia's strategic allocation of resources plays a significant role in promoting sustainability across the supply chain, supporting the notion that effective resource management can result to more sustainable operational outcomes.

4.2.3 Examples of Effective Resource Allocation Influencing Environmental Outcomes

The respondents provided some examples of how effective resource allocation has influenced environmental outcomes at Jumia such as;

Investing in transition from traditional plastic packaging to more environmentally-friendly materials, such as biodegradable alternatives, reducing waste and improving the supply chain's environmental footprint, Implementing of renewable energy infrastructure, such as solar panels, at its warehouses and logistics hubs, reducing the organization's reliance on fossil fuels and lowering its carbon emissions, Adopting of energy-efficient technologies, such as LED lighting and fuel-efficient vehicles to reduce energy consumption and emissions and Collaboration with sustainability-focused suppliers and partners commited to environmental sustainability, ensuring that its entire supply chain aligns with sustainable practices.

4.3 SECTION 3 These above examples demonstrate Jumia's strategic allocation of resources in improving the environmental sustainability of its operations and supply chain. Results on the Impact of Consumer Behaviour on Economic Sustainability are presented in Section 4.3. As indicated in the table below, this study investigates how consumer behaviour affects Jumia's supply chain's capacity to preserve its economic viability.

4.3.1 Table 7: Influence of Consumer Behavior on Economic Sustainability

Response	**Frequency**	**Percentage**
1 (Not At All)	2	2%
2 (Slightly)	6	7%
3 (Not Sure)	29	32%
4 (Significantly)	35	39%
5 (Extremely)	18	20%

Source: Primary data

The findings indicate that a majority of respondents(59%) believe consumer behaviour has a significant or extreme impact on the economic sustainability of Jumia's supply chain. In contrast, 32% were uncertain, and 9% felt the impact was minimal or non existent. These results align with the resource-based view (RBV) theory, which posits that companies can achieve a competitive advantage by effectively leveraging their internal resources. Jumia's emphasis on reverse logistics, a key internal capability, supports this theory by benefiting both the environment and the economy.

4.3.2 Table 8: Impact of Consumer Preferences on Reverse Logistics

Impact	**Frequency**	**Percentage**
1 (Not At All)	2	2%
2 (Slightly)	8	9%
3 (Moderately)	32	35%
4 (Significantly)	34	38%
5 (Extremely)	14	16%

Source: Primary data

Additionally, 54% of respondents said that customer selections had a major impact on Jumia's reverse logistics, 35% thought that the impact was moderate, and 11% thought that impact was minimal.

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). Jumia has improved its reverse logistics for recycling and reusing, according to the survey results, as a result of its efforts to meet consumer demands for sustainable goods and services. These efforts include growing the range of ethically and environmentally sourced goods it offers, using sustainable packaging, and improving logistics.

4.3.3 Jumia's Reaction to Shifting Customer Needs for Eco-Friendly Items and Services

The folks we spoke with also described Jumia's approach to meeting the increasing demand for environmentally friendly goods and services. Among the methods they mentioned are:

To satisfy the growing demand, Jumia has been expanding its assortment of energy-efficient, ecologically friendly, and ethically manufactured goods for sustainable choices. Along with educating their clients on the value of sustainability, they also motivate them to make environmentally friendly decisions by demonstrating how their purchases may benefit society and the environment

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). Jumia has also made a point of utilizing recyclable and biodegradable materials in its packaging and shipping practices. In order to lessen the impact of product delivery on the environment, they have enhanced their logistics procedures, which now include the use of electric motors. Jumia's proactive approach to adapting its services and operations to the evolving demands of environmentally conscious customers is demonstrated by these initiatives, which are crucial to the company's continued financial stability. Even while Jumia has addressed customer demand for sustainable items, it may still encounter difficulties due to shifting consumer preferences and the expense of upholding eco-friendly standards. Long-term commitment and consumer education are required to guarantee enduring benefits.

4.4: Findings on Jumia's Compliance with Social Sustainability Regulations.

This study explores the extent to which regulatory requirements do influence Jumia's social sustainability Initiatives as presented in the following table:

4.4.1 Table 9: Jumia's Compliance with Social Regulations

Compliance Rating	**Frequency**	**Percentage**
1 (Not Compliant)	5	6%
2 (Somewhat compliant)	10	11%
3 (Fully compliant)	45	50%
4 (Exceeds compliance)	30	33%

Source: Primary data

The responses in the above table show that majority of the respondents (83%) believe Jumia is fully compliant or exceeded the compliance requirements for social sustainability regulations. 17% of the respondents perceived Jumia as not compliant or somewhat compliant. These findings also support stakeholder theory, which argues that companies must meet the expectations of various stakeholders, including regulators, employees, and customers. Jumia's compliance with social regulations shows its efforts to balance economic goals and societal obligations.

4.4.2 Table 10: Influence of Regulatory Requirements on Social Sustainability

Influence	Frequency	Percentage
1 (Not at all)	2	2.2%
2 (Slightly)	6	6.7%
3 (Moderately)	30	33.3%
4 (Significantly)	37	41.1%
5 (Extremely)	15	16.7%

Source: Primary data Additionally, 58% of the respondents believed regulatory requirements had an extreme or significant influence on Jumia's social sustainability practices whereas 33% perceived a moderate influence and only 9% saw a slight or not at all influence.

4.4.3 Examples of Regulatory Requirements Leading to Changes in Jumia's Sustainability Practices.

The respondents helped give situations or examples where regulatory requirements led to a significant change in Jumia's sustainability practices and among were:

Labor and worker welfare regulations such as improved working conditions, fair wages, and employee wellness programs, to comply with labor regulations and ensure the social sustainability of their operations, environmental practices, such as waste management, emissions control, and sustainable logistics, to align with evolving environmental operating regulations.

Data privacy and security regulations to strengthen its data protection and cybersecurity measures to comply with data privacy regulations thus improved overall trust and social responsibility of the company.

Product testing, quality control, and recall procedures to meet the safety and quality standards mandated by regulatory bodies, leading to improved consumer trust and social sustainability.

Corporate social responsibility (CSR) requirements such as community development programs and charitable contributions, to comply with regulations and demonstrate its commitment to social sustainability. The examples above show how Jumia has adapted its sustainability practices in response to various regulatory requirements thus influencing the regulatory environment on the company's social sustainability efforts.

4.5 SECTION 5: Open ended Questions

4.5.1 Contribution of Reverse Logistics to Supply Chain Sustainability

The people we asked talked about how reverse logistics helps Jumia's supply chain be more sustainable .They highlighted several key benefits. One major advantage is that reverse logistics enhances resource efficiency and minimizes waste. By repairing, cleaning, and reusing products, parts, and materials, it reduces resources consumption and waste generation, making the supply chain more environmentally friendly. Additionally, reverse logistics facilitates the development of a closed-loop supply chain, where products and materials continuously circulate within the system. This supports a a circular economy , further increasing the sustainability of the supply chain.

.4.5.2 Difficulties in Setting Up Reverse logistics for Sustainability

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). The people we spoke with pointed out a number of issues with using reverse logistics techniques in an environmentally friendly manner. The absence of infrastructure and technology is a major problem. Jumia may have trouble obtaining, utilizing, and maintaining the equipment and infrastructure—such as processing centers and tracking systems—that they require to effectively manage reverse logistics. Reverse logistics can be more resource-intensive and complex than conventional logistics, which is another issue. This implies that they require unique procedures, staff development, and collaboration between various divisions of the business and outside organizations. Financial concerns are significant as well because establishing and expanding reverse logistics operations costs a large sum of money, which the corporation may find difficult to swiftly allocate. Changing consumer expectations and behavior also pose a constant challenge. It can be challenging to continue enticing clues

operation of reverse logistics; however, maintaining coordination and alignment across the supply chain can be challenging.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION AND RECOMMENDATIONS ON THE FINDINGS

5.0 INTRODUCTION

A discussion, summary, conclusion, and recommendation of the findings are presented in this chapter

5.1 Discussion on the findings

5.1.1 Relationship between Resource Allocation and Environmental Sustainability.

The findings indicate that the majority of respondents (66%) believe jumia uses resources in a way that is either good or very good for the environment.

Also, 58% of people think there is a good connection between how resources are used and helping the environment. These results match the Resource-Based View (RBV) theory, which says that a company's success comes from its special resources and skills, along with its ability to use sustainable practices well (Barney, J.B and Tyler 1991).

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020).

5.1.2 Influence of Consumer Behavior on Economic Sustainability.

The responses show that Jumia has wisely spent its resources on eco-friendly projects, like using sustainable packaging, renewable energy, energy-saving technology, and working with partners who care about sustainability. These actions match what research says, which is that smart resource use can help the environment by cutting waste, lowering carbon emissions, and using resources more efficiently (Adebambo et al., 2019; Hwabueze & Osiagor, 2020). According to the study, the majority of respondents (59%) believe that consumer behaviour has a significant impact on Jumia's ability to maintain an environmentally friendly supply chain. Additionally, 54% of respondents claimed that Jumia's return policy is heavily influenced by what customers find. Appealing.

These findings are consistent with a theory that states businesses can outperform competitors by leveraging their unique advantages, such as their flexibility to adapt to changing consumer demands (Barney, 1991).

Jumia is trying to have more products that are good for the environment and made fairly, and they are also working on using less harmful packaging and better ways to move things around. And improve its reverse logistics operations demonstrate its responsiveness to changing consumer preferences for more sustainable products and services thus showing Jumia's proactive approach in adapting its operations and offerings to meet evolving demands of environmentally conscious consumers which aligns with existing literature about how firms can effectively respond to consumer demands for sustainable products and services are more to achieve long-term economic sustainability (Rogers & Tibben-Lembke, 1999).

The results show that Jumia might have difficulties keeping its business financially stable, like dealing with changing customer tastes and the expense of being eco-friendly. This highlights the importance of a strong, long-term dedication and teaching customers to make sure Jumia's efforts to be sustainable keep working (Walker & Di Sisto, 2008).

5.1.3 Jumia's Compliance with Social Sustainability Regulations.

The results indicate that most people surveyed (83%) think Jumia follows or even goes beyond the rules for social sustainability. Moreover, 58% of respondents think that Jumia's approach to social sustainability is significantly impacted by these regulations.

This is consistent with the notion of stakeholder theory, which holds that for businesses to succeed over the long term, they must satisfy the demands of various groups, including regulators (Srivastava, 2007). Jumia demonstrates its commitment to striking a balance between corporate objectives and social duties by adhering to social norms and making modifications to sustainability policies in response to these norms**.**

The findings indicate that Jumia may continue to face challenges in adapting to regulatory changes and ensuring that its sustainable practices keep pace with these developments. This emphasises how Jumia must continue to adapt and collaborate closely with authorities and other organizations in order to ensure that its operations are long-term socially sustainable.

5.2 Summary on the Findings.

The study examined the relationship between reverse logistics and sustainability management at Jumia, a popular e-commerce platform in Africa. It examined consumer behaviour and its effects on the economy, the use of resources and its benefits to the environment, and the role that social sustainability plays in adhering to the law.

The findings demonstrate how Jumia's frugal resource management has contributed to environmental protection. They have achieved this through collaborating with partners who are concerned about sustainability, employing clean energy, and adopting eco-friendly packaging. According to the study, Jumia's capacity to maintain its financial stability and oversee its return policies is significantly impacted by consumers' shopping habits and preferences. Jumia is being forced by this to alter the goods it offers and the way it conducts delivery in order to better satisfy its clientele. According to the report, Jumia has also demonstrated that it cares about both making money and improving society by largely adhering to or even exceeding social sustainability regulations. The business has dealt with a variety of regulations, including those pertaining to the rights of employees, environmental protection, the security of client data, and accountability for the community

5.3 Conclusions

This study demonstrates that Jumia's supply chain sustainability is significantly impacted by reverse logistics. The report provides evidence that Jumia's operations maybe made more environmentally, financially, and socially responsible by giving attention to resource allocation, consumer behavior, and regulatory compliance.

Jumia has reduced its resource usage and improved environmental performance through resource management practices such as employing green technologies and building sustainably.

Jumia may also adapt to fulfil the needs of customers for sustainable goods and services, which keeps clients satisfied and fosters business expansion. Jumia's permission to operate has also been reinforced by its dedication to adhering to social sustainability regulations and its efforts to align its operations with stakeholder preferences.

5.4 Recommendations.

Here are some recommendations for Jumia based on the findings of this study: Jumia needs to do a better job of conserving resources. This entails spending money on infrastructure, innovative concepts, and technology that can improve Jumia's environmental performance. They should also explore for methods to include more energy-efficient technologies, ecologically friendly materials, and renewable energy sources into their supply chain.

Jumia have to focus on strengthening their relationship with clients in order to promote economic sustainability. By examining data and paying attention to customer input, businesses can gain a deeper understanding of what customers desire and how they behave. This will enable them to provide environmentally friendly goods and services. To satisfy the growing demand for sustainable options, more fairly sourced and environmentally friendly products ought to be added to the Jumia website. In order to optimise resource usage and improve customer satisfaction, they should also make it simpler for customers to return and mend products. Jumia should always be aware of and abide by emerging social sustainability regulations to ensure that they live up to everyone's expectations.

To make their company more socially sustainable, they should enhance employee assistance programs like fair pay, secure workspaces, and wellness initiatives..They should also do more things as a company to help society, like working with communities, giving to charity, and focusing on sustainability. Jumia should also include reverse logistics and sustainability in its overall strategy and decisionmaking. This can be done by setting clear, measurable goals for sustainability and regularly checking and reporting on the company's progress. Encouraging a culture of sustainability throughout the organization, along with employee participation and teamwork across different departments, can help drive ongoing improvements.

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Appendices

Appendix 1: Questionnaire

Dear respondent,

My name is Namulondo Britah a student at Uganda Christian University pursuing a Bachelor's degree in Procurement and Logistics Management, I am humbly asking for your time and cooperation in a research study as part of my academic requirement. The study is to assess **"the impact of reverse logistics on sustainability in Supply Chain".**

Instructions to respondents.

Please answer all questions honestly and to the best of your ability.

Your responses will be kept confidential and used solely for the purposes of this study.

For closed-ended questions, please select the option that best represents your opinion.

For open-ended questions, please provide detailed responses.

Section 1: Demographic Information

Please tick (√) in the appropriate bo☐ as the most agreed answer to the following statements.

1. What is your age?
   - 18-25 ☐
   - 26-35 ☐
   - 36-45 ☐
   - 46-55 ☐
   - 56 and above ☐
2. What is your gender?

   ☐ Male ☐ Female
3. What is your highest level of education?

   ☐ High school ☐ Diploma ☐ Bachelor's degree

   ☐ Master's degree ☐ Ph.D.

   Other (please specify) …….
4. What is your current role in the company?

   _____

5. How many years have you worked at Jumia?

   ☐ Less than 1 year ☐ 1-3 years ☐ 4-6 years

   ☐ 7-10 years ☐ More than 10 years

Section 2: The relationship between Resource allocation and environmental sustainability

6. How effectively does your organization allocate resources to support environmental sustainability? *(1=Very ineffectively, 2=Ineffectively, 3=Neutral, 4=Effectively, 5=Very effectively).*

7. Do you believe there is a direct relationship between resource allocation and the environmental sustainability of your Supply Chain? *(1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree).*

8. Can you provide examples of how effective resource allocation has influenced environmental outcomes in Jumia?

Section 3: The impact of Consumer Behavior in improving Economic Sustainability

9. How does consumer behavior influence the economic sustainability of Jumia's supply chain? *(1=Not at all, 2=Slightly, 3=Moderately, 4=Significantly, 5=Extremely).*

10. To what extent do consumers' preferences for sustainable products affect Jumia's reverse logistics operations? *(1=Not at all, 2=Slightly, 3=Moderately, 4=Significantly, 5=Extremely).*

11. How does Jumia respond to changing consumer demands for more sustainable products and services?

Section 4: The relationship between Regulatory Compliance and Social Sustainability

12. How compliant is Jumia with social regulations? *(1=Not compliant, 2=Somewhat compliant, 3=Fully compliant, 4=Exceeds compliance requirements).*

13. To what extent do regulatory requirements influence Jumia's social sustainability initiatives? *(1=Not at all, 2=Slightly, 3=Moderately, 4=Significantly, 5=Extremely)*

14. Can you describe a situation where regulatory requirements led to a significant change in Jumia's sustainability practices?

Section 5: Open-ended Questions

15. In your opinion, how does reverse logistics contribute to the overall sustainability of Jumia's Supply Chain?

16. What challenges do you face in implementing reverse logistics practices that support sustainability?

17. Please provide any additional comments or suggestions on how reverse logistics can further improve sustainability in Jumia?

Appendix 2: Data Collection letter

UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

SCHOOL OF BUSINESS

19th Aug, 2024

TO WHOM IT MAY CONCERN

Name: NAMULONDO BRITAH Reg No. J22B12/118
A bachelor's student who is seeking permission from your office to collect data for her dissertation titled

THE IMPACT OF REVERSE LOGISTICS ON SUSTAINABILITY IN SUPPLY CHAIN MANAGEMENT: A CASE STUDY ON JUMIA UGANDA.

We shall be grateful if you could render assistance to her in collecting the necessary data for her dissertation

The Uganda Christian University School of Business thanks you in advance

Mukisa Simon Peter
Research coordinator