



**SUSTAINABLE PRACTICES IN GLOBAL SUPPLY CHAINS
OF THE UK FAST-MOVING CONSUMER GOODS (FMCG)
INDUSTRY**

STUDENT NAME : OM CHAVDA

STUDENT ID : 2308421

PROFESSOR NAME : LAILA MAAZOUZ



PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Master's Degrees by Examination and Dissertation Declaration Form.

I, OM CHAVDA, declare that this dissertation has been composed by myself, that the work contained herein is entirely my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or qualification, in whole or in part, except as specified.

Signature: OM CHAVDA.....

Date: 13th Oct. 2024.....

Acknowledgements

I would like to seize this opportunity to thank each and every person who helped me finalize this research on sustainable practices within the fast-moving consumer goods sector of the UK. My biggest and most important thanks go to my academic supervisor, Ms. Laila Maazouz, on whom I relied so much for such valuable guidance, support, and encouragement throughout the research course. The acumen and incisive insights of this researcher alongside constructive criticism have immensely enhanced the quality of this study.

Abstract

Background: This paper is on exploring sustainable practices in the fast-moving consumer goods sector in the UK and filling the urgent requirement of environmentally responsible and socially responsible supply chain management. SSCM is an essential function in managing the environmental social, and economic impacts of the supply chains. This research aims to critically analyze and evaluate the sustainable practices in the global supply chains of UK fast-moving consumer goods (FMCG) industry to identify key drivers, challenges, and opportunities.

Method: Mixed methods would engage the use of qualitative interviews with the industry partners and a secondary qualitative method to pursue further depth, along with thorough data collection on current practices, challenges, and improvement strategies.

Findings: Findings indicate that FMCG companies have made progress on the path toward the adoption of sustainability practices, and yet considerable barriers still exist, including financial constraints, problems identified with engaging suppliers, and the integration of new sustainable operations into pre-existing businesses. The research stream identifies the role of consumer behavior in sustainability performance as well as a need for closer relationships among different stakeholders.

Conclusion: Incorporation of sustainability into business strategies allows for long-term achievement of environmental and social objectives. To this end, recommendations include improved supplier engagement, clear key performance indicators defined from the outset, and some form of industry collaboration. The study contributes to knowledge created about the issue of sustainability in FMCG and can serve as a valuable guide for policymakers, industry leaders, and researchers seeking inspiration to sound and sustainable supply chain practices.

Table of Contents

Chapter 1: Introduction.....	10
1.1 Background and Context.....	10
1.2 Problem Statement	11
1.3 Research Objectives	12
1.3.1 Aims	12
1.3.2 Objectives.....	12
1.4 Research Questions	12
1.5 Significance of the Study	13
1.6 Scope and Delimitations	13
1.7 Structure of the Dissertation	14
1.8 Definitions and Key Terms	15
Chapter 2: Literature Review	16
2.1 Introduction.....	16
2.2 Impact and Benefits of Sustainability in FMCG Supply Chains	16
2.3 Sustainability Integration in FMCG Supply Chains	17
2.4 Challenges and Barriers to Sustainable Practices	19
2.5 Drivers of Sustainable Supply Chain Practices in the UK FMCG Sector.....	20
2.6 Effectiveness of Current Sustainable Practices and Their Challenges in UK FMCG Sector	22
2.7 Strategies for Enhancing Sustainability in FMCG Supply Chains	24
2.5 Theoretical Framework	26
2.6 Literature Gap	28
2.7 Conceptual framework.....	28
2.8 Summary	30
Chapter 3: Research Methodology.....	31

3.1 Introduction.....	31
3.2 Research Philosophy	31
3.3 Research Approach	32
3.4 Research Design.....	33
3.5 Methodological Choice	33
3.6 Research Strategy.....	34
3.7 Time Horizon	36
3.8 Data Analysis	37
3.9 Sampling Strategy	38
3.10 Research Ethics	38
3.11 Summary	39
Chapter 4: Findings and Analysis	40
4.1 Introduction.....	40
4.2 Primary Qualitative Data Findings	40
4.3 Secondary Qualitative Data Findings	49
4.4 Discussion	55
Chapter 5: Conclusion and Recommendations	57
5.1 Introduction.....	57
5.2 Summary of Findings.....	57
5.3 Linking with Objectives.....	58
5.4 Conclusions	59
5.5 Recommendations.....	59
5.6 Limitations of the Study.....	61
5.7 Suggestions for Future Research	62
5.8 Summary	62

Reference List	64
Appendices.....	71
Appendix 1: Interview Questions	71
Research Question 1.....	71
Interview Questions	71
Research Question 2.....	71
Interview Questions	71
Research Question 3.....	72
Interview Questions	72
Research Question 4.....	72
Interview Questions	72
Appendix 2: Interview Questionnaire	73

List of Figures

Figure 1.1: Leading FMCG brands ranked by frequency purchased in the United Kingdom (UK) 2021.....	10
Figure 1.2: Structure of the Dissertation.....	14
Figure 1.3: Key Terms	15
Figure 2.1: Green Supply chain	17
Figure 2.2: Integrated Sustainable Supply Chain	18
Figure 2.3: Barriers to sustainable practice.....	20
Figure 2.4 Triple Bottom Line	27
Figure 2.5: Conceptual Framework	29
Figure 4.1: Sustainable shopping habits of UK consumers, 2021-2022	52
Figure 4.2: Supply Chain Challenges Faced by the Companies, 2021	54
Figure 5.1: Recommendation for the study.....	60

List of Tables

Table 3.1: Inclusion Exclusion Criteria	36
Table 4.1: Thematic Coding Table	51

Chapter 1: Introduction

1.1 Background and Context

Due to globalization, there has been the need for proper and accountable business practices in the UK FMCG especially in their integration of supply chain sustainability. Sustainable Supply Chain Management (SSCM) is crucial in managing environmental social and economic effects of supply chain operations. SSCM not only allows the company to fulfill the regulatory requirement but also tap into the increasing customer awareness and expectations of corporate social responsibility.

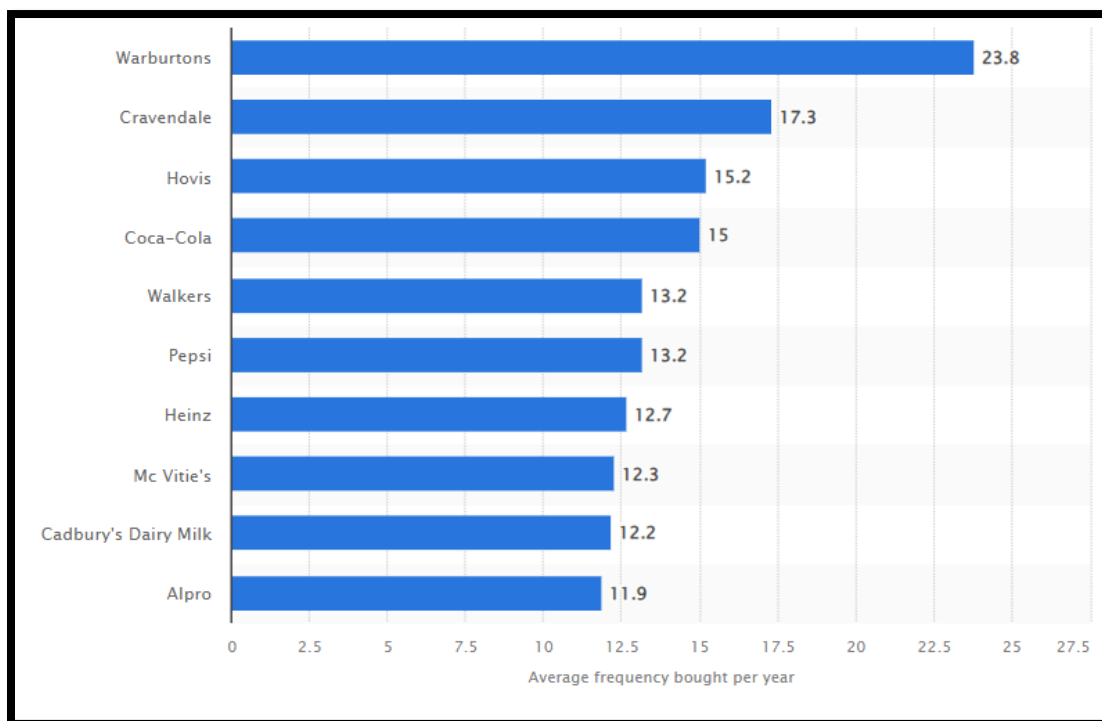


Figure 1.1: Leading FMCG brands ranked by frequency purchased in the United Kingdom (UK) 2021

(Source: Statista, 2024a)

The provided bar graph illustrates the top 10 fast-moving consumer goods (FMCG) brands in the United Kingdom for the year 2021, ranked based on their average frequency of purchase per year. The data, sourced from Statista, reveals that Warburtons, a renowned bakery brand, leads the pack with an impressive average purchase frequency of 23.8 times per year. Following closely are Cravendale, a dairy brand, and Hovis, another bakery brand, with average purchase frequencies of

17.3 and 15.2, respectively. Number four is the well-known beverage giant Coca-Cola, with a mean average purchase frequency of 15 times a year. The rest in this top 10 list consist of Walkers, Pepsi, Heinz, Mc Vitie's, Cadbury's Dairy Milk, and Alpro-all true leaders in reputable FMCG brands. Interesting is the fact that the average purchase frequencies of the top 10 brands vary between 11.9 and 23.8. The graph will depict the dominance of food and beverage brands in the FMCG category, which in turn suggests that consumers really do have a strong preference for these types of products. Moreover, the prominence of bakery brands within the top 10 again brings out that the bakery product group is one that is preferred in the UK market. The bar chart gives a crucial insight into the major FMCG brands dominating the UK space for the year 2021. The trends highlighted are about the dominance of food and beverage brands, and then the wide-appealing baked products. It would be interesting to see how consumer preferences in the years ahead shape the landscape for FMCG. The literature highlights the roles of SSCM in supporting the UN SDGs and enhancing innovation in supply Chain Management. Ethical sourcing, carbon footprint, and renewable energy are some among the measures that improve organizational readiness and performance. Thus, implementing SSCM enables companies to operate for the long term and become competitive in the global market.

1.2 Problem Statement

FMCG sector of United Kingdom confronts much complexities in adopting sustainability supply chain management strategy because of environmental, social and economic barriers (Prashar, 2023). As mentioned earlier, SSCM is widely accepted, but its implementation faces numerous challenges by organisations due to several barriers such as; technological constraints, legal requirements, and stakeholders. From the presented literature, it is possible to identify the desire to develop better solutions for addressing these issues and improving the efficiency of sustainable initiatives. Thus, the purpose of this research is to provide a critique of SSCM in the context of UK FMCG industry and highlight the features that could be potential drivers and barriers to the practice.

Although a growing realization of the importance of SSCM is reported in the FMCG sector of UK, full implementation still appears to remain a long way off. Significant barriers considered are those placed on the environmental, social, and economic planes. Technological constraints may also restrain a firm's ability to track and track the consequences across the entire supply chain, while

old-fashioned systems can even hinder efficiency efforts at making processes related to sustainability more streamlined. Additionally, the jurisdictions of domestic/international have calls and complications which give rise to compliance overheads that would even prove to hinder further progress. The law can also conflict with profit-making objectives that may cause companies to favor short-term profitability over long-term sustainability. (Prashar, 2023). Another serious challenge is stakeholder engagement. There are opposing priorities among the stakes, ranging from suppliers to consumers. Consumers may advocate an ecofriendly product but unwillingly bear the cost burden resulting from sustainable practice in the chain of supply. Suppliers cannot afford such a high cost because of resource scarcity, besides a lack of incentive to subject themselves to stricter sustainability criteria, especially economies in developing countries which are highly vulnerable to cost pressures. This research will critically review these barriers and drivers in order to achieve a proper understanding of the complexities involved.

1.3 Research Objectives

1.3.1 Aims

The aim of this research is to critically analyze and evaluate the implementation of sustainable practices within the global supply chains of the UK Fast-Moving Consumer Goods (FMCG) industry, identifying key drivers, challenges, and opportunities for improvement.

1.3.2 Objectives

1. To assess the primary drivers for sustainable practices in UK FMCG supply chains.
2. To evaluate the effectiveness of current sustainable practices implemented by UK FMCG companies.
3. To identify the key challenges faced by UK FMCG companies in implementing sustainable supply chain practices (Ngomane, 2023).
4. To recommend strategies for enhancing the adoption and effectiveness of sustainable practices within UK FMCG supply chains.

1.4 Research Questions

1. What are the primary drivers influencing the adoption of sustainable practices within UK FMCG supply chains?

2. How effective are current sustainable practices implemented by UK FMCG companies (e.g., ethical sourcing, carbon footprint reduction) in achieving environmental and social sustainability goals?
3. What are the key challenges faced by UK FMCG companies in implementing sustainable supply chain practices?
4. What strategies can be recommended to enhance the adoption and effectiveness of sustainable practices within UK FMCG supply chains?

1.5 Significance of the Study

This work adds to the existing literature on SSCM by offering understanding into the key issues and prospects in the UK FMCG industry. Thus, it provides major managerial and policy implications for the industry's players, such as policymakers, businesses, and customers by outlining the best practices and proposed strategies concerning SSCM. This research also aligns with the global sustainability goals such as the UN SDGs to ensure sustainable inclusion of environmental, social, and economic factors in the supply chain improvement, making organisations more resilient and competitive.

1.6 Scope and Delimitations

The study is carried out in the context of the UK FMCG industry and investigates the implementation of SSCM practices from the supplier's perspective up to the end customer. It is remarkable that the study mostly focuses on environmental, social, and economic sustainability factors. Secondary research limitations include the potential for bias in the selection and interpretation of secondary research sources, alongside the variability in data quality among diverse studies (Gong et al, 2020). Nevertheless, systematic data selection and thematic analysis are employed to reduce the biases, and the conclusions will be valid.

1.7 Structure of the Dissertation



Figure 1.2: Structure of the Dissertation

(Source: Self-Develop)

The chosen dissertation format allows for a systematic investigation into SSCM in the UK FMCG industry. Chapter 1 provides an overview of the research; these include background to the study, problem statement, research objectives, justification and significance of the study, and scope and organisation of the thesis. Chapter 2 provides a literature overview of SSCM, taking into account topical theories, frameworks, and practices that concern the FMCG industry (Dachan and Sherif, 2023). Research methodology is described in Chapter 3 in relation to the research design, data gathering, and analysis tools used. Chapter 4 presents the findings and analyses the findings' relevance to the implementation of SSCM in the UK FMCG industry. Therefore, Chapter 5 provides a comprehensive recapitulation of the research conclusions, implications for practice, as well as considerations for future studies. This structured methodology helps to identify the factors that spur as well as inhibit sustainable practices in the FMCG industry.

1.8 Definitions and Key Terms

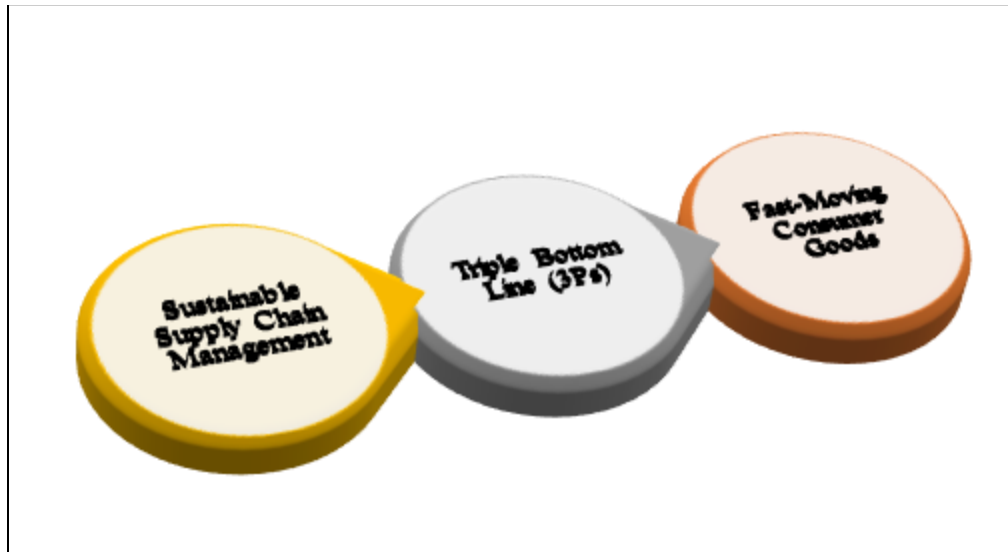


Figure 1.3: Key Terms

(Source: Self-Developed)

Sustainable Supply Chain Management (SSCM) refers to responsible utilization of resources in a supply chain while controlling the social, economic and environmental effects created by supply chain operations. Triple Bottom Line (3Ps) is a sustainability framework that incorporates three dimensions: Profit, people, planet, and profit, referring to social, environmental, and financial perspectives. FMCG which are those products that are quickly consumed by households and possess low cost per unit price such products include processed foods, drinks, cosmetics, detergents and others.

Ethical Sourcing enables the organisation to determine whether the product it is sourcing for its use was produced in an ethical manner taking into consideration the environmental, social and economic effects it has. Carbon Footprint is the total CO₂e emissions produced by activities within a supply chain whether it is directly or indirectly. Stakeholder Theory is a managerial theory that focuses on the impact and involvement of all the stakeholders, such as suppliers, buyers, and government agencies, in decisions and long-term management strategies of a firm.

Chapter 2: Literature Review

2.1 Introduction

Global supply chain sustainability has of recent been receiving more attention, especially in the FMCG market in the UK. There has been a rise in consumer concern in matters regarding the environment and social justice, as well as a change in regulatory policies, and this has forced companies to embrace sustainability in their supply chain. This shift is not simply a fad, but a part and parcel of the strategic vision of contemporary organizations and businesses that aspire towards sustainability and dominance. SSCM entails a large number of policies, including emissions reduction, fair trade, and circular economy.

2.2 Impact and Benefits of Sustainability in FMCG Supply Chains

The incorporation of sustainability practices for the FMCG supply chain undoubtedly impacts traditional operational methodologies for supply chain management by embracing environmental and social responsibility while also enhancing supply chain effectiveness. Unlike traditional theories that argue that sustainability is just an approach that hinders business growth by coming with many regulations, it is a resource that can be used to create better organizational performance and public welfare (Rastpour, Kayvanfar and Rafiee, 2023). The sustainability aspect in the FMCG supply chains significantly affects the environment.



Figure 2.1: Green Supply chain

(Source: Cahyadi *et al.* 2023)

Another major advantage of sustainability integration in FMCG supply chain is economic gains. Contrary to being an undesirable business expense, sustainability can revolutionise a firm's revenue by leading to reductions in utilities through efficient systems. Furthermore, sustainable practices can result in improved organisational image and customer loyalty as they become more aware of green and ethical products. It may change the direction of consumers and give market differentiation and more sales (Ngomane, 2023).

It is equally imperative to consider the social influences of sustainability within the FMCG supply chains. Sustainability goes beyond the conventional practices of CSR through equal employment, ethical purchasing, and stakeholder engagement, which ultimately question conventional practices. Businesses that practice the concept of sustainability make sure that the suppliers they conduct their business with pay the workers a reasonable wage and are protected appropriately. Policies such as these are not just moral responsibilities, but competitive advantages that add value to a firm's image and efficiency. Other CSR strategies include supporting local economy and investing in social development projects that improve the welfare of people affected by supply chain. All in all, the inclusion of sustainability within FMCG supply chains provides benefits that are extensive. Environmental enhancements, economic returns, and social progress all indicate the diverseness of sustainability. Furthermore, firms that engage in sustainability strategies are expected to benefit from operational discretion and innovation, fuelled by efficient use of resources and technology (Gong et al. 2020).

2.3 Sustainability Integration in FMCG Supply Chains

SSCM refers to the integration of sustainable practices in supply chain processes from raw material acquisition to end of product delivery. According to the nature of the FMCG industry, with high product turnover and resource consumption, it is essential to implement SSCM to address legal and market demands for sustainability.

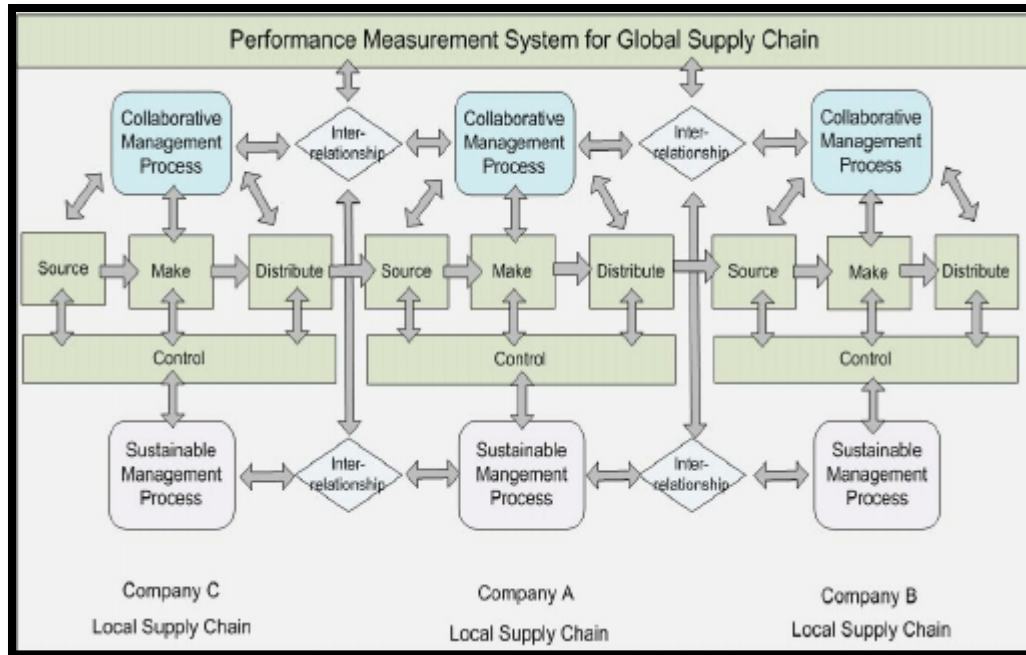


Figure 2.2: Integrated Sustainable Supply Chain

(Source: Negri *et al.* 2021)

A brief discussion on SSCM helps in identifying its tenets which include the following; ecological sustainability, social responsibility and economic sustainability. Consequently, SSC, instead of simply improving existing models, requires major shifts in supply chain paradigms, questioning conventional strategies and exploring opportunities in the existing supply chains. Also, issues related to green logistics practices aimed at minimizing the number of carbon emissions during transportation and waste management practices including recycling and reusing materials are part of SSCM. Strategies in implementing SSCM are not mere adaptations; they are a paradigm shift in the landscape of the new industrial age involving revolutionary internal organizational changes and new revolutionary external collaborations. At corporate level, organisations can promote eco-design to develop products with lower environmental impacts and embrace technologies that improve energy utilization (Udokporo *et al.* 2020). Externally, it is important to work with suppliers and logistics providers for sustainability to be realized. Thus, the important strategies for sustainability integration are the definition of clear sustainability criteria for suppliers, the long-term cooperation with them, the utilization of blockchain solutions for supply chain management.

Real-life examples of UK FMCG companies demonstrate that implementing SSCM is possible. For instance, Unilever has a policy of sourcing all its agricultural raw materials sustainably by the year 2025. Pursuant to its Sustainable Agriculture Code, the company establishes rules for suppliers on matters concerning the diversity, soil health, and water. Likewise, Tesco has managed to make impressive drops in its carbon intensity by improving the efficiency of the delivery network and adopting efficient refrigeration systems. Another good example is Marks & Spencer's Plan A that contains more than 100 targets associated with climate change, waste and natural resources. Measures that are part of this initiative are using sustainable cotton, minimizing food waste, and following ethical labour practices throughout the supply chain.

2.4 Challenges and Barriers to Sustainable Practices

Challenges and barriers in implementing sustainable practices in the global supply chain of UK FMCG industry. It is noteworthy that these obstacles can be divided into internal and external barriers, although both types of obstacles are difficult for companies that seek sustainability.

Internal constraints are those which originate from within the organization. However, one main issue is the issue of cost when it comes to adopting environmentally sustainable measures. New technologies for sustainable energy, the use of green materials, and changes to the processes can be very costly at first. Further, there is very little knowledge about sustainability in organizations (Mountfield et al. 2021). Employees might need to be trained to put into practice sustainable measures, which can be expensive and time-consuming. Another internal difficulty is the resistance to change. That is why organizational culture and established business practices can be quite rigid and unchangeable to shift to more sustainable practices.

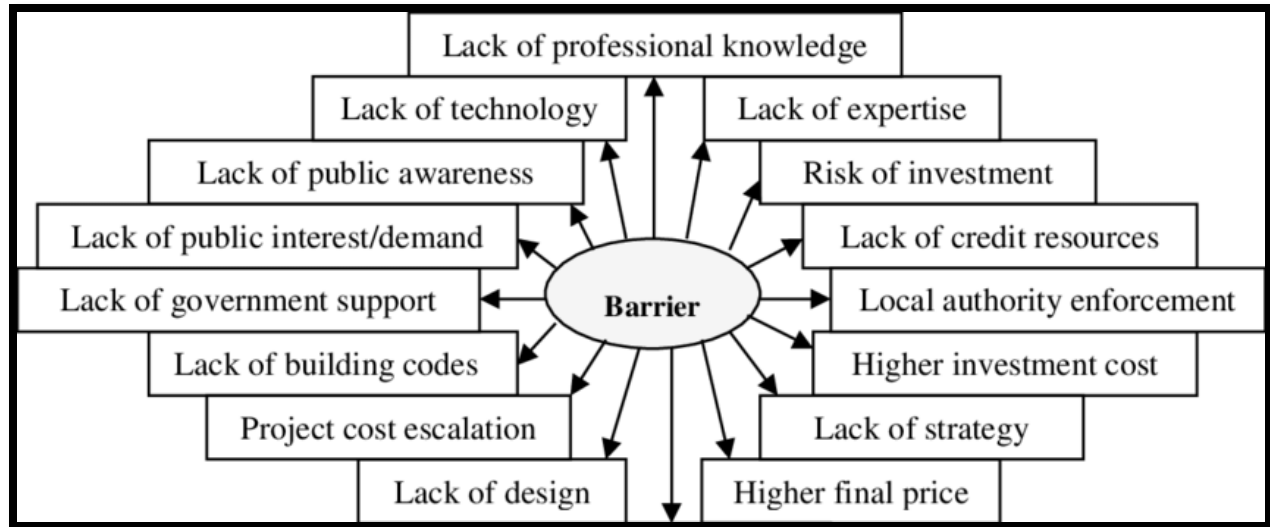


Figure 2.3: Barriers to sustainable practice

(Source: Kouhizadeh, Saberi and Sarkis, 2021)

External barriers refer to factors outside the organization that contribute to the non-implementation of sustainable practices. Where regulatory pressures are concerned, they can either act as an enabler or a constraint. However, it can be seen that rising complexity and variability of regulations makes compliance even more difficult and raises strict precondition in the supply chain. Competition is another major factor that hinders the growth of markets. FMCGs is a competitive industry, and businesses may feel that they are likely to be disadvantaged in the market due to the expenses that they are willing to incur to support sustainability.

2.5 Drivers of Sustainable Supply Chain Practices in the UK FMCG Sector

Many of the drivers for UK FMCG sector adoption of sustainable supply chain practices are a combination of pressures from regulatory requirements, consumer demand, CSR commitments, and competitive advantage. These drivers are increasingly shaping how companies in the sector strategize their operations to meet both environmental and social sustainability goals. **Regulatory pressure** would, however be one of the most important causes of the encouragement to practice sustainability. With the UK having some of the strictest environmental laws, the Environment Bill in the UK and the target of net zero carbon emissions by 2050 require to follow the legislations and become sustainable (Micheli et al., 2020). It forces companies to be green not to incur penalties and adhere to legislations such as EPR, placing responsibility for the whole lifecycle of products

on producers. Micheli et al. (2020) show, in a study of 169 Italian manufacturing firms, how regulatory pressures are one of the stronger drivers and significantly influence the relationship between green supply chain management practices and firm performance.

This can be underpinned with empirical evidence, but the authors contend that firms see these regulations as additional costs that add to the burden of the firm, which is a great debate on this tension between conformance and performance. For example, a 2020 survey for UK companies showed that 71% said that implementing new regulations was a reason for sustainability initiatives, while 45% cited the cost of compliance. Demand is the other significant driver that influences corporate behavior due to the growing influence of sustainability-conscious consumers.

Ever-increasing demand from UK consumers regarding product sourcing and environmental consideration has triggered the surge of ethically sourced products. In 2021, 60% of UK consumers stated that they were willing to pay more for a sustainable product (Statista, 2021a). **Consumer pressure** forces FMCG companies to have sustainable practices, such as ethical sourcing, reduction in carbon footprint, and waste minimization in supply chains (Kayikci et al., 2022). But further investigation into it shows that consumer demand may actually serve as an incentive to sustainability, even though it cannot scale often because of a "green premium" that consumers will not pay. It generates cleavage between consumer expectation and purchasing behavior. For example, consumers mention that they are more willing to purchase green products, but only 25% of them actually accept the premium, which should be paid, consistently; in this way, a gap arises between demand and the economic feasibility of sustainable initiatives (Kayikci et al., 2022). An emphasis on **CSR** commitments brings into play sustainability.

Many UK FMCG companies have adopted sustainability as part of their strategic CSR, and thereby both the driver and marketing tool to influence the brand image and customer loyalty (Roy et al., 2020). This is explained by the rising uptake of voluntary sustainability certifications such as Fair Trade, Rainforest Alliance, and Carbon Trust, which demonstrate the association's commitment to responsible and environmentally friendly stewardship. In the context of Bangladesh FMCG sector, integration of CSR initiatives was seen to work towards striking a chord between environmental sustainability and supply chain strategies, especially in developing markets where regulatory frameworks are lean (Roy et al., 2020). Finally, **competitive advantage** works as a strong catalyst since a company that can successfully operate on sustainable principles has an edge over others.

Micheli et al. (2020) still hold that embracing GSCM practices improves the environmental performance of a firm while enhancing its operational efficiency; thus, the company realizes cost savings and increased share in the market.

2.6 Effectiveness of Current Sustainable Practices and Their Challenges in UK FMCG Sector

The UK fast-moving consumer goods sector is important mainly because the sector has a large impact on the environment and society, and it is a critical area of study concerning the effectiveness of sustainability practices. Companies are adopting various sustainability initiatives: that includes ethical sourcing, carbon footprint reduction, waste minimization, and resource optimization. While these efforts align with global Sustainable Development Goals (SDGs), there must be a critical assessment of the actual effectiveness of these initiatives. However, although success is evident at the surface level, technological challenges and financial barriers exist as well as supply chain complexity that further arises from stakeholder misalignment, which does not allow for the complete achievement of these practices. A proper assessment of these practices reveals both their strengths and weaknesses. Among the sustainable practices is seen to be dominated by ethical sourcing in the UK FMCG sector. Such a practice aims at ensuring that the procurement of raw materials has a socially and environmentally responsible approach. According to Cammarano et al. (2022), companies implementing SDG-oriented supply chains have achieved relevant improvements in market performance as well as organizational efficiency.

Indeed, for example, 65% of companies agree that ethical sourcing has improved relationships with suppliers and consumer confidence, mainly through the procurement process. The push towards achieving the SDG goals has seen significant changes in sourcing practices, as companies such as Unilever and Tesco spearheaded the process of ensuring their supply chains are deforestation-free and absolved of human rights abuses. While responsible sourcing boosts the corporate image and reinforces customer loyalty, it is not without its challenges. Muhmad and Muhamad 2020, point out that the sustainable sourcing imposes a higher cost on most organizations to pay for their operations; it forces such organizations to spend more money than they can afford, particularly for SMEs. Companies that are very keen on high standards for sustainability would be expected to absorb 10-20% in purchases since the certified sustainable raw materials would normally attract a higher price, on average.

It would become difficult to remain competitively advantageous in the FMCG market, which is price-sensitive. The carbon footprint reduction is another major sustainable practice within the industry, including the reduction of the GHG emission level in supply chains. As Cammarano et al. (2022) indicates, the firm, focused on carbon footprint reduction, particularly the energy-efficient technology level, witnesses 15-25% improvement in its energy efficiency with cost and environmental benefits. For example, Tesco has managed to reduce its operational emissions by 40% since 2010 primarily through energy efficiency and investment in renewable energy. Still, considerable efforts are needed to achieve substantial carbon emission reductions.

Renewable energy and low-carbon technologies transition often requires significant upfront investment. For example, the economic cost to smaller firms of making the transition to a more sustainable energy regime will be prohibitively costly, and government incentives to abate costs are generally pitiful. In addition, despite the significant strides large FMCGs have made in controlling their operational emissions, the largest supply chain component-roughly half, both upstream in raw material extraction and downstream in product disposal-remains responsible for much of the overall emissions. According to the Carbon Trust's 2021 report, supply chain emissions can account for as much as 80% of a company's total carbon footprint, which suggests there is a need to make efforts at more holistic and cross-tier levels to reduce emissions along the value chain. This is particularly important when it comes to packaging waste. Biodegradable and recyclable packaging materials have been visible, in recent years, to be gaining traction within the UK FMCG sector. It is worth mentioning that "the companies adopting waste minimization policies have cut waste sent to landfill by 30 percent or more, mainly through changes in packaging materials and circular economy initiatives." according to Cammarano et al. 2022. For instance, Procter & Gamble (P&G) has pledged to make 100 percent of its packaging recyclable or reusable by 2030. The motivation behind this pledge is visible in the general trend of the industry, where 75 per cent of the UK FMCG companies have reported that they are moving towards achieving the waste minimisation targets by 2020. However, gigantic challenges exist. Currently, the most important barrier to green packaging adaptation involves technological considerations. Yet, many biodegradable materials have not yet reached the level of stability and economic feasibility that the traditional plastic product has; hence its inability to gain full acceptance.

Recycling and waste management differs between the various parts of the UK; therefore, there are inefficiencies in waste processing since only 50 percent of plastic packaging in the UK is recycled. This situation brings into perspective some of the challenges being faced in the quest for comprehensive waste reduction. According to research, Cammarano et al. (2022) explained that FMCGs companies that employed resource optimization strategies reduced the use of water by 20%, and also improved production efficiency up to 15%. Such outcomes are very indicative of the real realization in the implementation of sustainability into the processes in operations and are even more so notable in sectors like the food and beverages industry, where resources are high. Muhmad and Muhamad (2020) argue that supply chain complexity together with misalignment among stakeholders challenges the effectiveness of resource optimisation initiatives. For example, suppliers in emerging markets might lack the necessary resources or incentives to adopt sustainability standards as set out by their counterparts in the UK, giving way to gaps in the implementation of resource optimization strategies.

2.7 Strategies for Enhancing Sustainability in FMCG Supply Chains

The pressure on fast-moving consumer goods companies, be it in developed or emerging economies, is very great to adopt more sustainable practices within the business's supply chains. Significant progress in sustainability, however, requires the implementation of innovative strategies with greater focus than basic environmental compliance. Key strategies that can improve the levels of sustainability in supply chains for FMCGs include technological innovation, regulation frameworks, stakeholder collaboration, and driving business models by sustainability. Implementing these strategies in a timely manner can overcome current barriers and hasten the adoption of sustainable practices through the FMCG industry. Technology plays an ever-increasing role in sustaining this improvement within FMCG supply chains through better business efficiency and reduced environmental footprint. According to Roy et al. (2020), technological development, which includes DEA and FCM, can bring a systematic approach for the evaluation and prioritization of sustainable strategies.

This would allow an organization to analyze cause-and-effect relationships between sustainability strategies and the performance of its supply chains so that better-informed decisions would be in place. For instance, using DEA, FMCG businesses in Bangladesh could ascertain which of the sustainability strategies could be employed in such a manner that performance levels in supply

chain will go up, and thereby cut down energy consumption by 15-20% and waste generation by 10%, during the period of 2018-2020. These technologies are generally not taken up being highly cost-intensive at initial levels and also very complex, though their performance and benefits are very evident. Such an example can be cited in the UK FMCG sector where smaller firms may not be able to afford advance technologies. In addition, specialized skills needed for operating the systems can be a source of limitation on larger usages. Regulatory frameworks can present a critical enabler of sustainability by providing detailed guidelines and standards that FMCG companies can operate by. In emerging markets like Bangladesh, for environmental sustainability, regulatory support has been effective, wherein the strictness of regulations in controlling pollution has been the cause, claims Roy et al. (2020).

The UK saw some efforts in the form of regulatory programs like UK Plastic Packaging Tax, which came into operation in April 2022. This put pressure on FMCG companies to change their packaging strategy. It was the achievement of the sector, reducing plastic usage by 5% in one year. According to Ebrahim et al. (2022), for companies in South Africa, the linkage between environmental, social, and economic sustainability dimensions with regulatory constraints may be too complex to manage. FMCG manufactures are often under pressure due to financial strains in which economic sustainability will take a priority over environmental and social dimensions.

This means that while regulations are necessary to execute sustainability, they must be designed in a way that does not financially burden or harass smaller firms. A more balanced approach that offers flexibility, for example through phased implementation or tax incentives for early adopters, could improve compliance without compromising economic viability. And not least, the only way to achieve sustainable results is through collaborative efforts along the entire supply chain. According to Ebrahim et al. (2022), sustainability must be integrated into relationships within a supply chain, especially in the context of cooperation among manufacturing producers, suppliers, and retailers. This helps FMCG companies pool resources, share best practices, and deal with most sustainability issues collectively. For example, in South Africa, a joint initiative to reduce packaging waste was seen as an outcome of cooperation between FMCG manufacturers and retailers that, by 2021, reduced landfill waste by 12%. In the UK, collaboration by major FMCG players like Unilever with their supply chain partners has made great strides in reducing the environmental impact of raw material extraction through more sustainable sourcing strategies.

Although such success stories abound, many attempts at collaboration fail because the different stakeholding parties have priorities on sustainability misaligned with one another. Suppliers in emerging markets quite often do not have the infrastructure nor incentives necessary to satisfy the strict sustainability requirements from FMCG manufacturers in developed economies. However, sometimes the problem lies in the fact that customer expectations do not closely align with corporate sustainability goals; in fact, according to Ebrahim et al. (2022), another added complexity in supply chain integration. Sustainability may become a strategic imperative for FMCG companies who may look to scale up their sustainability efforts as part of the business models. According to Roy et al. (2020) businesses would move from traditional profit-making modes to sustainability-based ones, thus moving environmental and social considerations into the core operations of business. For instance, companies can adopt the circular economy model which emphasizes the concept of reducing waste and conserving and rejuvenating the materials. In UK, FMCG companies such as Procter & Gamble adopt this model. As quoted in Britain's commitment to ensure that all their packaging will be either recyclable or reusable by 2030.

2.5 Theoretical Framework

Sustainable supply chain management (SSCM) is based on several theory of Practical theories that help to measure SSCM In the context of fast-moving consumer goods (FMCG) industry. The theorem of TBL is also essential in SSCM while focusing on the economic, environmental, and social aspects of a business organization. This theory argues that business organizations must create value not only, for shareholders' capital goods but also for society and the natural ecosystems (Kouhizadeh, Saberi and Sarkis, 2021). The TBL framework has a strong influence on FMCG, encouraging companies to balance the approach toward evaluating corporate performance in terms of their economic, environmental, and social performance. Companies in this particular industry are slowly growing with increasing awareness toward their responsibility for ecological as well as social impacts, thus the TBL framework becomes a guidance tool to improve their sustainable practice across operations (Lovisceck, 2020). The idea of a circular economy pushes this forward even further by calling for a systemic change from a linear "take, make, dispose" model to one that is centered on the reuse, regeneration, and reintroduction of materials.



Figure 2.4 Triple Bottom Line

(Source: Pandiangan et al. 2022)

Stakeholder theory also has an important function in SSCM, pointing to the fact that all individuals and organizations involved in business processes should be taken into account including suppliers, customers, employees and communities. FMCG companies need to engage with stakeholders to understand and address sustainability concerns throughout the system, according to this theory.

The resource-based view (RBV) theory posits that firms can attain superior operational performance through the management of resources and capabilities within the firm. In the context of SSCM, this means that FMCG companies can utilize sustainability practices to create competitive advantage, improve brand image and ultimately reduce costs through sustainable resource management (Pandiangan et al. 2022). The RBV theory has a significant impact on SSCM in FMCG because it underscores the strategic utilization of internal resources and capabilities. In that regard, the implementation of sustainability practices in all the supply chain processes right from procurement to disposal will aid FMCG companies in gaining a competitive edge over others. They will also increase their brand reputation and enhance operational efficiency. This holistic view ensures not only that sustainability goals are aligned to more comprehensive business objectives but also that supply chain actors interact cooperatively with each other to effectively and efficiently make use of the resources available (Lubis, 2022). This is likely to therefore

improve overall supply chain performance and prevent cost increases as sustainable resources are managed in better ways.

This approach helps in enhancing the cooperation of all the supply chain partners and guarantee the achievement of sustainability objectives. Another important tool in SSCM is the **Life Cycle Assessment (LCA)**, which consists in the evaluation of all environmental impacts related to the entire life cycle of a product. The use of LCA can aid FMCG organizations in determining the critical impacts that need to be managed and the decisions that can be made to improve sustainability.

2.6 Literature Gap

Many studies have examined sustainability issues in FMCG supply chains; however, there are still significant research gaps. One critical area that remains underexplored is the long-term economic impact of sustainability, despite the observed short-term cost reductions and process improvements. Relatively little is known about how sustainability efforts enable strategic value creation and competitive advantage (Kaplan, 2023). Awareness of these long-term effects is necessary for encouraging more firms to adopt sustainable policies. Another gap is the absence of substantial emphasis on the social aspects of sustainability. Specifically, most research focuses primarily on the environmental and economic dimensions of sustainable supply chain management, largely neglecting the social implications. More research is required in relation to the implications of sustainability initiatives on employment relations, community health, and social justice, especially in developing countries where many FMCG supply chain operations occur.

2.7 Conceptual framework

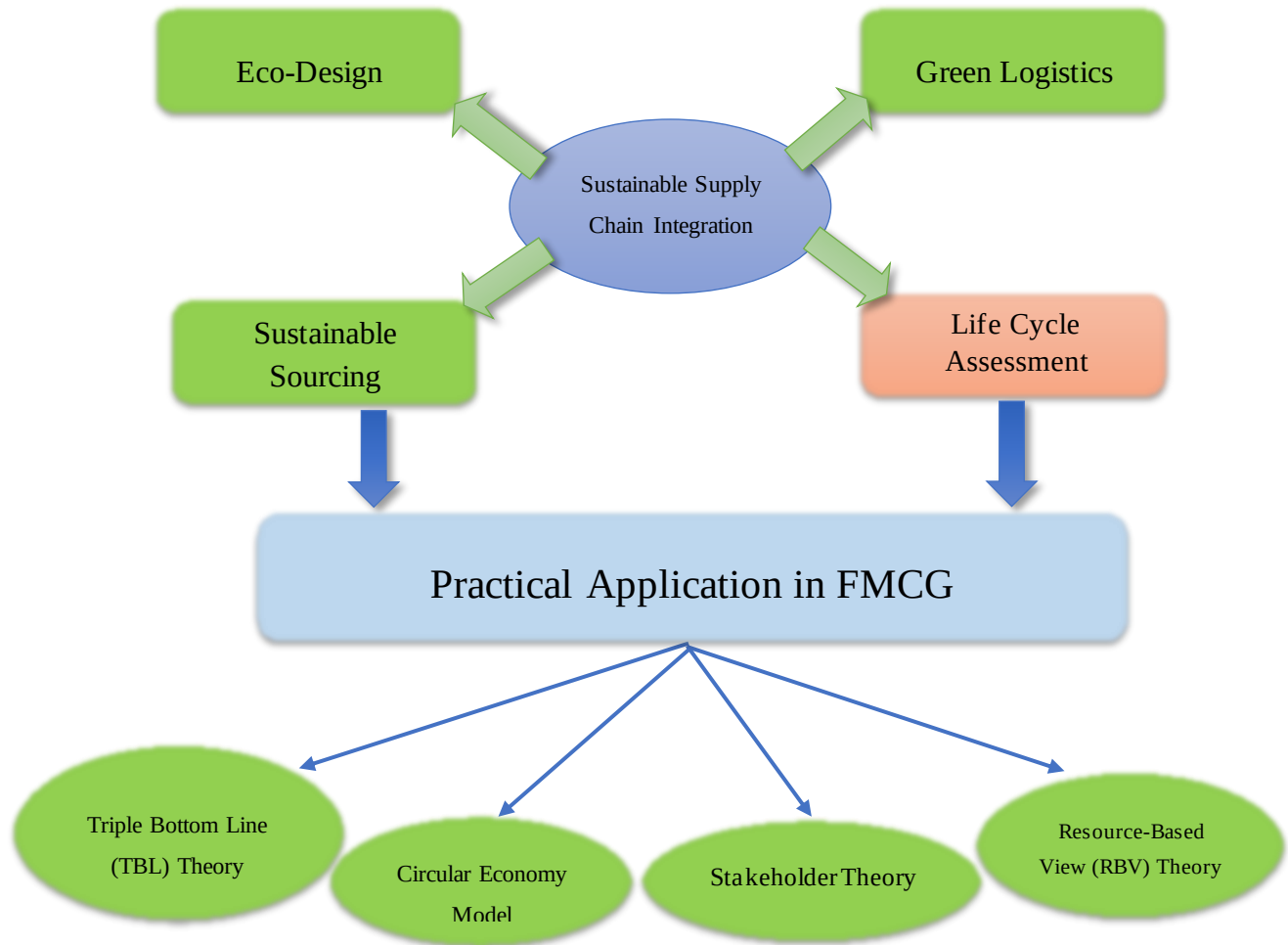


Figure 2.5: Conceptual Framework

(Source: Self-Developed)

The conceptual framework encompasses selected sustainability ideas and theories promoting the study of sustainable practices among the UK FMCG value chains. **Eco-Design**, **Green Logistics**, and **Sustainable Sourcing** act as pragmatic strategies for the minimisation of environmental impact and financial considerations. This paper discusses the **Life Cycle Assessment (LCA)**, a comprehensive and structured tool for identifying the environmental impacts of products from their conception to their disposal, hence making better decisions possible. Therefore, **Sustainable Supply Chain Integration** is essential in order to incorporate sustainable principles for every activity in the supply chain.

The following is an elaboration of the foundational theories within which this framework operates. The **Triple Bottom Line (TBL) Theory** of sustainability lays emphasis on equal consideration of environmental, social, and economic variables. The **Circular Economy Model** aims at implementing the regenerative approach of using resources rather than merely consuming them, reducing waste and utilising closed-loop systems. **Stakeholder Theory** focuses on all the people who stand to be impacted by supply chain choices so that sustainability is accepted by many and implemented fully. Finally, Liberating Views' **Resource-Based View (RBV) Theory** emphasises on managing a firm's resources and capabilities to achieve a competitive and sustainable market advantage. When taken together, these concepts and theories offer a sound theoretical foundation for dissecting and navigating sustainable initiatives within the realm of FMCG.

2.8 Summary

There are social advantages that are associated with sustainability within the supply chain of commodities. Innovative evidence regarding their capacity in the reduction of carbon emissions, enhancing the performance of organisations, as well as the treatment of societal dilemmas are emphasised. Economic impacts in more extended periods, social issues, and the application of technology amplifying sustainability among the FMCG industries. Studying the instances of the emerging technologies, including Blockchain & AI, provide a better insight into the supply chain transparency and efficiency. Investigating how these technologies enhance the factors that enhance sustainability may also bring more areas for advancement and understand why sustainability should be sought in the FMCG industry better.

Chapter 3: Research Methodology

3.1 Introduction

This chapter provides a detailed account of the methodology employed to critically analyze sustainable practices within the global supply chains of the UK FMCG industry. It begins by outlining the research design, including the descriptive and qualitative methods utilized. The chapter discusses the philosophical approach of positivism and the deductive reasoning that guided the investigation. It also elaborates on the rationale of the methodological approaches: semi-structured interviews with stakeholders and archival research.

3.2 Research Philosophy

According to the fundamental principles of positivism that form the basis of this study, knowledge is obtained through experience (Park, Konge and Artino, 2020). This approach is based on the idea that there is an objective essential truth out there, waiting to be discovered through the application of the scientific method. As a result, positivism facilitates an organized method for analyzing sustainable practices in the global supply chain of the UK FMCG industry that is based only on the factual data.

Ontological Considerations:

Positivism ontologically assumes that there is an objective reality that is perceivable and exists regardless of people's perception or their understanding of it. This viewpoint correlates with the research objective of evaluating sustainable activities as tangible objectives that can be quantitatively compared (Ugwu, Ekere and Onoh, 2021). The research solely emphasizes the measurable components of sustainability, including environmental concerns and ethical acquisition. By following a positivistic paradigm, the research views these elements as real and factual, which in turn eliminates subjectivity as a critical component of the analysis.

Epistemological Considerations:

Positivism in epistemology sought to advance knowledge through observation and utilization of scientific means. This approach aligns with the research's objective of being data-focused as it orients the research toward the gathering of qualitative data (Omodan, 2022). The focus is on gaining knowledge from the findings of the study and employing structured procedures to examine

these findings. With positivism, the results proposed are solid facts that can easily be verified rather than theories in the minds of the researchers.

3.3 Research Approach

The deductive approach that forms the basis of this research involves developing hypotheses from theories that are already in existence to explain a given phenomenon. This approach begins with theory or framework hypothesis testing then moves to the level of an empirical investigation (Casula, Rangarajan and Shields, 2021). The deductive approach is useful since it forms part of the applicative arm of a research study because established theories are applied in the given study to analyse and test their relevance and application concerning sustainable practices in aggregate UK FMCG supply chains.

Role of Deductive Approach:

The deductive approach assumes salience as it is responsible for formulating hypotheses from the proposed theories. First, drawing from the existing theories of sustainability and supply chain management, the potential hypotheses concerning drivers, effectiveness, and the barriers to sustainable activities are developed (Young et al. 2020). This makes the approach important as it helps to ensure that the investigation is done based on a particular theoretical framework which helps in analysing how the theories hold in the case of the UK FMCG industry.

Alignment with Research Objectives:

This approach corresponds with the research objectives and questions well due to its structure in hypothesis testing. For instance, the approach aids in estimating the outcomes of the current sustainability management practices by formulating hypotheses from the theories of environmental management and ethical sourcing. Alleging Hypotheses on the organization and supply chain constraints, it also supports the objective of testing for sources of challenge in integrating sustainable practices. This alignment ensures that the study's objectives and aims are not deviated from when conducting the research.

Process of Developing Hypotheses:

Based on the conceptual framework of sustainable supply chain management, hypotheses are being formulated and developed. For example, there are general theories on the positive impacts of

sustainable practices and the negative impacts that prevent their adoption that form the general hypotheses (Siponen and Klaavuniemi, 2020). Subsequently, these hypotheses are subjected to empirical testing to provide a comprehensive examination of the extent to which these theories have been valid in the context of the UK FMCG supply chains. This process makes the research both theory-based and verifies the findings with data collected from the study.

3.4 Research Design

Descriptive research design is used in collecting and analysing data for the purpose of describing the nature of phenomena. This design's purpose is to capture the details of the subject area completely and also to record the nature of the subject in the current society without changing the variables (Siedlecki, 2020). When used in this research study, descriptive research design is most suitable when conducting an evaluation of sustainable practices in the UK FMCG supply chain.

Relevance to the Study:

For this study, it was imperative to use descriptive research design due to the reason that this type of approach helps to determine the current state of affairs concerning sustainability practices. Consequently, with the help of this design, the accumulated data regarding various aspects of sustainability like the environmental impact, ethic issues of supplies, and resource consumption can be collected and visualized. This approach provides detail on how these practices are brought out and the level of achievement.

3.5 Methodological Choice

Qualitative research was chosen for this study because it is more appropriate for exploring the nature of complex phenomena like sustainable practices in UK FMCG supply chains. This methodological approach is most suitable in these contexts given the complexity and multi-dimensionality of sustainability concept which may have many meanings.

Appropriateness for Exploring Complex Phenomena:

Sustainability practices focus on a number of areas such as information on environmental impacts, supply chain and organisational initiatives. These are multifaceted factors that require additional understanding of how they work and how they affect biologic and psychologic processes (Hennink, Hutter and Bailey, 2020). In this way, qualitative research is beneficial for offering a

more thorough insight into such practices since it also contains the specific details that can often be overlooked in surveys or questionnaires. It aids in understanding how sustainability is integrated into the supply chain work and what opportunities and challenges are seen.

Understanding Stakeholder Perspectives:

The experiences of key stakeholders in the UK FMCG business had to be established by conducting interviews with them. Qualitative techniques comprised of, Interviews comprising of open-ended questions to uncover the level of sustainability knowledge among the stakeholders and how they are implementing it. This method helps explain their decision-making processes, barriers, and procedures. Assessing the efficiency of present methods and identifying areas for improvement requires understanding these perspectives.

Justification for Thematic Analysis:

The purpose of thematic analysis is to find patterns and themes in extracted data. This approach organises qualitative data and helps extract usable information from a lot of it. Thematic analysis helps explain how circumstances and experiences affect sustainable practice integration and results by identifying recurring themes and patterns (Braun and Clarke, 2023). It supports mechanically analysing qualitative data to ensure extensive and sufficient study outcomes.

3.6 Research Strategy

Interviews:

The consideration of respondents also forms a part of the research strategy and it encompasses five non-recorded telephonic semi-structured interviews with key stakeholders in the UK FMCG Industry. The selection of semi-structured interviews themselves is also ideal due to the specification of crucial topics on sustainable behaviour while giving the researcher the chance to explore each participant's views in detail (Langley and Meziani, 2020). The questions aim at getting detailed responses on ideas and practices of sustainability, current measures and practices used, problems encountered in implementing them, and how they can be overcome.

Selection of Stakeholders:

The five key players were chosen because they have a lot of knowledge and experience with sustainability in the UK FMCG industry. The factors for choosing are:

- **Role and Influence:** Stakeholders with important roles in creating or adopting sustainable practices within their organisations.
- **Expertise:** Professionals with a lot of information about strategies, challenges, and business trends related to sustainability.
- **Diversity:** Different FMCG businesses' points of view (for example, producers, wholesalers, and stores) to give a full picture of the industry.

This selection guarantees that the collected data is diversified in terms of the FMCG supply chain and latent sustainability practices from a range of perspectives.

Archival Research:

Interviews are complemented by the archival research method in order to gather more primary data (Hennink, Hutter and Bailey, 2020). Information derived from the secondary research incorporates industry reports, company documents, and sustainability reports. It thus uses historical and comparative data on sustainability practices as provided by these sources to allow for a more informed analysis.

Complementary Role:

To a certain extent, archival data aligns with the primary data by presenting more evidence of sustainability past and ongoing practices, trends, and results. Since it provides an overview of the current issues regarding sustainability in the industry, it aids in the verification and contextualisation of interviews. The integration of secondary data enriches the analysis by incorporating documented evidence and trends, thereby supporting a more nuanced evaluation of sustainable practices.

Criteria	Inclusion	Exclusion
Type of Source	Industry reports, company sustainability reports, academic articles, and case studies	Personal blogs, non-peer-reviewed articles, non-industry-specific publications
Publication Date	Recent reports and publications (e.g., within the last 5 years)	Outdated sources (e.g., published more than 5 years ago)

Relevance	Sources directly related to sustainable practices in FMCG supply chains	Sources not related to FMCG or sustainability practices
Credibility	Peer-reviewed journals, reputable industry publications, authoritative reports	Unverified sources, non-academic or non-professional publications
Geographic Focus	Sources focusing on the UK FMCG sector or global practices relevant to the UK context	Sources with a focus on regions or industries outside the FMCG sector or UK context
Data Quality	Sources providing accurate, comprehensive, and up-to-date data	Sources with incomplete, inaccurate, or outdated information

Table 3.1: Inclusion Exclusion Criteria

(Source: Self Developed)

In summary, the research strategy combines semi-structured interviews with key stakeholders and archival research to provide a comprehensive analysis of sustainable practices in the UK FMCG supply chains. The combination of primary and secondary data sources ensures a well-rounded evaluation of current practices, challenges, and opportunities for improvement.

3.7 Time Horizon

This type of research is defined by the fact that data is collected at different time periods in order to capture shifts (Hunziker and Blankenagel, 2024). It is especially helpful in identifying the dynamics in sustainable activity within the UK FMCG market. Longitudinal encourages the acquisition of information concerning the change process of sustainability initiatives in the light of internal and external surroundings.

Relevance to Sustainable Practices:

Applying the longitudinal time horizon allows to identify emerging patterns of sustainable practices in the FMCG supply chains in detail (Linnhoff, Smith and Smith, 2020). Sustainability management accounting helps in tracking the progress of sustainability activities, identify emerging trends and determine the impact of various factors on these practices in organizations. It is important here because practices of sustainability in the FMCG industries are not permanent and

they are likely to change over a certain period due to acts of parliament, market forces and inventions.

Implications for Capturing Dynamic Aspects:

Thus, the longitudinal perspectives provide a more dynamic an image of UK FMCG supply chains that is able to capture the time dimension of sustainability. It enables the research to document also the way in which such practices have evolved and will evolve in future. This perspective is helpful in evaluating that which would be workable and sustainable, and in analyzing organization's reactions to challenges and creating patterns and outcomes in the long run. In this way, the research can observe what is occurring with time and present a clear picture of the factors that define sustainability and other possible recommendations for improvement.

3.8 Data Analysis

Analysis of Interview Responses

Qualitative interviewing encompasses a rigorous process of assessing stakeholders' beliefs regarding sustainability within the context of the UK FMCG industry. This is done through a descriptive analysis in which the main points that emerged from the interviews are outlined to identify insights pertaining to drivers, effectiveness, and challenges towards sustainability. After this, thematic analysis is then used to analyse patterns and themes (Risi, 2022).

Analysis of Archival (Secondary) Data

This method involves the identification and analysis of themes conducted on secondary data from a variety of industry segments, sustainability reports of various organizations and in journals. This involves two processes; one is the initial scan over the secondary data and the second process involves identification of segments in the scanned data which contain information on components of sustainability (Lalanne, 2024). Last but not the least, themes are derived by Boolean combining of codes under generic themes such as best practices, rules and regulation among others. Such thematic analysis makes it possible to identify the right trends and patterns from the secondary data on sustainability practices. This reduces the number of themes and makes the analysis more stringent and consistent with the goals and aims of the study.

Integration of Data

Data triangulation and data synthesis are used when analysing interview responses, as well as other secondary sources of data. In the next step of the framework, the gaps and/or the match between the thematic results from the secondary data analysis and the interview findings are recognized. The extent of such a procedure is to enhance the credibility of the outcome and the validity of the assessment. These ideas when combined give a fair idea of sustainability practices keeping in mind the perspective of the stakeholders as well as the data available from the industry.

3.9 Sampling Strategy

Sampling for Interviews

Regarding the interview, the sampling procedure was to look for **12** key stakeholders operating in the UK FMCG industry to yield fresh and rich insights on sustainability. The participants were identified by their positions in sustainability decisions, which used sustainability managers, supply chain directors, and consultants (Mweshi and Sakyi, 2020). This criterion involved their work and positions in the integration and assessment of sustainability together with decision-making. This sample size was deemed sufficient to ensure that, while various opinions could be represented, participants would have enough time to elaborate on their responses.

Secondary Data

The durability and dependability of secondary data sources determined their identification. The available sources which were used to include: Industry reports of the specific sector and some of the selected firms' sustainability reports; and academic journals that offer relevant information on trends, practices, and data of the FMCG sector. These sources were then reviewed for credibility, relevance, and temporal availability to ascertain whether the data acquired would promote a robust analysis.

3.10 Research Ethics

The interview stressed privacy and secrecy to protect the respondents' privacy who took part. These steps consisted of referring to participants by pseudonyms and making sure that any reports and analyses contained no participant identifying data. The interview data was also made anonymous so that the participants' names would not be revealed. Only the study team had access to it. All the interviewees provided informed consent to be interviewed before the interviews began. This involved offering clarification on the goals of the research, how data will be utilised,

and highlighted that participation was going to be done on a voluntary basis. An informed consent form was presented to the participants, and each participant was supposed to sign the form to show that he or she understood the research and agreed to participate in the research. It was also ensured that ethical standards were upheld through the conduct of non-recorded semi structured interviews without forcing the participants and also keeping their identities confidential. Participants were informed that their responses will be used for research purposes only and that they could opt out of the study at any time without any consequences.

3.11 Summary

The chapter on methodology described the overall research plan and the methods used to examine sustainable practices in UK FMCG supply chain environments. Positivist philosophical underpinnings were employed in the study whereby a deductive method was employed to test theories. Assessing practices required descriptive and qualitative research approaches. Integrating thematic secondary data analysis with descriptive interview replies provided a complete picture. Confidentiality, informed consent, and respectful treatment of participants ensured ethical sampling of important stakeholders and reputable secondary sources. Together, these methods enable a full and robust review of FMCG sustainability practices.

Chapter 4: Findings and Analysis

4.1 Introduction

This Chapter 4 provides findings and analysis of the qualitative study conducted on the sustainable practices in the UK FMCG supply chains. It looks into four specific questions pertaining to the understanding of the factors that drive the adoption of sustainability, the effectiveness of the existing practices, the barriers in functioning and the possible ways out. The information was obtained through reaching out to 10 respondents employed in the industry as managerial staff, as supply chain managers, sustainability officers and operational managers. Their observations emphasize the regulatory, consumer and corporate social responsibility drivers behind sustainability initiatives in the context of the practical opportunities and prospects for improving sustainability in the FMCG supply chain management.

4.2 Primary Qualitative Data Findings

[Link to consent form of participants](#)

Citations	Keywords	Theme Name
Participant 3	• Legal obligations	Drivers of Sustainable Practices in UK FMCG Supply Chains
	• Emissions regulations	
	• Waste management compliance	
Participant 2	• New waste management laws	
	• Packaging regulations	
	• Rethinking design	
Participant 1	• Consumer demand	
	• Sustainability focus	
	• Buying behavior	
Participant 4	• Corporate Social Responsibility (CSR)	
	• Aligning values	
	• Reputation enhancement	
Participant 8	• Market competitiveness	
	• Brand loyalty	
	• Consumer attraction	

Participant 4	• Awareness of sustainable practices	Effectiveness of Current Sustainable Practices in Achieving Environmental and Social Goals
	• Renewable energy sources	
	• Carbon footprint	
Participant 5	• Energy-efficient technologies	
	• Operational costs	
	• Sustainability objectives	
Participant 3	• KPIs tracking	
	• Supplier sustainability criteria	
	• Supply chain transparency	
Participant 11	• Support for small suppliers	
	• Ethical labor practices	
	• Resource-intensive compliance	
Participant 10	• Holistic approach	
	• Neglected aspects of sustainability	
	• Broader environmental goals	
Participant 12	• Financial constraints	Challenges in Implementing Sustainable Supply Chain Practices
	• High costs	
	• Integration complexity	
Participant 5	• Supplier commitment	
	• Competency differences	
	• Standards compliance	
Participant 3	• Economic volatility	
	• Sustainability deprioritization	
	• Operational realities	
Participant 9	• Coordination challenges	
	• Communication issues	
	• Delayed implementation	
Participant 5	• Communication routines	

	• Trust-building • Collaborative efforts	Strategies to Enhance the Adoption and Effectiveness of Sustainable Practices
Participant 3	• Training and resources • Stakeholder alignment • Commitment discussions	
Participant 4	• Innovations in logistics • Packaging advancements • Emissions reduction	
Participant 8	• Collaboration with NGOs • Industry partnerships • Tackling sustainability challenges	
Participant 1	• Clear achievable goals • Public transparency • Trust and accountability	
Participant 6	• Social impact KPIs • Holistic sustainability approach • Accountability mechanisms	

Table 4.1: Thematic Coding Table

Research Question 1: What are the primary drivers influencing the adoption of sustainable practices within UK FMCG supply chains?

Theme 1: Drivers of Sustainable Practices in UK FMCG Supply Chains

The adoption of sustainable practices within the UK FMCG supply chain include the legal requirements, consumer expectations, CSR and competition. According to figures obtained from the participants the role of the regulatory bodies as well as government policies towards the formulation of sustainable programs cannot be overemphasized. Managers face legal obligations, including carbon emissions reduction and waste management, which set legal restrictions that dictate organizational behaviour. Participant 3 said ***“We have to comply with both local and international regulations, especially regarding emissions and waste management”***. This view is in concordance with Participant 2 who said ***“new waste management laws and packaging***

regulations have forced us to rethink how we design and produce our products. Compliance with these regulations is a primary driver of our sustainability initiatives.”

Consumer demand was also estimated to be a significant force acting throughout the responses referring to how companies adjust to higher expectations of consumers in terms of environmental sustainability. Participant 1 concurred saying that consumers nowadays have shifted their focus towards sustainability and this changes their buying behaviour thus putting pressure on organizations to align with these values. This is necessary to justify their continuous efforts in sustaining brand image and establishing itself in its competitive market where clients respond positively to companies visibly practicing ethical sourcing, efficient waste management and minimizing carbon footprints.

CSR adds flavour to the ethical motivation for sustainability a concept well advanced for implementation. Concerning CSR, as a key motivator influencing internal practices to be in line with societal expectations. Participant 4 made the following statement, *“CSR is significant as it aligns our business practices with our values and enhances our reputation. It also helps in setting expectations for suppliers and stakeholders, ensuring that our supply chain operates in a socially responsible manner.”* CSR frameworks help organizations adjust the concept of sustainability to their primary business model, which in turn, cements strategic management priorities. Altogether, the diverse drivers such as the regulatory environment, consumers, CSR and the competitive environment constitute a complex system that prompts the FMCG firms to embrace sustainability. Participant 8 added, *“There’s a clear link between sustainability and market competitiveness. Companies that embrace sustainable practices tend to attract more customers and enhance their brand loyalty.”* Hence, the combination of these different drivers, which includes the regulatory environment, consumer demand & CSR, and competitive pressures, creates a scenario which drives the FMCG sector towards sustainability.

Drivers for adopting sustainable practices for UK FMCG supply chains are myriad, ranging from regulatory compliance to consumer expectations, CSR, and competitive pressures. According to **Participant 11, "Our motivation stemmed from rising consumer awareness, regulatory compliance, and the need for a positive brand image."** Several responses reflect that understanding, including that today's consumers require brands to be more accountable and sustainable. More importantly, the trend in consumer preference is measurable; Participant 12

observed, "Recent studies show that 70% of consumers are willing to pay a premium for sustainable products," thereby indicating a business case for companies to have their products aligned with sustainability goals. The regulatory environment is also a significant determinant of sustainable practices. Participants highlighted the fact that compliance with newly developed EU standards for packaging waste and emissions forces companies to innovate and evolve. As **Participant 11 noted, "Compliance with EU regulations, particularly on packaging waste and emissions, has forced strategic changes in our supply chain toward sustainability."** Such regulatory provisions set minimum benchmark standards and force business houses to utilise greener technologies and practices more responsively. CSR initiatives reinforce such forces too.

Research Question 2: How effective are current sustainable practices implemented by UK FMCG companies (e.g., ethical sourcing, carbon footprint reduction) in achieving environmental and social sustainability goals?

Theme 2: Effectiveness of Current Sustainable Practices in Achieving Environmental and Social Goals

The stewardship of sustainable initiatives in the value chains of UK FMCG companies differ based on the targeted environmental or social concerns. The survey shows that there is general awareness on sustainable practices like sourcing for materials and products sustainably, reducing carbon emission and controlling wastes but the implementation has not yielded the expected results at all levels. Participant 4 stressed ***"Environmentally, transitioning to renewable energy sources has significantly reduced the carbon footprint for several clients"***. On the other hand, Participant 5 noted ***"Implementing energy-efficient technologies in our production facilities has reduced our carbon footprint and lowered operational costs"***.

Nevertheless, there are some signs of positive change, but it should be admitted that contemporary efforts have a rather moderate success in reaching sustainable development objectives in the long run. Participant 3 noted ***"Common KPIs include reductions in carbon emissions, energy usage, water consumption, and waste production. Companies also track the percentage of suppliers meeting sustainability criteria and improvements in supply chain transparency"***. The phenomenon suggests that due to the complexity of industries and globalization of supply chains, sustainable practices work in an island; there are usually cases where sustainable practices have been successful in some areas of operation but not proven effective in others. For instance, during

the interviews, Participant 1, observed ***“Smaller suppliers sometimes struggle to meet our sustainability criteria, particularly regarding ethical labor practices. We often need to provide support and resources to help them comply, which can be time-consuming and resource-intensive”.***

Such measures that are confined to the carbon reduction might help to hide other sustainability issues. Participant 4 said he sees risks in company’s excessive targeting of carbon numbers missing all the other aspects of sustainability including water usage or loss and degradation of natural habitats. Participant 10 further added, ***“We need a holistic approach to sustainability; otherwise, we risk neglecting important areas that also contribute to our environmental and social responsibilities.”***

This lopsidedness is somewhat worrisome since it indicates that even though carbon-centric projects may be easy to articulate, and to some extent measure, there are still many aspects of sustainability that can be conducted and remain under discussed. This signifies that the commitment of UK FMCG companies to sustainable practices provides an interesting interplay of commitment and execution towards achieving environmental and social sustainability targets. While awareness on sustainable practices, such as ethical sourcing and carbon footprint reduction, are apparent, such strategies lack proper execution most of the time. **As noted by Participant 11: “We are using life cycle assessments to measure carbon footprint, and we have improved it by 25% over five years.”** This quantitative measurement draws attention to the possibility of measuring in relation to progress; however, it underlines the demand for more comprehensive measures than carbon footprint. The participants also complained about the holistic nature of the sustainability initiatives. **Participant 12 said, “We have regular audits and sustainability assessments. We have seen reductions of our carbon footprint by 20 percent for the past three years.”** But all these reductions don't forward the issue that other important factors of environmental stewardship, such as water usage, biodiversity conservation, and labor ethics, get bypassed. Substantiating the need for a holistic approach to sustainability, **Participant 10 declares, “We need a holistic approach to sustainability; otherwise, we risk neglecting important areas that also contribute to our environmental and social responsibilities.”** Such an attitude prompts a call to UK FMCG companies to further elaborate on and implement a more integrated strategy encompassing multiple dimensions of sustainability.

Research Question 3: What are the key challenges faced by UK FMCG companies in implementing sustainable supply chain practices?

Theme 3: Challenges in Implementing Sustainable Supply Chain Practices

Sustainable supply chain practices in UK FMCG Industry are not something that can be easily achieved because there are several barriers such as: The inability to generate more funds for its implementation, Lack of supplier commitment, and the involvement of more complex supply chain management strategies. Participant 2 stated ***“Barriers include high costs associated with new technologies and materials, resistance from some suppliers, and the complexity of integrating sustainability into existing processes”***. Participant 3 also highlighted the financial challenge, stating, ***“Financial constraints can limit the scope and speed of implementing sustainability measures. Companies may struggle to justify the initial costs of sustainable technologies or materials, even if the long-term benefits are clear.”***

Supplier engagement can be considered another important challenge. For instance, participant 5 stated that because the suppliers may differ in competency, especially the small-scale ones, it is challenging to ensure compliance with sustainable standards across the chain. Adherence to environmental and ethical standards entails resource, training and sometimes capital which most suppliers might not afford. Participant 1 pointed out ***“Smaller suppliers sometimes struggle to meet our sustainability criteria, particularly regarding ethical labor practices. We often need to provide support and resources to help them comply, which can be time-consuming and resource-intensive.”***

These challenges are compounded by the increasing complexity of the global supply chains. Participant 2 claimed ***“Economic volatility, particularly during downturns, can shift the focus away from sustainability. When margins are squeezed, sustainability initiatives are sometimes deprioritized as the company focuses on survival and profitability.”*** Additionally, Participant 3 noted, ***“Integrating new practices into existing supply chains can be complex and resource-intensive.”*** These linkages of problems pose severe barriers for corporations that try to implement sustainable supply chain management practices. Participant 9 further elaborated, ***“We face significant challenges in coordination and communication across different regions and suppliers, which can delay the implementation of sustainable practices.”***

The challenges that UK FMCG companies face in the implementation of sustainable supply chain practices are multiple, striding far beyond financial restrictions and supplier outreach. The greatest challenge is really one of complexity required to turn an existing supply chain management strategy into a real play of effective sustainability principles. **Participant 11 said, "Sharing best practices and resources has helped to create a culture of sustainability encouraging joint problem-solving."** There is an imperative for effective collaborative communication as well as common goals among such diverse stakeholders within the supply chain, which is however difficult to achieve in such a dynamic marketplace.

Dependency on suppliers' competencies: It is a concern as one of the **participants has said, "The engagement of suppliers is tough, especially if they are not equipped to support our sustainability expectations."** This could compromise the overall effectiveness because the companies simply cannot rely entirely on their own capacities. Several levels of compliance among the suppliers will not support such reliance. As Participant 2 noted, "Economic volatility-especially during periods of recession-will sometimes divert the attention from sustainability. When margins get compressed, sometimes such sustainability initiatives are deprioritised as the company focuses on survival and profitability." This prioritization of short-term financial stability over long-term sustainability goals reflects a larger trend in which businesses may struggle to balance ethical commitments with operational realities.

Research Question 4: What strategies can be recommended to enhance the adoption and effectiveness of sustainable practices within UK FMCG supply chains?

Theme 4: Strategies to Enhance the Adoption and Effectiveness of Sustainable Practices

To overcome these challenges and improve the impact of sustainable initiatives on the members of the UK FMCG supply chain, the businesses are using measures. Engagement with suppliers and other stakeholders is often cited as one of the most important approaches to change. According to participant 5, ***"It is crucial to have routines about communication and collaborations to foster trust and common understanding that both companies and suppliers are committed to working towards the same sustainability objectives"***. This sentiment is echoed by Participant 7, who stated, ***"Regular dialogues with suppliers not only enhance compliance but also enable us to learn from each other's best practices."***

Another approach highlighted by Participant 3 is *“Providing training and resources to suppliers helps them meet sustainability standards, and engaging stakeholders in sustainability discussions ensures alignment and commitment”*. Participant 10 emphasized this further by saying, *“We need to invest in our suppliers’ capabilities. By enhancing their skills and knowledge, we create a stronger supply chain that can achieve sustainability goals together.”*

Innovation also plays a critical role in addressing sustainability concerns. Participant 4 stated *“Innovation is crucial for overcoming challenges. For example, advancements in packaging materials have allowed us to reduce plastic use, and innovations in logistics have improved our supply chain efficiency and reduced emissions”*. Participant 5 also highlighted advancements in technology: *“Advancements in packaging technology have allowed us to reduce plastic use, and new supply chain management tools have improved efficiency and transparency”*. Participant 9 further added, *“Investing in R&D for sustainable alternatives is essential. It’s not just about compliance but about leading the industry in sustainability.”*

Collaboration and partnerships are also identified as key strategies. Participant 8 stated, *“Collaborating with industry peers and NGOs can amplify our efforts and help us tackle sustainability challenges more effectively. Together, we can drive more significant changes.”*

The other identified strategies include collaboration and partnering, innovation, and having goals that reflect sustainability and specific Key Performance Indicators. Participants 1 advised *“Starting with clear, achievable goals... public transparency in reporting sustainability progress can foster trust and accountability”*. Participant 6 emphasized this point, stating, *“KPIs should reflect not only environmental targets but also social impacts. This holistic approach ensures that we are accountable to all aspects of sustainability.”* This way, sustainability efforts are not simply visioned, but strategic plans that are realizable and trackable where necessary is formulated. There is a need for a more holistic strategy involving various dimensions to further improve adoption and effectiveness in enhancing UK FMCG supply chain sustainability. One such dimension is the long-term partnership needed instead of transactional relationships. **As Participant 11 pointed out, “Consumer demand is critical.”** It is reported that 65% of our customers prefer sustainable products. Relational dynamics in this case can bring together an environment of open communication and collaboration in problem-solving-this will lead to a more sustainable supply chain ecosystem. Technology integration into sustainability initiatives, likely,

increase the effectiveness of the efforts. For instance, cutting-edge data analytics can provide the companies with tremendous insights into their supply chain operations. They can easily trace how inefficient certain aspects of the supply chain operations are and what can be improved. **Participant 12 mentioned, "we are tracing our supply chain using blockchain technology by adding sustainability practices to boost transparency and accountability."** In this manner, UK FMCG companies will not only make their operations far smoother but also improve accountability towards achieving the sustainability targets.

4.3 Secondary Qualitative Data Findings

4.3 Secondary Qualitative Data Findings

Citations	Keywords	Theme Name
Mc Loughlin et al. (2023)	• Legal initiatives • Environmental policies • International standards • Waste minimization	Drivers of Sustainable Practices in UK FMCG Supply Chains
Erin, <u>Bamigboye</u> and <u>Ovewo</u> (2022)	• Consumer demand • Environmental consciousness • Consumption patterns • Sustainable consumption	
Statista (2024)	• Purchase reduction • Sustainable shopping habits • Consumer behavior • Environmental responsibility	
<u>Elfawal</u> Ragheb and Adel (2021)	• Corporate Social Responsibility (CSR) • Brand identification • Ethical responsibility	

	• Consumer confidence	
Alghababsheh and Gallear (2021)	• Social capital • Transparency • Social responsibility • Stakeholder engagement	Effectiveness of Current Sustainable Practices in Achieving Environmental and Social Goals
Fortunati, Morea, and Mosconi (2020)	• Circular economy • Waste reduction • Resource optimization • Environmental footprint • Sustainable packaging	
Deloitte (2023)	• Consumer spending • Greenhouse emissions • Product durability • Cost vs. sustainability	
De Vass, Shee, and Miah (2021)	• IoT technology • Resource tracking • Real-time monitoring	
Ghadge et al. (2021)	• Resource constraints • Environmental and financial goals • Profit margins • Sustainability adoption	Challenges in Implementing Sustainable Supply Chain Practices
Roscoe et al. (2020)	• Geopolitical disruptions • Brexit • Supply chain uncertainty • Regulatory changes	
Statista (2024)	• Supply chain scarcity • Demand-side pressure	

	• Short-term vs. long-term focus	
Rahman et al. (2020)	• Financial limitations • Supplier knowledge • Compliance issues	
McLoughlin et al. (2023)	• Business process management • Sustainability integration • Environmental and social objectives	Strategies to Enhance the Adoption and Effectiveness of Sustainable Practices
Huang et al. (2022)	• CSR • Brand image • Stakeholder engagement • Supplier relationships • Knowledge sharing	
Butt et al. (2024)	• Reverse logistics • Circular economy • Product recovery • Remanufacturing	

Table 4.2: Thematic Coding Table

Theme 1: Drivers of Sustainable Practices in UK FMCG Supply Chains

The promotion of sustainability practices in the UK FMCG supply chain is characterised by the following key drivers; regulation, consumer demands on sustainable products, CSR and competition advantage. According to Mc Loughlin et al. (2023), legal initiatives – beginning at the national level through environmental policies or at the global level through international sustainability standards – can indeed serve as strong incentives for companies to develop sustainability into their supply chains. These regulations force corporate entities to implement policies and procedures meant to lower their impact on the environment, minimize wastes, and practice sound sourcing.

Consumer demand is also considered important, especially as Erin, Bamigboye and Oyewo (2022) pointed out that growing consumer environmental consciousness translates into changes in

consumption patterns. Sustainability trends in the UK show that in the period of 2021 to 2022, the population that has decreased the rate of purchases of new goods increased by 20%, which indicates a positive trend in terms of sustainable consumption (Statista, 2024). This trend reveals the rise of consumer awareness to environmental responsibility demanding FMCG firms to design products and ensure environmentally sustainable supply chain management strategies.

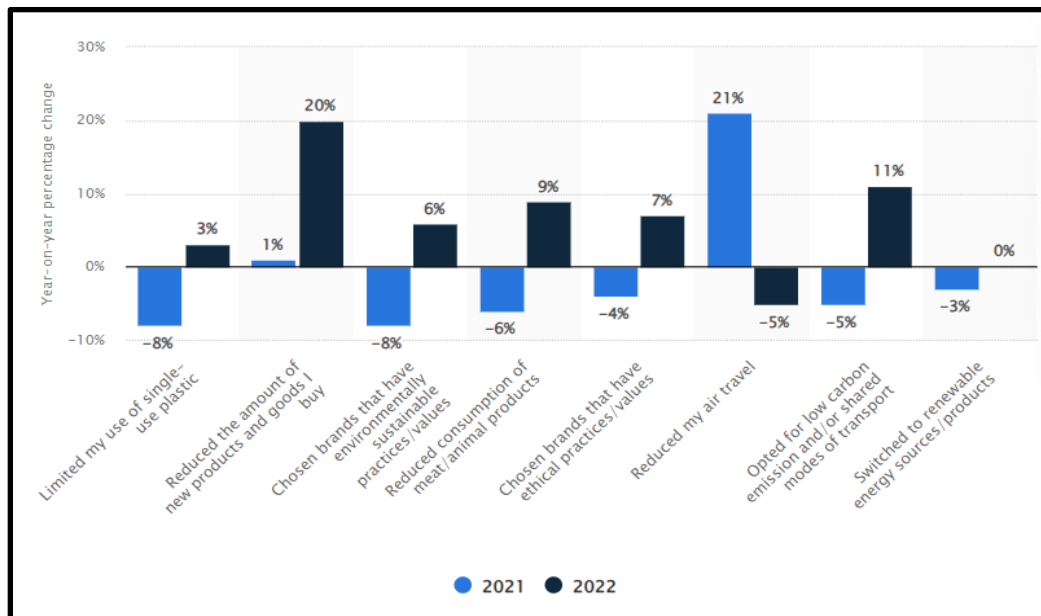


Figure 4.1: Sustainable shopping habits of UK consumers, 2021-2022

(Source: Statista, 2024a)

For the second aspect, corporate social responsibility also affects the sustainability policies adopted by organisations. As described by Elfawal, Ragheb, and Adel (2021), CSR is not only the ethical responsibility but it is a management weapon that strengthens brand identification and establishes competitive advantage. The following year-on-year percentage change graph in different sustainable practices by consumers in the UK from 2021 to 2022 illustrates that there has been a positive trend as most of the practice data reveal an increase in adoption. Most of the data reveal a growing trend. The most noteworthy aspect was the significant growth in the percentage of consumers who limited their consumption of one-time plastic and minimized purchasing new things and items (Alkaraan et al. 2023).

Theme 2: Effectiveness of Current Sustainable Practices in Achieving Environmental and Social Goals

In verifying the effectiveness of its assumption of sustainable practices in the UK FMCG sector for the current study, the following research question is posited: According to Alghababsheh and Gallear (2021), social capital is vital for the development of socially sustainable supply chain management. The integration of circular economy for sustainable practices has been particularly effective in the areas of waste reduction and resource optimization. In this study, following authors Fortunati, Morea, and Mosconi (2020), have posited that circular economy is effective in the supply chain through the reduction of the environmental footprint in the process of consuming and producing. In the context of FMCG companies, there has been growing focus on areas like waste management, recycling, and an effort to shift towards sustainable packaging but the shift to circular business model presents a set of systemic challenges related to cost, and infrastructure (Centobelli, Cerchione, and Esposito, 2020).

This paper concludes that there is a clear linkage between consumer behaviour and sustainability where consumers are central in influencing the success or failure of sustainability initiatives. The study by Deloitte (2023) reveals that consumer spending is responsible for more than a quarter of total greenhouse emissions in the UK making the consumer decisions key determinants of the sustainability goals. Nevertheless, the escalating cost has made the customers change their attitude to the use of eco-friendly products in a way that they have embraced the culture in order to ‘save’ rather than out of environmental consciousness. While more consumers may be paying attention to the lifespan and reparability of products they are buying, the price is still an issue for most. According to De Vass, Shee and Miah (2021), another system is the IoT technology that can aid sustainable practice, including resource tracking to monitor consumption in real-time although its application is still somewhat nascent due to cost and other factors.

Theme 3: Challenges in Implementing Sustainable Supply Chain Practices

The core problem of integrating sustainability in supply chain involves several challenges and this is so especially in industries such as FMCG where complication and size of scale tends to worsen the already complicated problems. Ghadge et al. (2021) have noted that sustainability initiatives within the food system including British artisan cheese makers are constrained by lack of resources which, when adopted, delay attainment of both environmental and financial objectives. This is because while customers are willing to pay more for environmentally sustainable products, profit margins remain thin for businesses.

Another challenge that highly affects the reliability of sustainable supply chain practices is the confusion resulting from geopolitical influence. As pointed out by Roscoe et al. (2020), macro-economic volatilities including Brexit have undermined predictability in supply chain networks, thus reduces the ability of an enterprise to commit to sustainable investments. Due to frequently changing regulations and situations that require quick action to adapt to new trading circumstances, many supply chain specialists have no choice but to focus on the current solution rather than the best long-term practice. This challenge is further made worse by external quintessential interferences for example, the COVID-19 pandemic interference that compounded supply chain scarcity and demand-side pressure for speedy response, as highlighted in a survey on supply chain professionals in 2021.

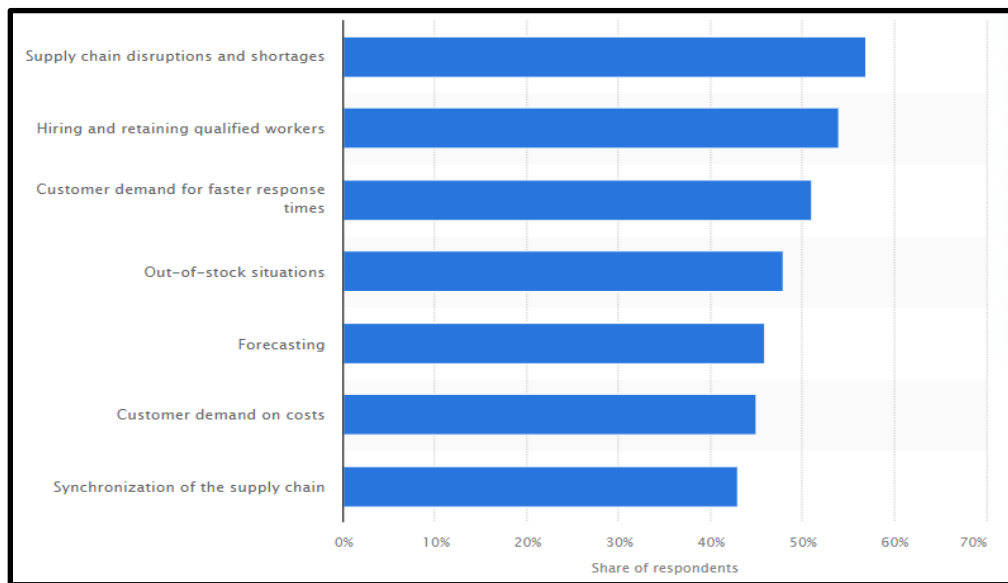


Figure 4.2: Supply Chain Challenges Faced by the Companies, 2021

(Source: Statista, 2024b)

According to Rahman et al. (2020), the chief barriers to adopting green supply chain management are financial limitations and the absence of knowledge among suppliers. At times, first-tier suppliers are not in a position to adhere to the same standards as the second-tier suppliers owing to environmental management constraints such as inadequate knowledge or sufficient capabilities. This level of disengagement and compliance presents a major challenge to the implementation of sustainability practices throughout the supply chains. This bar graph represents the issues that the supply chain managers of 2023 face, as according to few respondents. The figures provided in the

graph indicate that the main challenge deemed the most critical was supply chain disruptions and shortages, as overwhelming people identified this issue as a matter of concern (Zimon, Tyan, and Sroufe, 2020). This comprises hiring and retaining skilled labor, ranked high by 55 percent of the respondents. Others include customer's demand for quicker response times, out-of-stocks, forecasting, customer's demands on costs, and supply chain being out of sync.

Theme 4: Strategies to Enhance the Adoption and Effectiveness of Sustainable Practices

These technological advances suggest that it is possible to enhance the uptake and efficiency of sustainability in supply chain and networks through several strategic approaches such as re-engineering, CSR and reverse logistics. As McLoughlin et al. (2023) described, one of the most significant avenues stated is the refocusing of business process management to underpin sustainability into the supply chain's operations. Through linking sustainability objectives with working practices, organisations are in a position of achieving the stated goals around managing the environment and social needs such that sustainability becomes part of the core organisational business instead of extra-organisational or additional.

Huang et al. (2022) have a reasonable point when they note that CSR is instrumental in the promotion of sustainability in B2B markets. According to these authors, CSR not only improves brand image but also fosters stakeholder engagement which is critical in improving sustainability. This in turn encourages the forging of relations with suppliers so as to guarantee the observance of sustainability criteria all through the chain. Such approaches also contribute to the exchange of knowledge and resources that may be vital for the small firms that may not have the capability to implement sustainability practices on their own. One of these strategies is the use of reverse logistics as, according to Butt et al. (2024), it supports the formation of circular economy. Reverse logistics helps in the recovery of products at the end of their life-cycle for reuse, recycling or remanufacturing hence being environmentally friendly. This practice is particularly useful in retail industries, as it is easy to experience high numbers of product returns or end-of-life products (Agrawal et al. 2024).

4.4 Discussion

The analysis illustrates that these factors that make the application of environmental strategies feasible within the UK's FMCG supply chains in practice emanate from regulation, stakeholder pressures on sustainability, and buyers' power. Motivated or pressured, organizations incorporate

sustainability in their strategies but effectiveness differs across industries. The variations in results owed mainly to policies such as lack of adequate support for eco-initiatives or occasional involvement of suppliers which inhibit sustainability.

In so doing, an understanding of the contextual factors would enhance all manner of processes which are flexible and worth improving. However, upon present these findings, one would do well to notice that, until today, any sustainability programs aimed and embedded into the FMCG domain have been rather unstructured at best. Since worldwide alignment or standardisation of sustainable practices is difficult, fragmented supply chains exacerbate this issue. Končar, Marić, and Vučenović (2021) suggest a pragmatic approach for managing sustainable supply chains spanning many aspects and regions. Without coherence, individual enterprises' efforts may fail, jeopardising the industry's sustainability goal.

Moreover, these findings also show a tendency toward new approaches, which are based on collaboration and creative effort of stakeholders as well as transparency between them. There has been a measurable synergy from the combination of advanced technology and resource logistics (RL) for the improved management of the environment and more effective use of resources. Warehouse packaging and transportation innovations have helped organisations boost sustainability without sacrificing operational productivity. Technology advancement requires constant expenditures in technology and supplier partnerships. Mountainfield et al. (2021) remark that supply chain supplier relationships are also crucial to the implementation of such innovative practises. Maintaining progress towards sustainability targets and gaining stakeholder buy-in on all sustainability targets require it.

Chapter 5: Conclusion and Recommendations

5.1 Introduction

This chapter synthesizes research findings and advances recommendations for the improvement of sustainable practices within the UK fast-moving consumer goods sector. Through a summary of key insights from this study, this chapter explains the effectiveness of current measures on sustainability and the difficulties that have been encountered in the implementation. Finally, this chapter develops actionable strategies to facilitate and spur the adoption of sustainable practices. This is essential for the stakeholders because of the FMCG companies, suppliers, and policymakers as well as consumers who are trying to make sense of how to achieve environmental and social goals within the newer dimensions of competition and heightened consciousness of a growing market landscape. This chapter will outline the summary of findings, conclusions, linking with objectives, recommendations and future research directions.

5.2 Summary of Findings

Findings of the research would therefore provide a multi-faceted view of how effective sustainable practices are in all UK FMCGs. From the study, it is clear that one of the main themes of the effectiveness of current sustainable practices in achieving both the environmental and social goals. Most companies are actively engaged in various initiatives related to waste reduction, sustainable sourcing, and ethical labor practices. For instance, the induction of circular economy values has been found to be genuinely helpful in reducing waste and maximizing resource efficacies, considering that several companies are expending considerable efforts toward the attainment of sustainable packaging solutions (Yin, and Yu, 2022). The most critical problems with the implementation of sustainable supply chain practices have been determined by the study. Problems based on financial constraints have been discovered, as companies incur the initial costs of the new technologies and materials. Supplier engagement is also important as small-scale suppliers are usually in a mess because of the shortfall of resources and skills to achieve sustainability criteria. This implies that FMCGs need to invest more in their suppliers in order for the firms to comply while creating alignment along the chain of supply. Several strategies have also been recognized to enhance the uptake and impact of sustainable practices as suggested by the research (Prashar and Sunder M, 2024). They encompass clear and well-defined sustainability goals along with measurable and relevant key performance indicators. They invest in innovative technologies, build

effective communication means between companies and their suppliers, and in all, these are strategic efforts to remove the hindrances. In fact, the current literature claims that there should be cooperation and integrate sustainability into the very approach of business models to bring change within the boundaries of an industry (Rastpour, Kayvanfar, and Rafiee, 2023). Generally speaking, there is clear conclusion in such findings of interrelation between good sustainable practices and improved outcomes on the environment and society; this based forms of recommendations subsequently offered to alleviate the challenges identified.

5.3 Linking with Objectives

The four central objectives that the research was guided by, and to which I have responded through the results of the study, are as follows:.

Assessment of the Main Drivers that Promote Sustainability in UK FMCG Supply Chains:

Consumer demand for greener products, pressures from regulation, and desire to remain competitive are seen as major drivers. This study showed that from the main finding of the corporate sustainability strategies are driven majorly by consumer awareness and environmental consciousness as a result of their market expectations where FMCG companies increase sustainable practices.

To estimate how effective the sustainable practices currently in place by UK FMCG companies are. The study indicates that with several companies making commendable steps toward sustainability, the effectiveness of such practices is often marred with inconsistent application and different supplier compliance. While the adoption of circular economy principles has proven to work well towards waste reduction and resource optimization and thus a necessity indicates large environmental and social benefit when placed effectively.

Identifying key challenges facing UK FMCG companies to effectively implement sustainable supply chain practices. Major challenges identified include financial constraints, problems in the involvement of suppliers, and the process complexity of integrating sustainability into existing supply chain frameworks. Such barriers hindrances indicate the inefficiency of sustainability initiatives for broader adaptation by companies, suggesting the design of a comprehensive strategy to overcome these barriers.

Recommend ways and means through which the adoption and effectiveness of sustainable practices in UK FMCG supply chains are improved. The study finds a number of actionable strategies, such as developing communication with suppliers, significant investments in innovative technologies, and formulating clear sustainability goals along with corresponding key performance indicators. These recommendations aim to strengthen the implementation of sustainable practices, thus being able to challenge UK FMCG companies to undergo change in their supply chains meaningfully.

5.4 Conclusions

Illumination of the Status Quo Concerning Sustainable Practice in the UK FMCG Industry: This study reflects the status quo concerning sustainable practice in the UK FMCG industry. Although much has been developed toward sustainability it remains inconsistent in terms of effectiveness. It is found that incorporation of sustainability manifests through the collective effects of such factors as consumer demands for sustainability, regulatory forces, and cost-effectiveness of these measures. There has been a strong rationale for FMCG companies to integrate sustainability into their business strategies since it not only enhances brand reputation but also responds to the growing demand of consumers for responsible and ethical products. The research paper examines the effects of customer behavior on the sustainability performance of FMCG companies. As consumers increasingly prefer an ecologically clean lifestyle, they indirectly influence the sustainability strategies FMCGs use via their purchasing decisions. This is the only way consumers can be aligned in one direction with corporate objectives to push for meaningful change in this sector. The research calls for a more holistic approach to sustainability-from what the business itself does inside to engaging external stakeholders, including suppliers and consumers. The integration of sustainable practices into the core business model of UK FMCG companies would be worthwhile, not only for their achievement of corporate goals but also in contributing to broader environmental and social objectives, which could resonate with current values in society.

5.5 Recommendations

Although with the results from this study, some actionable recommendations are made for FMCG companies, policymakers, and researchers themselves to provide a better incentive for higher adoption and effectiveness.

- **For FMCG Companies**

Improve Supplier Engagement and Training: Enhanced interaction with suppliers can lead to improved levels of conformity to sustainability standards. Provision of training and other resources equips the suppliers with the skills to operate at such levels of sustainability and has established a sustainability culture in the chain of supply. (Gong et al. 2020).

Establish Clear KPIs for Sustainability Goals: Designate and create measurable and attainable KPIs that show environmental and social impact. This allows for tracking and accountability regarding how progress is made so sustainability initiatives are not just aspirations but actionable and measurable steps (Mathu, 2021).

Foster Collaboration within the Industry: Encourage partnerships and collaborations between industry actors and non-governmental organizations (NGOs). Such collaborations will amplify effort and resources, hence easier for any company to tackle its sustainability challenges better.

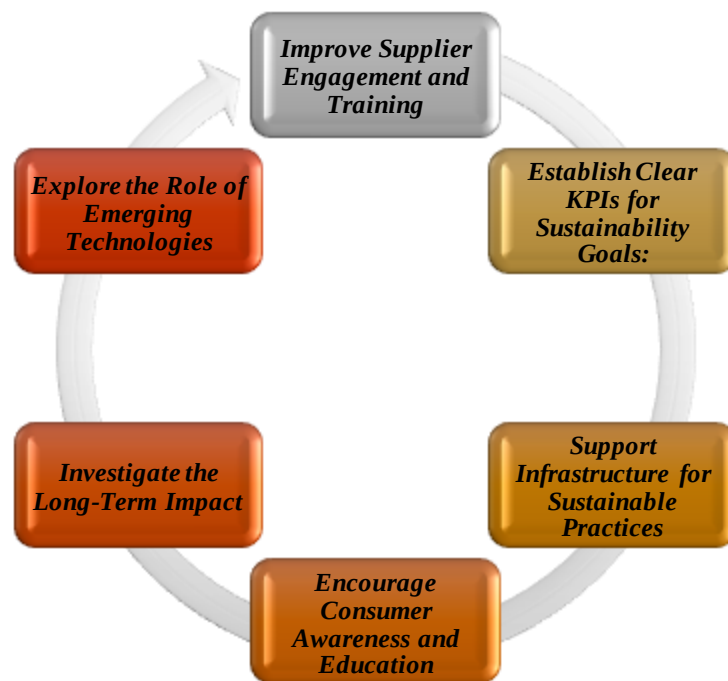


Figure 5.1: Recommendation for the study

(Source: self-created)

- **For Policymakers**

Support Infrastructure for Sustainable Practices: Invest in infrastructures that will help the FMCG companies adopt more sustainable operations through support in sustainable practices, recycling facilities, renewable energy sources, etc (Mountfield et al. 2021).

Encourage Consumer Awareness and Education: Sustainability awareness should be promoted among consumers. Educated consumers are likely to make an environmentally responsive purchase, and the demand would then drive sustainable products forward.

- **For Researchers**

Investigate the Long-Term Impact of Sustainable Practices on Consumer Behaviour: Track the effects of sustainable practices on consumer behavior over time and identify trends and changes in preferences (Nebohand Mbhele, 2021).

Explore the Role of Emerging Technologies in Enhancing Sustainability: Discuss how blockchain and IoT, for example, can enable sustainable practices to be deployed and monitored within FMCG supply chains. Adoption of such recommendations by stakeholders will enhance the quality of more responsible and ethical business operations within the UK FMCG sector.

5.6 Limitations of the Study

While this research can demonstrate new insights into sustainable practices of the UK FMCG sector, it is worthwhile to reflect on several limitations that were observed during the study. Firstly, the sample size was relatively small and was therefore not representative of the full range of diversity within the FMCG industry. This may limit the generalisability of the findings because there could be a different perspective from stakeholders whose views are not included. What cannot be ignored on this scale are potential biases in responses given by participants, too (Hussain and Khan, 2024). The respondents may have answered socially desirably, especially as related to sustainability practices, which might overestimate the effectiveness of such initiatives. Thus, the response bias might jeopardize the reliability of data collected. The research scope was limited to certain FMCG sectors, which meant that some practices and challenges among companies in other FMCG sectors would not be brought under consideration. This limitation calls for caution while generalizing the findings to the whole landscape of FMCG (Choudhary, 2020). In this respect, acknowledging such limitations is very much important in framing the conclusions and

recommendations, since they were indicating further research to validate and broaden such insights provided by this investigation.

5.7 Suggestions for Future Research

There is, hence, a need for further studies on this research gap to widen the comprehension of sustainability practices in the FMCG sector in the UK. A few potential directions for future research on these findings are suggested below:

Longitudinal Studies: Longitudinal studies allow researchers the opportunity to measure how sustainable practices may impact consumers and corporate strategies over time. This would help better understand the long-term impacts of sustainability initiatives (Zimon, Tyan, and Sroufe, 2020).

Comparative Studies Across Different Sectors: Cross-sectoral comparative studies of other sectors of the FMCG industry may outline sectoral-specific issues and best practices around sustainability. Such kinds of studies transfer knowledge and inspire innovation which may vary from one sector to the other.

Examination of the Role of Consumer Education: The future research could be focused on the extent of impact of such education upon sustainability efforts. In this regard, for instance, an investigation into how growing consumer education and literacy about sustainability issues influences purchasing behavior could offer FMCG companies' essential guidance in bringing their strategies in line with consumer expectations.

Consequently, with these streams of research in mind, researchers will be better equipped in making their contributions to the evolution of sustainability, coupled with improved understanding of the issues that affect sustainable practices in the FMCG sector and ultimately put forward practical solutions to enrich the sustainability initiatives.

5.8 Final Summary

This chapter synthesizes the findings of this research and underlines the importance of sustainable practices within the UK FMCG sector. It places emphasis on how sustainability must become integrated into business strategies and consumer behaviour for full environmental and social impact. Recommendations made in this chapter will therefore guide FMCG companies,

policymakers, and researchers toward a more sustainable future. Overall, this study underscores the fact that commitment to sustainability is not merely an ethical need but a strategic necessity for the long-term viability and success of the UK FMCG sector in the face of growing environmental challenges.

References

Link to Consent Forms of Participants: [click here](#)

Agrawal, R., Agrawal, S., Samadhiya, A., Kumar, A., Luthra, S. and Jain, V., 2024. Adoption of green finance and green innovation for achieving circularity: An exploratory review and future directions. *Geoscience Frontiers*, 15(4), p.101669.

Alghababsheh, M. and Galleary, D., 2021. Socially sustainable supply chain management and suppliers' social performance: The role of social capital. *Journal of Business Ethics*, 173(4), pp.855-875.

Alkaraan, F., Floyd, D., Rahman, M. and Nuery, N., 2023. A new era of strategic investment decision-making practices in UK companies: Towards sustainable supply chains and circular economy. *Theoretical Economics Letters*, 13(3), pp.666-682.

Becher, E., 2022. *Shared value creation through integrated reporting in the Fast-Moving Consumer Goods (FMCG) Industry: an analysis of the effect of Corporate Social Performance (CSP) on the Corporate Financial Performance (CFP) of multinational companies* (Doctoral dissertation).

Braun, V. and Clarke, V., 2023. Toward good practice in thematic analysis: Avoiding common problems and being a knowing researcher. *International journal of transgender health*, 24(1), pp.1-6.

Butt, A.S., Ali, I. and Govindan, K., 2024. The role of reverse logistics in a circular economy for achieving sustainable development goals: a multiple case study of retail firms. *Production Planning & Control*, 35(12), pp.1490-1502.

Cahyadi, W., Candrasa, L., Cen, C.C., Cahyadi, L. and Pratama, I., 2023. Green supply chain, green communication and firm performance: empirical evidence from thailand. *Systematic Reviews in Pharmacy*, 11, pp.398-406.

Cammarano, A., Perano, M., Michelino, F., Regno, C., and Caputo, M., 2022. SDG-Oriented Supply Chains: Business Practices for Procurement and Distribution. *Sustainability*. <https://doi.org/10.3390/su14031325>.

Casula, M., Rangarajan, N. and Shields, P., 2021. The potential of working hypotheses for deductive exploratory research. *Quality & Quantity*, 55(5), pp.1703-1725.

Centobelli, P., Cerchione, R. and Esposito, E., 2020. Pursuing supply chain sustainable development goals through the adoption of green practices and enabling technologies: A cross-country analysis of LSPs. *Technological Forecasting and Social Change*, 153, p.119920.

Choudhary, N.S., 2020. Supply Chain Management's Determinants and the Overall Performance of the Fast-Moving Consumer Goods (FMCG) Sector in Pakistan. *International Journal of Applied Business and Management Studies*, 5(2), pp.63-80.

Dachan, M.H. and Sherif, S., 2023. The Reverse Supply Chains of the Fast-Moving Consumer Goods: The Impacts of Product Returns on Reverse Supply Chains in Sweden.

De Vass, T., Shee, H. and Miah, S., 2021. IoT in supply chain management: Opportunities and challenges for businesses in early industry 4.0 context. *Operations and Supply Chain Management: An International Journal*, 14(2), pp.148-161.

Deloitte, 2023. *The Sustainable Consumer 2023* Available at: <https://www.deloitte.com/uk/en/Industries/consumer/research/sustainable-consumer.html> [Accessed on 13th September, 2024]

Ebrahim, S., Niemann, W., and Kotzé, T., 2022. Sustainable supply chain integration: An exploration of South African fast-moving consumer goods manufacturers. *South African Journal of Economic and Management Sciences*. <https://doi.org/10.4102/sajems.v25i1.4192>.

Elfawal, A., Ragheb, M.A. and Adel, R., 2021. Supply chain management practices, innovation capabilities and operational performance: An empirical evidence from the FMCG sector. *The business and management review*, 12(1), pp.70-81.

Erin, O.A., Bamigboye, O.A. and Oyewo, B., 2022. Sustainable development goals (SDG) reporting: an analysis of disclosure. *Journal of Accounting in Emerging Economies*, 12(5), pp.761-789.

Fortunati, S., Morea, D. and Mosconi, E.M., 2020. Circular economy and corporate social responsibility in the agricultural system: Cases study of the Italian agri-food industry. *Zemedelska Ekonomika*, 66(11), pp.489-498.

Ghadge, A., Er Kara, M., Mogale, D.G., Choudhary, S. and Dani, S., 2021. Sustainability implementation challenges in food supply chains: A case of UK artisan cheese producers. *Production Planning & Control*, 32(14), pp.1191-1206.

Gong, Y., Putnam, E., You, W. and Zhao, C., 2020. Investigation into circular economy of plastics: The case of the UK fast moving consumer goods industry. *Journal of Cleaner Production*, 244, p.118941.

Gong, Y., Putnam, E., You, W. and Zhao, C., 2020. Investigation into circular economy of plastics: The case of the UK fast moving consumer goods industry. *Journal of Cleaner Production*, 244, p.118941.

Gong, Y., Putnam, E., You, W. and Zhao, C., 2020. Investigation into circular economy of plastics: The case of the UK fast moving consumer goods industry. *Journal of Cleaner Production*, 244, p.118941.

Hennink, M., Hutter, I. and Bailey, A., 2020. *Qualitative research methods*. Sage.

Huang, Y., Surface, D.L. and Zhang, C., 2022. Corporate social responsibility and sustainability practices in B2B markets: A review and research agenda. *Industrial Marketing Management*, 106, pp.219-239.

Hunziker, S. and Blankenagel, M., 2024. Cross-sectional research design. In *Research Design in Business and Management: A Practical Guide for Students and Researchers* (pp. 187-199). Wiesbaden: Springer Fachmedien Wiesbaden.

Hussain, Z. and Khan, A., 2024. Investigating the Determinants and Consumer Preferences of Sustainable Consumption and Production Adoption Among Fast-Moving Consumer Goods Manufacturers. In *Sustainable Development Goals: The Impact of Sustainability Measures on Wellbeing* (Vol. 113, pp. 79-92). Emerald Publishing Limited.

Kayikci, Y., Kazançoğlu, Y., Gozacan-Chase, N., and Lafçı, Ç., 2022. Analyzing the drivers of smart sustainable circular supply chain for sustainable development goals through stakeholder theory. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.3087>.

Končar, J., Marić, R. and Vučenović, S., 2021. Exploring pro-environmental behaviour in FMCG supply chain. *Tehnički vjesnik*, 28(6), pp.2060-2071.

Kouhizadeh, M., Saberi, S. and Sarkis, J., 2021. Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers. *International journal of production economics*, 231, p.107831.

Lalanne, A., 2024. How Can Entrepreneurs Use a Build in Public Strategy to Grow Their Business?: archival research based on publicly available relevant secondary data.

Langley, A. and Meziani, N., 2020. Making interviews meaningful. *The Journal of Applied Behavioral Science*, 56(3), pp.370-391.

Linnhoff, S., Smith, K.T. and Smith, L.M., 2020. An examination of longitudinal study typologies for business research. *International Journal of Business and Globalisation*, 24(2), pp.212-239.

Loviscek, V., 2020. Triple bottom line toward a holistic framework for sustainability: A systematic review. *Revista de Administração Contemporânea*, 25, p.e200017.

Lubis, N.W., 2022. Resource based view (RBV) in improving company strategic capacity. *Research Horizon*, 2(6), pp.587-596.

Mathu, K., 2021. Supply Chain Management as a Competitive Advantage of Fast-Moving Consumer Goods SMEs in South Africa. *Journal of Energy and Natural Resources*, 10(1), p.33.

Mc Loughlin, K., Lewis, K., Lascelles, D. and Nudurupati, S., 2023. Sustainability in supply chains: reappraising business process management. *Production Planning & Control*, 34(1), pp.19-52.

Micheli, G., Cagno, E., Mustillo, G., and Trianni, A. 2020. Green supply chain management drivers, practices and performance: A comprehensive study on the moderators. *Journal of Cleaner Production*, 259, 121024.

Mountfield, A., Hrajnaha, K., Koh, L., Lascenko, L., Puchala, R. and Schalch, C., 2021. Barriers to implementing sustainability experienced by middle managers in the fast-moving consumer goods and retail sector. In *Research Handbook of Sustainability Agency* (pp. 75-92). Edward Elgar Publishing.

Mountfield, A., Hrajnaha, K., Koh, L., Lascenko, L., Puchala, R. and Schalch, C., 2021. Barriers to implementing sustainability experienced by middle managers in the fast-moving consumer

goods and retail sector. In *Research Handbook of Sustainability Agency* (pp. 75-92). Edward Elgar Publishing.

Muhmad, S., and Muhamad, R. 2020. Sustainable business practices and financial performance during pre- and post-SDG adoption periods: a systematic review. *Journal of Sustainable Finance & Investment*, 11, 291 - 309.

Mweshi, G.K. and Sakyi, K., 2020. Application of sampling methods for the research design. *Archives of Business Review–Vol*, 8(11), pp.180-193.

Nebah, N.D. and Mbhele, T.P., 2021. Supply chain design dimensions for supply chain resilience in the South African fast-moving consumer goods retail industry. *Africa Journal of Management*, 7(sup1), pp.58-81.

Negri, M., Cagno, E., Colicchia, C. and Sarkis, J., 2021. Integrating sustainability and resilience in the supply chain: A systematic literature review and a research agenda. *Business Strategy and the environment*, 30(7), pp.2858-2886.

Ngomane, S.R., 2023. *Supply chain strategy, flexibility and performance in the Gauteng fast-moving consumer goods (FMCG) industry* (Doctoral dissertation, Vaal University of Technology).

Ngomane, S.R., 2023. *Supply chain strategy, flexibility and performance in the Gauteng fast-moving consumer goods (FMCG) industry* (Doctoral dissertation, Vaal University of Technology).

Omodan, B.I., 2022. A Model for selecting theoretical framework through epistemology of research paradigms. *African Journal of Inter/Multidisciplinary Studies*, 4(1), pp.275-285.

Pandiangan, S.M.T., Oktafiana, F., Panjaitan, S.R. and Shifa, M., 2022. Analysis of public ownership and management ownership on the implementation of the triple bottom line in the plantation sector listed on the Indonesia Stock Exchange. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(1), pp.349-3497.

Park, Y.S., Konge, L. and Artino Jr, A.R., 2020. The positivism paradigm of research. *Academic medicine*, 95(5), pp.690-694.

Prashar, A. and Sunder M, V., 2024. Sustainability drivers of fast-moving consumer goods supply chains: a multi-method study. *Benchmarking: An International Journal*.

Prashar, A., 2023. Supply chain sustainability drivers for fast-moving consumer goods (FMCG) sector: an Indian perspective. *International Journal of Productivity and Performance Management*, 72(8), pp.2397-2419.

Rahman, T., Ali, S.M., Moktadir, M.A. and Kusi-Sarpong, S., 2020. Evaluating barriers to implementing green supply chain management: An example from an emerging economy. *Production Planning & Control*, 31(8), pp.673-698.

Rastpour, E., Kayvanfar, V. and Rafiee, M., 2023. Multi-criteria decision-making methods for the evaluating of a real green supply chain in companies with fast-moving consumer goods. In *Sustainable Logistics Systems Using AI-based Meta-Heuristics Approaches* (pp. 26-38). Routledge.

Risi, D., 2022. Business and society research drawing on institutionalism: Integrating normative and descriptive research on values. *Business & Society*, 61(2), pp.305-339.

Roscoe, S., Skipworth, H., Aktas, E. and Habib, F., 2020. Managing supply chain uncertainty arising from geopolitical disruptions: evidence from the pharmaceutical industry and brexit. *International Journal of Operations & Production Management*, 40(9), pp.1499-1529.

Roy, S., Das, M., Ali, S., Raihan, A., Paul, S., and Kabir, G., 2020. Evaluating strategies for environmental sustainability in a supply chain of an emerging economy. *Journal of Cleaner Production*, 262, pp. 121389.

Siedlecki, S.L., 2020. Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), pp.8-12.

Siponen, M. and Klaavuniemi, T., 2020. Why is the hypothetico-deductive (HD) method in information systems not an HD method?. *Information and Organization*, 30(1), p.100287.

Statista, 2024a. *Leading FMCG brands ranked by frequency purchased in the United Kingdom (UK) 2021*. Available at: <https://www.statista.com/statistics/301875/leading-ten-fmcg-brands-by-frequency-bought-united-kingdom-uk/> [Accessed on 13th September, 2024]

Statista, 2024b. *Year-on-year change in sustainable shopping behaviors among UK shoppers in 2021 and 2022, by action* Available at: <https://www.statista.com/statistics/1325519/change-in-sustainable-shopping-behavior-in-the-uk/> [Accessed on 13th September, 2024]

Statista, 2024c. *Supply chain challenges in 2021** Available at: <https://www.statista.com/statistics/1182057/global-supply-chain-challenges/> [Accessed on 13th September, 2024]

Udokporo, C.K., Anosike, A., Lim, M., Nadeem, S.P., Garza-Reyes, J.A. and Ogbuka, C.P., 2020. Impact of Lean, Agile and Green (LAG) on business competitiveness: An empirical study of fast moving consumer goods businesses. *Resources, Conservation and Recycling*, 156, p.104714.

Ugwu, C.I., Ekere, J.N. and Onoh, C., 2021. Research paradigms and methodological choices in the research process. *Journal of Applied Information Science and Technology*, 14(2), pp.116-124.

Yin, S. and Yu, Y., 2022. An adoption-implementation framework of digital green knowledge to improve the performance of digital green innovation practices for industry 5.0. *Journal of Cleaner Production*, 363, p.132608.

Young, M., Varpio, L., Uijtdehaage, S. and Paradis, E., 2020. The spectrum of inductive and deductive research approaches using quantitative and qualitative data. *Academic Medicine*, 95(7), p.1122.

Zimon, D., Tyan, J. and Sroufe, R., 2020. Drivers of sustainable supply chain management: Practices to alignment with un sustainable development goals. *International Journal for Quality Research*, 14(1).

Appendices

Appendix 1: Interview Questions

Research Question 1

What are the primary drivers influencing the adoption of sustainable practices within UK FMCG supply chains?

Interview Questions

1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?
2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?
3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?
4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?

Research Question 2

How effective are current sustainable practices implemented by UK FMCG companies (e.g., ethical sourcing, carbon footprint reduction) in achieving environmental and social sustainability goals?

Interview Questions

1. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?
2. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?
3. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?

4. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?

Research Question 3

What are the key challenges faced by UK FMCG companies in implementing sustainable supply chain practices?

Interview Questions

1. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?
2. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?
3. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?
4. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?

Research Question 4

What strategies can be recommended to enhance the adoption and effectiveness of sustainable practices within UK FMCG supply chains?

Interview Questions

1. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?
2. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?
3. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?
4. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Appendix 2: Interview Questionnaire

Interview Transcript: Participant 1

(Sustainability Manager at a Major FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**

- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**
- 13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?**
- 14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?**
- 15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?**
- 16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?**

Interview Transcript: Participant 2

(Supply Chain Director at a Mid-Sized FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 3

(Consultant Specializing in Sustainability)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 4

(Supply Chain Director at a Large FMCG Corporation)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 5

(Sustainability Manager at an FMCG Brand)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 6

(Chief Sustainability Officer at an FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 7

(Operations Manager at an FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**

12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?
13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?
14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?
15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?
16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 8

(Marketing Manager at an FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**

12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?
13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?
14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?
15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?
16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 9

(Product Development Manager at an FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 10

(Logistics Manager at an FMCG Company)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**

13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?

14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?

15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?

16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?

Interview Transcript: Participant 11

(Supply Chain Manager)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**

- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**
- 13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?**
- 14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?**
- 15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?**
- 16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?**

Interview Transcript: Participant 12

(Sustainability Coordinator)

- 1. Can you describe the key factors or pressures that motivated your company to begin integrating sustainable practices into your supply chain?**
- 2. To what extent do you believe consumer demand influences your company's decision to adopt sustainable practices?**
- 3. How do regulatory frameworks and government policies impact your organization's sustainability initiatives?**
- 4. In your experience, how significant is the role of corporate social responsibility (CSR) in driving sustainability within your supply chain operations?**
- 5. How do you assess the effectiveness of your company's current sustainable practices in terms of achieving environmental goals such as carbon footprint reduction?**
- 6. What metrics or key performance indicators (KPIs) does your company use to measure the success of its sustainable supply chain initiatives?**
- 7. Can you provide examples where sustainable practices have directly contributed to both social and environmental improvements within your supply chain?**
- 8. To what extent do you believe your company's sustainable practices are aligned with broader industry standards and expectations?**
- 9. What are the most significant barriers your company has encountered when trying to implement sustainable practices within your supply chain?**
- 10. How do financial constraints impact the adoption of sustainability measures in your supply chain operations?**
- 11. Can you discuss any challenges related to supplier engagement and compliance with your company's sustainability standards?**
- 12. In your view, how do external factors, such as market competition or economic volatility, affect your company's ability to maintain sustainable supply chain practices?**
- 13. What strategies has your company found to be most effective in increasing the adoption of sustainable practices across your supply chain?**
- 14. How does your organization foster collaboration with suppliers and stakeholders to enhance the effectiveness of sustainability initiatives?**

- 15. In your opinion, what role does innovation play in overcoming challenges related to sustainability in the supply chain, and can you provide examples?**
- 16. What recommendations would you suggest to other FMCG companies seeking to enhance the adoption and impact of sustainable supply chain practices?**