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Green Supply Chain Management Practices in DHL, Amazon, and UPS

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Abstract

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Green supply chain management (GSCM) practices have become increasingly important for companies to reduce their environmental impact while also improving their operational efficiency. The aim of this study is to focus on the GSCM practices of three major logistics companies: DHL, Amazon, and UPS.

This is a qualitative research method accompanied by desktop research. Firstly, the primary data has been collected through a questionnaire that is used to describe the green supply chain management practices in the selected companies. The secondary data has been collected through the SWOT analysis of the selected organizations to acquire knowledge of the theoretical background of green supply chain management and GSCM practices of DHL, Amazon, and UPS.

The findings of this research show DHL, Amazon, and UPS have all implemented various GSCM practices to reduce their environmental impact and promote sustainability throughout their supply chains. By utilizing alternative fuel vehicles, optimizing delivery routes, and incorporating sustainable packaging practices, these companies are demonstrating their commitment to reducing their carbon footprint and creating a more sustainable future.

The conclusion of the study presents the examination of the current practices of DHL, Amazon, and UPS in terms of green supply chain practices. According to the SWOT analysis, threats and difficulties can be reduced by using this thesis' knowledge. This will be helpful for the company to secure a long-term future.

Keywords: Green supply chain, green logistics, green management, green supply chain practices, sustainability, green marketing

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1 Introduction

This chapter illustrates the background of the topic and summarizes the different perspectives of green supply chain practice. Subsequently, the research objective, investigative questions, demarcation, benefits, case company, and the structure of the thesis are discussed and differentiated.

1.1 Background

As soon as industrialization got underway, environmental concerns swept across the world like wildfire. After that, they swept across whole countries before becoming worldwide. Lack of organic assets, water contamination, and air pollution harm "flora and fauna," "human health," and diseases including ischemic stroke and heart infection, lung cancer, severe interference with the lungs, and cerebrovascular disease. “Emerging environmental issues pave the way for a new method of supply chain practice, i.e., green supply chain practice, which significantly changes the way organizations produce and deliver products and services” (Lee & Tang 2018, 7). In other words, natural resources devastation paves the way for new methods of producing and delivering products and services. Nevertheless, environmental concern has become a crucial factor that leads the way for business houses to practice supply chain concern towards the environment or green supply chain practice, which significantly has gained attention all over the world among all short of business houses.

Many studies like (Srivastava 2007, 54-55) defines supply chain management with “integrating environmental thinking either it is related to the international and national aspects into supply-chain management, including product design, material sourcing and selection, manufacturing processes, delivery of the final product to the consumers as well as end-of-life management of the product after its useful life”. Moreover, add another dimension asserting that “green supply chain management can be defined as the integration of environmental thinking into the supply chain management, including product design, supplier selection, and material sourcing, manufacturing processes, product packaging, delivery of the product to consumers, and end-of-life management of the product after its use” (Sundarakani & al. 2010, 43).

The green supply chain management idea is utilized to reduce environmental issues including air, water pollution, and wastage by incorporating green practices in the operations of the businesses. Although the underlying premise of the sustainable approach is undoubt-

edly to improve ecological liability, businesses often use the green concept to "kill two adversaries with one bullet." Whereas a green supply chain can decrease pollution and manufacturing expenses while also propelling development in the economy, creating competitiveness in terms of higher consumer happiness, a favorable brand and image, and allowing companies to outsource their goods to environmentally friendly nations.

The green supply chain practice is defined as "green supply chain is a concept that combines green procurement, environmental management of manufacturing materials, environmental circulation, marketing, and reverse logistics" (Hervani, Helms & Sarkis 2005, 334). The supply chain management with "integrating environmental thinking into supply-chain management, including product design, material sourcing, and selection, manufacturing processes, delivery of the final product to the consumers as well as end-of-life management of the product after its useful life" (Srivastava 2007, 54–55). Moreover, another dimension asserting that "green supply chain management can be defined as the integration of environmental thinking into the supply chain management, including product design, supplier selection, and material sourcing, manufacturing processes, product packaging, delivery of the product to consumers, and end-of-life management of the product after its use" Sundarakani & al. 2010, 43). In this sense, green supply chain practice/ management has emerged to combine elements of environmental management and supply chain management (Yang, Lu, Haider & Marlow 2013, 57). Most recently, (Cousins, Lawson, Petersen & Fugate 2019, 8), reported that green supply chain management practices help to improve both environmental and cost performance.

We have seen in these definitions that environmental concerns are central to what all should maintain and preserve for the wellbeing of all including the company. For instance, it is precisely recorded that supply chain management practice not merely helps to improve the environment, but at the same time, also helps to secure maximum benefits. With this knowledge in hand, the bachelor thesis examines three companies, such as DHL, Amazon, and UPS green supply chain practices in detail.

The importance and benefits of this research includes identifying the most effective GSCM practices used by DHL, Amazon, and UPS, which can serve as a benchmark for other logistics companies to adopt as well as for the scholars. This study also highlights the improvements in the sustainability performance of DHL, Amazon, and UPS by identifying areas where they can improve their GSCM practices. It raises awareness among the public, policymakers, and other stakeholders about the importance of GSCM practices and their potential benefits for the environment and society. It presents that by implementing GSCM practices, logistics companies can reduce their environmental impact while also improving

operational efficiency, which can lead to cost savings overall. GSCM practices can also provide a competitive advantage for logistics companies by demonstrating their commitment to sustainability and meeting the increasing demand for environmentally responsible products and services.

1.2 Research questions

The purpose of this research is to address the economic and environmental dimensions of sustainability, particularly in the context of green supply chain management (GSCM) practices by referring to DHL, Amazon, and UPS green supply chain practices. The objective of this study is to examine the current practices of DHL, Amazon, and UPS in terms of green supply chain practices.

The research and investigative questions (IQs) of the thesis are as follows.

RQ: What are the economic and environmental dimensions of GSCM practices in DHL, Amazon, and UPS?

The research question was divided into the following investigative questions.

IQ1: What are the green supply chain management practices of DHL, Amazon, and UPS?

IQ2: What are the strengths and the weaknesses of DHL, Amazon, and UPS green supply chain practices from both environment and company perspectives?

IQ3: How do green supply chain management practices of DHL, Amazon, and UPS promote the well-being of the environment, customer, and company?

1.6. Overlay matrix

Table 1. Overlay matrix

Project Task	Theoretical Framework	Project Management Methods	Outcomes
IQ 1: What are the green supply chain management practices of DHL, Amazon, and UPS?	Green supply chain management	Literature review	1 & 2.1
IQ2: What are the strength and the weakness of DHL, Amazon, and UPS green supply chain practices from both environment and company perspectives.	SWOT Analysis	Internet research	2.1, 2.2 & 4
IQ3: What a green supply chain management practices of DHL, Amazon, and UPS promote the wellbeing of the environment, customer, and company.	Green Packaging Green Logistics	Review of Companies Website	2.1, 2.2, & 4

1.3 Demarcation

The primary objective of the study is to explore suggest how three companies such as DHL, Amazon, and UPS observe green supply chain management practices. Therefore, the focus will be on the current state of these companies' green supply chain management practices.

Logistic services have undergone a dramatic shift in recent years due to globalization and new market conditions. The scope of this thesis includes that in a world where logistics is becoming increasingly complex, businesses may find that their competitors are also offering cutting-edge services aimed at improving supply chain efficiency while also being more environmentally friendly. According to a recent report by the World Resources Institute (WRI), numerous companies such as DHL, AMAZON, and UPS have shown a rising interest in environmental challenges and their potential solutions, which can also be strengthened by green logistics. Emerging topics like greenness and environmental sustainability have led to a wide spectrum of environmental concerns, primarily connected to logistics management

and processes. The study also does not engage any comparative study, rather a more informative study in the field of green supply chain management. In terms of time, this study is conducted during Spring 2020. In this sense, the study will be limited to available data on web site and company profiles.

1.4 International aspects

Today, environmental sustainability is a major topic of discussion (UNEP 2011, 6). The worldwide community promotes the use of more environmentally friendly industrial methods and technologies by businesses. Companies throughout the world are growing increasingly interested in environmental issues and using them as strategic elements in their enterprises because the market appears to reward environmentally conscientious organisations.

While some environment protection tools have seen an essential restriction, that is the decrease of environmental effects from an organisation or a process by assigning them at other times, upstream or downstream of the supply chain, thus growing environment effects on other subjects, such as suppliers and distributors (Rourke 2014, 9). It's because many environmental management tools only look at the environmental issue from a single perspective, the perspective of the single organisation, while environmental troubles are produced by a wide range of various subjects that all relate to the overall impact on the environment in a closely interconnected manner. The physical footprint of a product is the sum of the physical footprints of processes along the product supply chain at various times and locations across the world (Hoekstra & Wiedmann 2014, 3).

1.5 Benefits

Several benefits can be utilized from the study and some of the signs are first, the study investigates three companies' green supply chain management practices, which can be utilized for comparative understanding. Second, these companies can utilize authors' recommendations for the well-being of the company, customers, and the environment. Third, the company can utilize knowledge of this thesis to minimize risks and challenges highlighted by authors to gain a sustainable future. Fourth, the study can be utilized for future research and publications.

It is no secret that supply chain management (GSCM) has received a lot of attention in the literature on process systems engineering (PSE). To maximize economic gains while minimizing environmental impacts, a mathematical optimization model can be developed. Decisions include the selection of suitable raw materials and suppliers, technologies, and transportation routes. (Hugo & Pistikopoulos 2005, 7); (Bojarski et al. 2009, 5); and

(Gosálbez & Grossmann 2010, 12) discuss their findings and concluded profit or customer satisfaction are both examples of economic performance metrics. Examples of environmental indicators include waste reduction algorithms (Cabezas & al. 1999) and life cycle assessment (LCA)-based measures like CML 2001 (Guinée 2002). The operational dynamics of the supply chain, on the other hand, receive little attention while planning and design are widely discussed.

1.6 Case Companies

The study investigates three companies such as DHL, Amazon, and UPS green supply chain practices. They are not commissioning companies for this research. DHL (Dalsey, Hillblom, and Lynn) international GmbH is an American and German dispatch, allocate, and express mail that is a division of the German coordination company Deutsche Post DHL. Deutsche Post DHL is the world's biggest coordination company, present in over 220 nations and domains around the world and conveys over 1.3 billion parcels per year. It is said that since 2009, DHL is focused on corporate social responsibility and sustainability by following several programs. A worldwide logistics corporation, DHL operates in over 220 countries. "DHL Express, DHL Global Forwarding, Freight, and DHL Supply Chain" are all part of the world's largest transportation and logistical group, Deutsche Post DHL.

DHL has implemented the following initiatives as part of its commitment to CSR and sustainability since 2009: “PPGoGreen, PPGoHelp, and PPGoTeach” are all devoted to environmental conservation, disaster relief, and the advancement of education around the world. DHL thinks that long-term competitiveness may be improved by providing sustainable and environmentally friendly services. As a result, sustainability will have a beneficial impact on the acquisition and retention of new customers and current customers. Transportation route optimization, the employment of vehicles with alternative drive systems, and energy-efficient warehousing are the most significant sustainable activities. Products and services from DHL are designed to reduce CO2 emissions and greenhouses gas emissions, as part of a general strategy of green optimization.

Environmental conservation and corporate success are inextricably linked, according to the organization. Suppliers are held to a "Supplier Code of Conduct," which establishes expectations for their actions, including environmental programmers. An open conversation based on integrity, tolerance, and mutual trust is also encouraged by this company, which utilizes a wide range of interaction platforms to reach its stakeholders (e.g., e-mail, Intranet, Extranet, employee magazines, etc.). Additionally, DHL promotes its suppliers to stick to its moral, health, security, and environmental protections. Finally, suppliers make their choices

based on a multi-step tendering procedure that also considers factors like cost-effectiveness and quality.

Management of environmental concerns is at the heart of "Greening Production." DHL's green procurement practices are focused on the following areas: paper and printed matter; packaging (pallet wrap); site consumables (a wide range of supplies); and energy savings. By replacing all fluorescent lights with LED lighting, the company has reduced environmental emissions of carbon and energy consumption. " International environmental protocols, such as the Greenhouse Gas Protocol (GHG Protocol), the Corporate Accounting and Reporting Standard," and the "Corporate Value Chain Accounting and Reporting Standard," are all adhered to by DHL in its present actions. (Cosimato & Troisi 2015, 263).

Amazon is an American multinational conglomerate technology company that focuses on e-commerce, cloud computing, digital streaming, and artificial intelligence. Recently the company started following green supply chain practices with a commitment to the environment. It is estimated that (Srivastava 2007, 3) definition of GSCM encompasses all aspects of the merchandise life cycle: purchasing, production, delivery, usage, and disposal. A wide range of activities, including design, development, manufacture, and mustering as well as packing and distribution are all part of Amazon's supply chain management processes.

This study by (Zhu & Sarkis 2004, 5), which focuses on the green production network, is one of the most comprehensive investigations of its kind. GSCM because of the component analysis, the researcher examined the green network of stores of the directors in terms of four measurement techniques: internal natural administration, external rehearses, eco-plan, and venture recuperation. A single measurement termed outside rehearses was used by the researcher to examine the role of collaboration with customers in environmental issues and green purchasing.

Green purchasing and participation in natural concerns with purchasers were scrutinized in discrete measurements in this unique circumstance, as the researcher examined GSCM with 5 measurements in subsequent examinations (Zhou & Sarkis 2012, 7) analyzed GSCM in three ways: inbound capacity measurement, green creation measurement, and outward capacity quantification, which included green exhibiting climate-friendly bundles and environmentally friendly dissemination and reusing. Shang et al. conducted another study in which they used a variety of metrics to examine the GSCM. Six categories were developed to organize the study's findings of eco-friendly behaviors. The first is a measure of green production and packaging, which includes the reduction of waste and hazardous substances, the use of clean vehicle methods, and the use of recyclable and reusable packaging materials (Nawaz 2021, 9). Natural investment is the next measurement, which includes

the construction of an environmental management framework and the arrangement of natural training programmers for the representatives.

As part of Amazon's third measurement, "green advertising," Amazon funds climate-related activities and marks its site with environmentally friendly information. Green providers, as the name suggests, are those who adhere to a set of environmentally friendly procedures, such as consulting with the provider on environmental issues and basing provider selection on natural models. The fifth and final measurement is made up of scrap and material that has been thrown away. (Kennedy & Patrick 2013, 8).

United Parcel Service (UPS) is an American multinational package delivery and supply chain management company including sales, marketing, procurement, HR, communications, and engineering and assigned directors of sustainability for each of those functions (Wheeland 2011, 16). Moreover, the company is observing greening supply chain practices while highlighting the need for environmental protection and reducing costs for the wellbeing of all.

Creating economic benefit through green or sustainable supply chain management has been recognized by numerous companies, such as UPS (Mefford & Winkler 2011, 19). Understanding supply chain management, a collaborative process comprising numerous inter- and intra-organizational entities from various levels of hierarchy (Cavinato, Flynn & Kauffman 2006, 14) is particularly instructive. (Carter & Easton 2011, 13) conduct a thorough investigation into the implementation of sustainable supply chain management solutions and uncover various tendencies. Sustainability in supply chains can only be achieved by considering several different aspects, which (Hu & Hsu 2010, 7) do so well in their paper. In today's intertwined economy, a look at a supply chain, particularly a global one, may indicate the several ways in which sustainability might be implemented.

As a result of supply chain management decisions, sustainability is intertwined with many aspects of UPS's supply chain, from raw materials to transportation carriers and even final consumption. The importance of material choices and vendor certification has been shown in the previous study on purchasing in both the commercial and governmental sectors (Pagell, Zhaohui & Wasserman 2010, 12). It is also possible to reduce the negative influence on the environment by employing sustainable transportation and warehousing (Tan, Daud & Sundaram 2010, 13). Each unrelated choice in the global supply chain has the potential to affect the environment when multiplied by the number of links in the chain. As an alternative, improving the overall performance of a supply chain by implementing a more sustainable model could provide a competitive advantage to all parties involved in the chain.

1.7 Risk analysis

This research involves the case companies such as DHL, Amazon, and UPS with the green supply chain practice. DHL and UPS involve physical product deliveries while Amazon is related to e-commerce. The risk is the limited access to the process of adopting the green supply chain procedures which might benefit the research by having a safe and secure environment while working in the groups and it reduce the problems in the supply chain management.

2 Green Supply Chain Management Practice

An overview of green logistics and supply chain management is provided in this chapter. Third-party logistics service providers include companies such as Amazon, UPS, and DHL. First, an introduction to green supply chain management practices is provided. In this section, you will discover what the term means and how it is used in the real world.

2.1 Understanding the Green Supply Chain Management Practice

Issues related to pollution of the environment are addressed along the supply chain. Such issues increase environmental concern in supply chain management and have been adopted as a prior strategy by leading industries of all the sectors, especially logistics and packaging. According to (Ninlawan, Seksan, Tossapol & Pilada 2010, 14), green supply chain management includes green procurement, green manufacture, green distribution, and waste management as shown in Fig. 1.

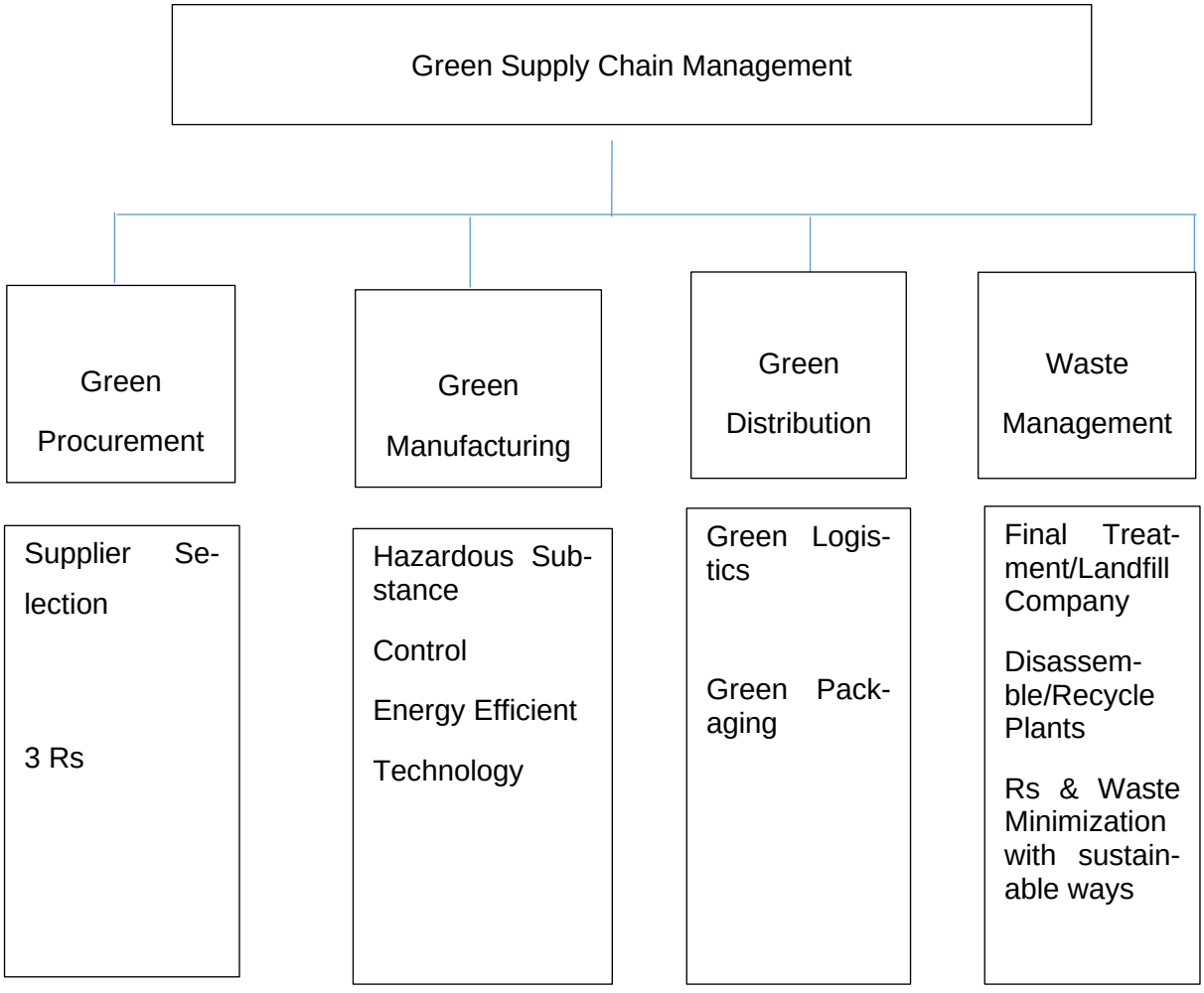


Figure 1: Activities in Green supply chain (Ninlawan & al. 2010, 2)

First, green procurement affirms purchasing products and services that cause minimal adverse environmental impacts. It incorporates human health and environmental concerns into the search for high-quality products and services at competitive prices (Smith, 2018, 45). Second, green manufacturing is the renewal of production processes and the establishment of environmentally friendly operations within the manufacturing field. It is the "greening" of manufacturing, in which workers use fewer natural resources, reduce pollution and waste, recycle and reuse materials, and moderate emissions in their processes have shown in Fig. 2. (Jones & Brown, 2020, 112). Third, the green distribution consists of green logistics and green packing. Packaging characteristics such as measure, shape, and materials affect distribution because they influenced the transport characteristics of the item (Wu, Dunn & Forman 2012, 16).

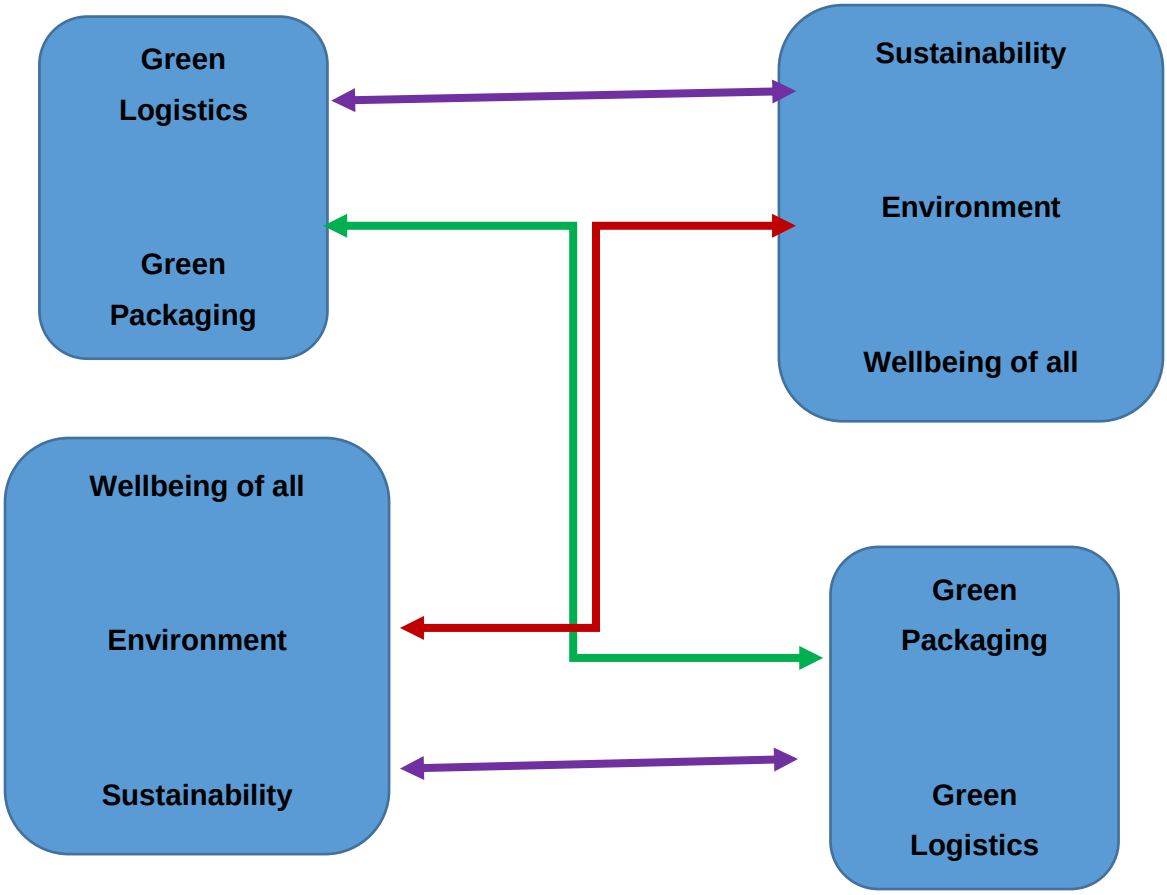


Figure 2: Relation between in green supply chain activities (Wu & al. 2012, 7)

Better packaging, alongside rearranged loading designs, can reduce materials utilization, increment space utilization within the distribution center and the trailer, and diminish the amount of taking care of required (Ninlawan & al. 2010, 5). Fourth, waste management is the process of treating solid waste and offers a variety of solutions for recycling items that do not belong to trash. It is about how garbage can be used as a valuable resource. Waste

management is something that each household and business owner in the world needs. Moreover, waste management disposes of the products and substances that you have used safely and efficiently.

By highlighting all these four elements of green supply chain management the thesis investigates these elements in detail by presenting a holistic perspective, which advocates the well-being of all including the environment, company, and customers (Smith et al. 2020 78). Moreover, the thesis investigates three logistic and packing companies related to distribution. Therefore, the work focuses on third segments of green supply chain management that highlight green distribution. Most businesses and supply chains now use a variety of green practices to increase efficiency while also helping the environment. Even though some of the followings are well-known environmentally beneficial practices (Brown & Johnson, 2019).

2.2 Green material sourcing

Material and component characteristics like reusability, recycling, and the absence of toxic or dangerous substances are sought in green sourcing. Procurement experts are being encouraged to rethink their current sourcing and buying methods and the environmental effect they have considering increasing environmental concerns (Smith & Brown, 2019, 42). Eco-friendly buying has two functions: recycling and remanufacturing. Sources such as green sourcing enable waste reduction while also improving recycling and remanufacturing capabilities, according to Min and Galle. Carter and Rogers investigated green sourcing to discover what impact it has on a company's environmental and financial performance (Carter & Rogers, 2020). They found that using a green buying approach lowered product prices while also improving companies' environmental and financial performance, as well as their reputation in the market. A company's operational and environmental success is positively correlated with eco-friendly buying, according to the authors (Zailani & al. 2010, 12). There are five diverse types of green buying according to the authors (Yang & al. 2014, 15): design operations management, supply chain management, environmental authentication, ecology, and external environmental management as shown in Fig. 3. According to the research, environmentally responsible buying contributes to a company's total profitability. The supply chain and company operations may reduce waste, contamination of the air and water by utilizing green buying.

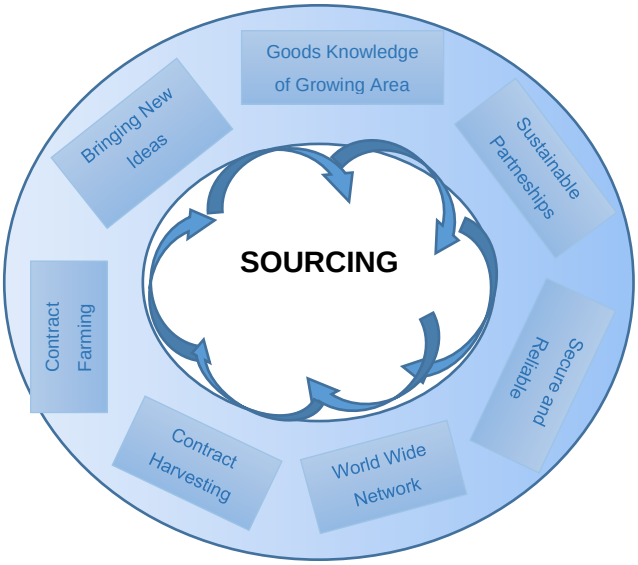


Figure 3: Sourcing green supply chain (Adopted from Judith 2017, 333)

2.3 Green marketing

Businesses and customers will be exposed to a range of marketing activities that demonstrate the company's goal of reducing impacts from its products thanks to its green marketing strategy (such as planning, manufacturing, process, pricing, promotion, and after-sale service) has shown in Fig. 4. While providing for the needs of people, there are steps we can take to reduce our negative impact on the environment. In addition to helping companies save money and the environment, green marketing also helps them gain an advantage in the marketplace.

Figure 4: Green marketing (Adopted from Hitesh 2019, 4)

2.4 Green management

GMPs give you more information to help you meet your business goals and protect the environment. Implementing green management practices has several advantages, including increased environmental compliance, cost savings, the fulfillment of social obligations, and reduced carbon emissions. Green management is a strategic method to reduce the environmental impact of an organization's supply chain while increasing its economic output (Adams & Johnson, 2019 78–92). As a result, performance-oriented features are essential in maximizing resources use and achieving sustainability ideas in an organizational environment.

Supply chain greening has become an increasingly prominent issue for many businesses and logistics managers in the 21st century. Organizational environmental awareness and environmental practices in supply chain logistics are particularly prominent issues. Research in this paper examines the relationship between organizational learning and management assistance and the measure to which logistics firms implement green supply chain management (GSCM) methods that are potential pollutants of the environment in their incoming and outward logistics activities. With initiatives like comprehensive quality management and environmental management systems, the company gained organizational and operational knowledge. Top and middle management, as well as employees from various departments, all provided support for GSCM ideas and practices (Zhu & al. 2008, 13).

2.5 Green distribution and warehousing

Using environmentally friendly logistics and storage may help reduce waste production while also enhancing the brand image of a business. Companies benefit financially and environmentally from using green distribution. Organizations, transportation companies, and governments have all taken steps to lessen the environmental impact of transportation and logistics. This is in response to a growing awareness of the problem of pollution caused by transportation. Vehicles today are environmentally benign, but initiatives to reduce pollution have not kept pace with rising transportation volumes. To lessen the environmental impact, new pathways must be opened. Organizations can reduce their environmental footprint by using green logistics. Identifying the green logistics distribution strategies considered by academics is therefore critical. It is also necessary to determine the efficacy of these procedures and the problems or obstacles encountered throughout their implementation. Only then can additional studies be done to provide solutions and focus on new research pathways, and only then can further research be pursued (Uygun & Dede 2016, 9).

2.6 Green manufacturing

By using ecologically and socially responsible methods, manufacturers may reduce their production's negative impacts while increasing their profitability. Productivity rises when industrial processes are less harmful to the environment. Reduced costs and improved quality are achieved via the use of green resources, providing the business with a competitive edge in the market (Johnson et al. 2018). To reduce waste and improve production efficiency, both lean manufacturing and green manufacturing use lean principles and green practices. When it comes to green manufacturing, there are many advantages. Green production methods reduce manufacturing's negative environmental impact while green manufacturing boosts a company's operational, environmental, and monetary performance. production that is more environmentally friendly (Wu & Green 2021, 32–45).

2.7 Ecological design

It's been shown that incorporating ecological design concepts into the supply chain may save waste by up to 80 percent, according to some research Materials derived from renewable sources, more efficient ways of production, and environmentally friendly design features are just a few of the ecological design ideas used (Jones & Green 2021, 76). As a result of thoughtful design, the environmental impact of a product may be minimized over its entire lifetime. Eco-friendly product design allows companies to repurpose waste resources and save money at the same time.

2.8 Green transportation and reverse logistics

By using eco-friendly shipping and reverse logistics, companies may enhance their image while also saving money. Improving the efficiency of the transportation system and establishing client relationships may reduce logistical costs and help companies thrive financially. Logistical operations related to rehabilitation may generate goods that may be resold to previous customers through reverse logistics (reuse, recycling, and manufacturing). Green logistics practices assist companies to minimize their environmental impact by increasing quality and reducing costs (Brown & Davis 2021, 78).

2.9 Green renewable energy and biofuels

There is a growing reliance on carbon and greenhouse gas emissions, the main drivers of global warming and pollution, as well as climate change in global logistics and supply chains on the global scale. For long-term environmental and economic growth, renewable energy

and biofuels are required to be used in the supply chain. Those in logistics need more energy than jobs in other industries (David 2008, 20). Businesses may increase output while decreasing carbon emissions by using sustainable energy sources like biofuels. Even though fossil fuels are better for the environment, they come at a price. Businesses are being compelled to use environmentally friendly energy and biofuels across their supply chains because of government requirements as well as conscientious consumers as shown in Fig. 5. Bioenergy helps the environment by decreasing carbon dioxide emissions, while simultaneously increasing corporate profitability and enhancing the public image and reputation of the company.

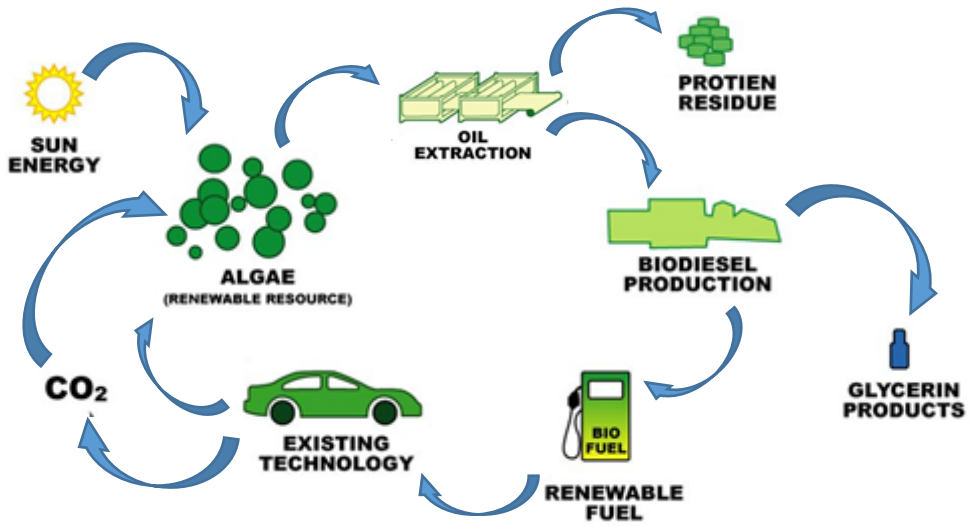


Figure 5: Green renewable energy and biofuels (Adopted from Çankaya & Sezen 2019, 5)

Businesses that want to go green with their logistics need to cut costs everywhere they can. By using recycled, repurposed, or remanufactured goods, packaging, components, and materials may be kept at a reduced cost. It has been shown (Khan & al. 2015, 16) that green practices open new markets and allow the sale of goods to nations that support the environment while polluting companies cannot. Businesses may save money, improve profitability, and gain market share by using environmentally friendly supply chain management techniques. Businesses use eco-friendly business practices to have a bigger effect on society. A higher quality of living for individuals will be achieved via greater social performance, without compromising the natural beauty of their surroundings. Increasing the company's social performance and improving the company's image all go hand in hand with environmental sustainability and reducing environmental hazards.

Companies may utilize GSCM techniques to improve the quality of their products and the timeliness of their delivery (Taylor & Clark 2022, 34). To reduce carbon emissions, eliminate

waste across the supply chain, and improve communication between suppliers and customers, companies may use green supply chain management methods. These programs may also make it simpler to promote reusing, recycling, and remanufacturing in the long term. To become more environmentally friendly, businesses may benefit from using an integrated environmental management system (IEMS).

2.10 The role of success factor in green supply chain management

There is no doubt that a green supply chain is a new idea, which is gaining popularity to improve environmental performance across the whole chain. We have identified the following six key crucial success factors for putting green supply chain management into practice to achieve enhanced environmental sustainability (Kamalakanta, Kannan, Akhilesh, Devika & Yong 2013, 10).

2.10.1 Ethical leadership/internal management

Internal environment management includes support from and encouragement from senior management. A robust internal management structure is required for a business to become green. Because of pressure from labor unions and environmental groups, senior management is forced to act. People's desire to participate in ecologically beneficial activities may increase if their views of environmental dangers are altered (Adnan, Bhatti, Farooq, & Wanasika, 2020).

2.10.2 Customer management

Customers are crucial in environmentally friendly supply chains. To fulfill their consumers' demands and remain competitive, businesses in developing countries are under considerable pressure to incorporate green practices into supply chain operations. Customer involvement is critical for reaping the benefits of green supply chain management (Attia, 2023).

2.10.3 Supplier management

Customers and suppliers must be involved if green supply chain techniques are to be implemented. Close supplier cooperation facilitates better incentive programs and quicker adoption of new eco-friendly concepts. An openness to new green practices like green partnership agreements and innovation in green practices may lead to improved operational and environmental performance and help companies achieve their economic objectives (Carballo-Penela, Ruzo-Sanmartín, & Sousa, 2023).

2.10.4 Competitiveness

According to published studies, expertise and essential components may play a role in the adoption of green practices across the supply chain (Meythi & Martusa, 2013). The company's dedication to environmental sustainability is sometimes overshadowed by its desire to become more competitive via the use of green practices. Other voluntary competitive considerations may have influenced companies' green business practices choices.

2.10.5 Social

Most specialists think society has an enormous influence on whether ecologically friendly methods are utilized nowadays. Considering the growing environmental consciousness among regulatory authorities and customers, businesses must disclose end-to-end details on how their supply chain activities affect the community and the daily lives of people. There is a better possibility for non-governmental organizations (NGOs) to persuade companies to become green if they use electronic and social media (Garcia & Martinez, 2022 45).

2.10.6 Regulatory

Most experts believe society has a significant impact on whether environmentally friendly techniques are currently used in manufacturing and other industries. Businesses must provide end-to-end information on how their supply chain operations impact the community and people's everyday lives considering regulatory authorities and consumers' increasing environmental awareness (Rupa & Saif, 2022). The use of electronic and social media by non-governmental organizations (NGOs) improves their chances of convincing corporations to become green.

2.11 Green supply chain management and sustainability

Governments and consumers alike are placing growing pressure on companies across the globe to minimize their environmental effects. People are growing increasingly worried about the environment. Companies need to obtain a competitive edge by incorporating sustainability into their service and manufacturing sector business practices while also lowering supply chain expenses from start to end. Internationally renowned specialists have turned their focus to eco-friendly solutions due to the increasing impacts of global warming, climate change, waste production, and air pollution. According to Rath, GSCM (green supply chain management) has a role to play in fostering organizational sustainability. Environmental awareness is increasing, and cities across the developed world should emphasize GSCM

as shown in Fig. 6. Therefore, the environmental movement has lately gained momentum among emerging nations.

According to studies performed by (Deloitte 2010, 3) and (McKinsey 2011, 7), supply chain management is essential to attaining sustainability. Sustainability is based on three pillars: economic development, environmental preservation, and social justice. Despite this, business and the environment have gotten more attention than social problems. With green supply chain management (GSCM), businesses may better monitor their environmental performance across the supply chain. Green buying, product design, and product end-of-life management are all covered in the scope of GSCM, according to a study (Srivasta 2007, 4).

Most of the emphasis in the supply chain planning and design literature has been concentrated on GSCM. A typical approach is to develop a mathematical optimization model that maximizes economic and environmental advantages while reducing expenses. The selection of suitable raw materials and suppliers, technology, or transportation routes are among the choices to be considered. For example, (Hugo & Pistikopoulos 2005, 2), (Bojarski al. 2009, 3), (Guillén & Grossmann 2010, 5). Profit and customer satisfaction are two examples of economic success metrics. Waste reduction algorithms (Cabezas & al. 1999, 19) and LCA-based metrics like CML 2001 (Guinée 2002, 7) are examples of environmental indicators. Even though most studies concentrate on strategy and design, the operational dynamics of the supply chain are seldom addressed.

2.12 Green supply chain and financial outcomes

Study results show that green supply chain management practices provide substantial financial and environmental advantages, according to (Golicic & Smith 2013, 9) and (Wu & Pagell 2011, 4) Green supply chain management involves tradeoffs and cost-benefit problems no matter how you look at it (GSCM). Many business leaders are not sure whether developing green practices will pay off or if they can even produce them in the first place (Rao and Holt 2005, 17) and (Kleindorfer, Singhal & Wassenhove 2005, 15). There are numerous green resources and talents needed to offer monetary and ecological advantages, according to experts. However, many of these resources and abilities have yet to be proven in real-world situations (Guang & al. 2012, 9). Researchers in the green supply chain have considered stakeholders, administrative weights, and institutional weights in a study by (Guang & al. 2012, 4), (Pagell & Wu 2009, 12) and (Zhu, Sarkis & Lai 2013, 22). This is based on the work of (Pagell & Wu 2009, 12) there has been truly little research done on organizational orientations before implementing a green supply chain. Since practitioners represent key business directions and practices that are applied across the whole

organization to achieve better performance, additional thinking and analysis were required to properly understand the effect of practitioners (Chan, Chan & Wang 2012, 7).

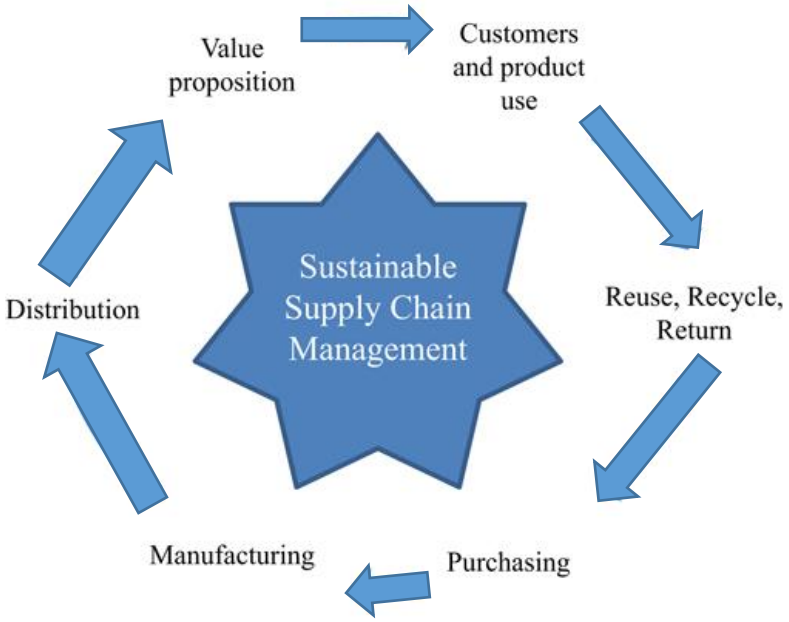


Figure 6: Sustainable supply chain management (Adopted from: Swayam, Bikram & Vipul 2019, 12)

To what extent does a company respond to green supply chain management problems reveal assets and skills needed to implement green practices while still guaranteeing regulated financial and ecological outcomes? Strategic organizational orientation is required to properly comprehend the impact of business practices on firm behavior and competitive company performance (Noble, Sinha & Kumar 2002, 17). Supply chain management is driven by strategic direction, which shapes the network's features, behavior, and decision-making (Mello & Stank 2005, 15). Because of this, the study's goal is to investigate the significance of organizational orientation in the development and implementation of profitable green supply chain practices or mechanisms, as well as the impact of such practices or mechanisms on improving business performance.

2.13 The impact of SCM on supply chain operations

The majority of supply chain management (SCM) research has concentrated on the positive aspects of the supply chain, such as product acquisition and management (Carter & Dresner 2001, 4). Contrary to widely held belief, there has been truly little research done on the breadth and depth of critical skills and practices. Sarkis started to coordinate green practices across many corporate divisions and several tiers of suppliers in 2012, when they were recognized as important but more implicit and harder to understand abilities. By the end of

the study, the authors concluded that a key competence was needed to handle the natural or environmental consequences of inventory network operations.

Several GSCM frameworks treat GSCM techniques as though they were secretly stored in a mystery box in a vault (Sauer & Seuring 2018, 4). When establishing categories using a supply chain structure, different approaches are ignored. This may be due to a misunderstanding of GSCM practices and essential operations in the supply chain (SC). Not all "going green" means using less or returning packaging (Rostamzadeh & al. 2015, 3).

According to (Darnall 2008, 7) It has to do with business strategy, whereas the other does not necessarily have anything to do with the supply chain It is difficult to find published research on an individualized and in-depth theoretical-practical approach to different GSCM activities because of these and other constraints. According to (Sarkis & al. 2011, 5) thorough evaluation of theories that might explain the phenomena, the GSCM processes were accepted. There was no comparison of the concepts' suitability for different types of practices.

More in-depth typologies and publications on the usage of GSCM methods do not utilize the same theoretical approach. They provide managerial practices and implementation evaluation methods in a significant paper published in the journal GSCM (Zhu & al. 2008, 9). A more recent example is the framework developed by (Centobelli & al. 2017, 5). When it comes to the tools and the practice methods under this paradigm, there are four objectives. With this approach, supply chain practices that are exclusive to one business may be isolated from those used by others. Since the focus has been on application, ideas that might aid academics in improving the model have been left out.

2.14 The effect of GSCM on the decision-making process

Suppliers collaborate with manufacturing and storage facilities to obtain raw materials. Several suppliers work together to create and deliver the final product. Sustainability in the supply chain is influenced by the sourcing of both primary and secondary raw materials (intermediaries), packaging materials, and manufacturing facilities. Because there are so many parties involved and so many differences in their interactions, responsibilities, and constraints, managing the supply chain is a challenging task This degree of complexity has the potential to lead to undesirable outcomes like dominoes falling and chaotic dynamics taking over. Making supply chain decisions is more difficult than it should be because of delayed information, limited visibility, and various levels of uncertainty (Malviya & Kant 2016, 14).

The economic and environmental performance of the supply chain may take time to see how a business decision serves the company's objectives, even if it is successful. It is critical

to examine the system's influence on decision-making in depth. Chain simulation models help us better understand supply chain dynamics (CSM). Dynamics simulation can show how supply chain decisions affect sustainability over the short and long term. LCA indicators are used in our simulation model to determine the supply chain's long-term viability. Before creating our dynamic simulation model, we will run through some standard supply chain operations. An analysis of the long-term viability of two different diaper and detergent supply chains is conducted by the author (Sivaprakasam, Selladurai & Sasikumar 2015, 12).

3 Research Methods

This chapter represents the researcher's choice of the method approach for the case companies and the reasons why they have decided to choose this method. The main research method is qualitative. Moreover, all the data are collected through reviewing the case company website, published case studies, research studies, published interviews, and others.

3.1 Qualitative Research

According to Susan E. DeFranzo (2011; 12), qualitative research "is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. Qualitative Research is also used to uncover trends in thought and opinions, and dive deeper into the problem" (Gallagher 2009, 7).

The research methodology of this study is desktop research to acquire knowledge of theoretical background about green supply chain management and GSCM practices of DHL, Amazon, and UPS.

3.2 Data collection methods

Published papers, books, case studies, company websites would be the main method for the data collection. Besides, I shall also review the published interview of DHL, Amazon, and UPS senior representatives on the issue of the green supply chain management practice. This research is qualitative, and data will be collected through a questionnaire that is used as the data collection technique.

3.2.1 Participants

The questionnaire has been distributed among the individuals who are directly or indirectly related to the logistics firms. One hundred populations have been selected for this research and forty responses we have collected from the one hundred populations.

3.3 Data validity and reliability

To check the data validation and reliability, I shall cross-check with a published report by all three case companies.

3.4 Research design

The research method selected for this study is qualitative. This chapter shows how data is collected and analyzed to answer the research questions. This research explains why it comes under the category of qualitative research. In this research secondary data is utilized to analyze and fulfill the research questions. The secondary data is collected through the available resources like articles, journals, interviews, questionnaires, TV, newspaper, books, and websites shown in Fig. 7.

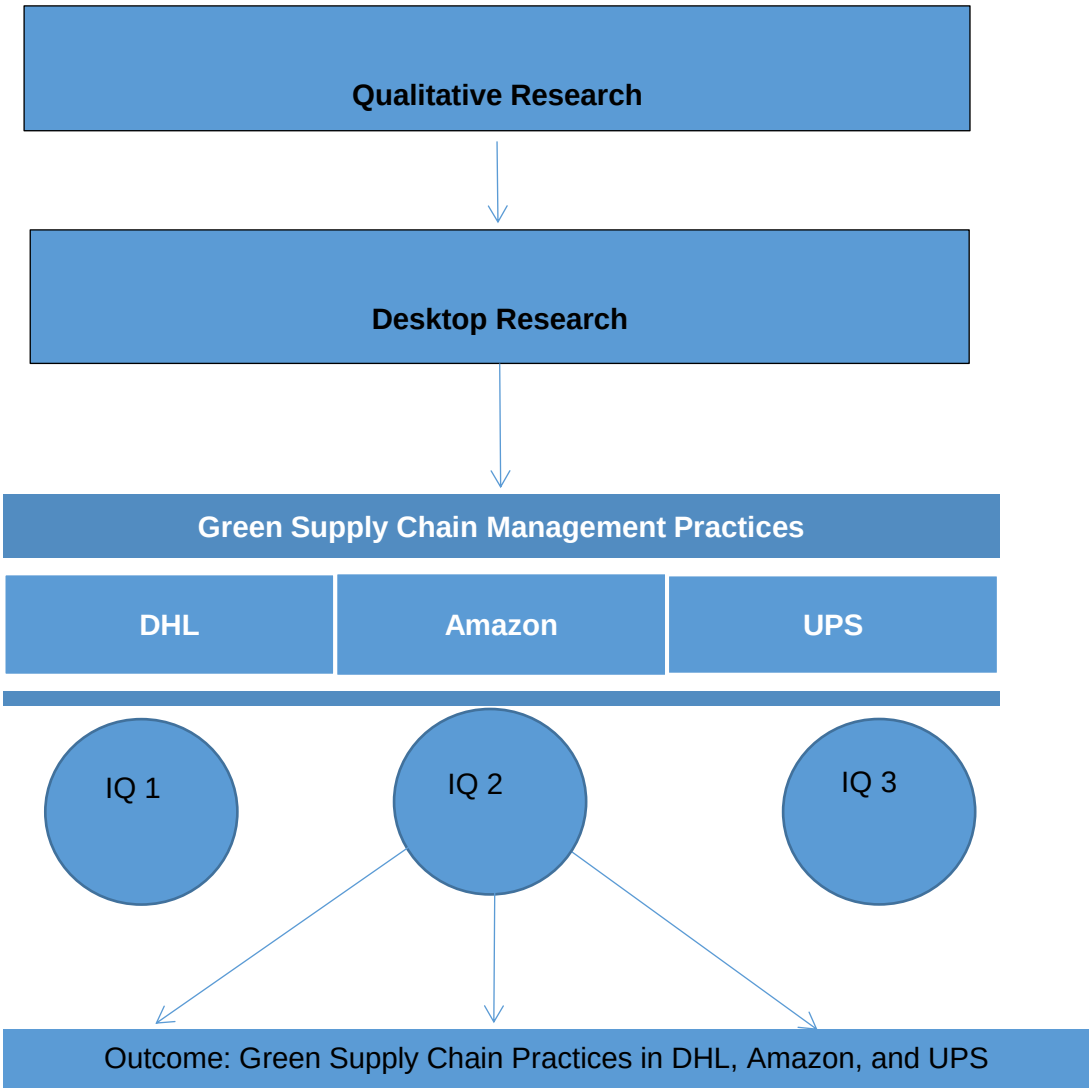


Figure 7: IQ Relation with Case Companies

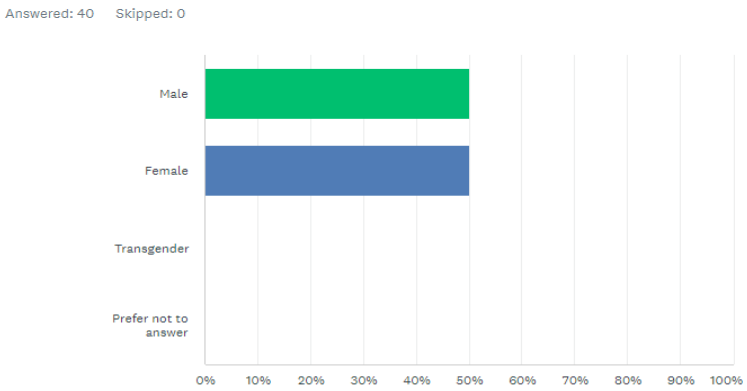
4 Results and discussion

In this chapter, the designed research is analyzed through the questionnaire on an online platform that is surveymonkey.com where questionnaire link is distributed and get the forty responses and made the following results below.

4.1 Questionnaire results and discussion

Q:1 What gender do you identify as?

Figure 1: ratio of male to female

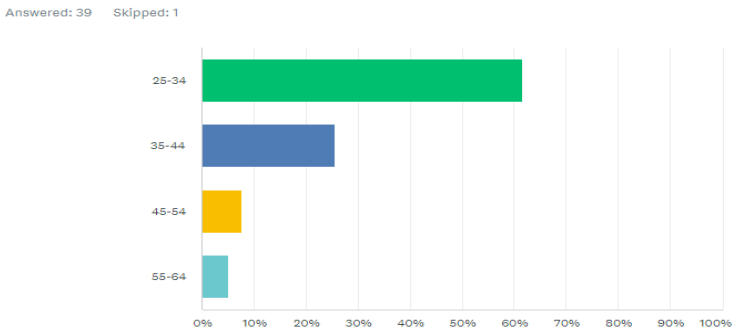


ANSWER CHOICES	RESPONSES	
Male	50.00%	20
Female	50.00%	20
Transgender	0.00%	0
Prefer not to answer	0.00%	0
TOTAL		40

In the above question, forty responses have been collected in which twenty were Females and 20 Male candidates who has participated in this research and gave their opinions. The ratio of males and females is equal as the companies gave equal rights either employees are males or females. This survey demonstrate best results as the participation of males and female is equal.

Q 2: What is your age?

Figure 2: Age group of Participants

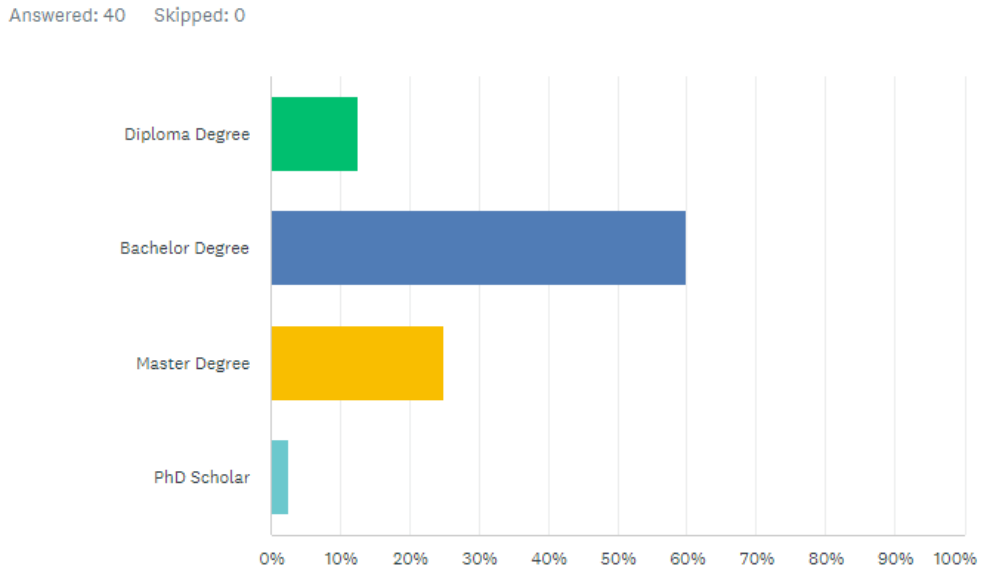


ANSWER CHOICES	RESPONSES	
25-34	61.54%	24
35-44	25.64%	10
45-54	7.69%	3
55-64	5.13%	2
TOTAL		39

In the above, 61.54% of responses are of age in the range of 25-34 years, 25.64% are of 35-44 years, 7.69% are of 45-54 years and 5.13% are of 55-64 years old who have participated in this study. A higher percentage of the young respondents with the age range of 25-34 show that the employees from the other companies have fresh education and strong mental power. The higher number of youngsters in this survey participation depict the high ratio of hiring process of youngsters.

Q 3: What is the highest degree or level of education you have completed?

Figure 3: Qualifications of Participants

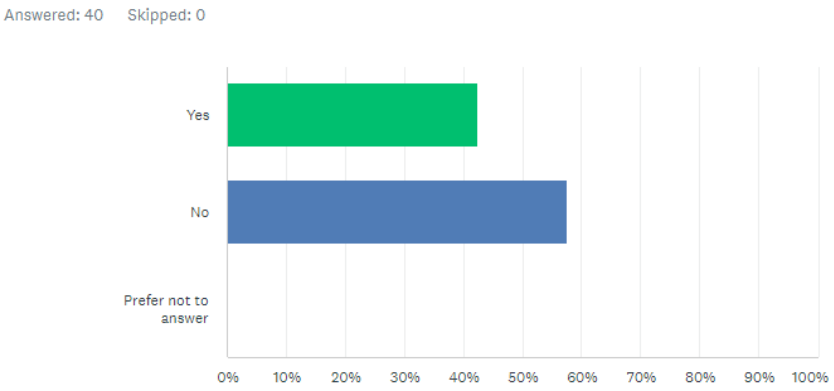


ANSWER CHOICES	RESPONSES	
Diploma Degree	12.50%	5
Bachelor Degree	60.00%	24
Master Degree	25.00%	10
PhD Scholar	2.50%	1
TOTAL		40

In this question, the maximum responses have their higher degrees of education is bachelor's with 60% weightage, 25% have master's degrees and 12.50% have Diplomas degree and 2.5% have Ph.D. degrees who have participated in this research. The higher number of the participant are those who possessed the bachelors' degrees and this shows that the respondents are youngsters.

Q 4: Are you married?

Figure 4: Marital status of Participants



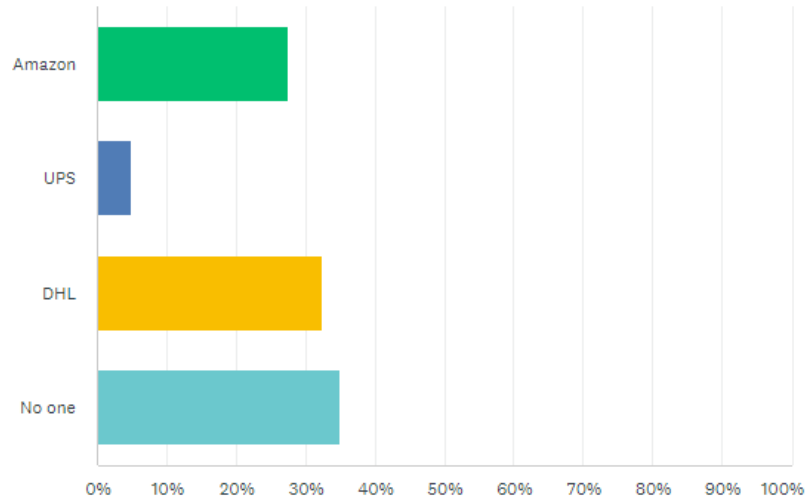
ANSWER CHOICES	RESPONSES	
Yes	42.50%	17
No	57.50%	23
Prefer not to answer	0.00%	0
TOTAL		40

The above analysis shows that the maximum number of respondents are non-married lives with 57.50% weightage and responses who are married have a weightage of 42.50% in this research.

Q 5: By which supply chain company, you ever availed of the logistics services?

Figure 5: Services availed by Participants

Answered: 40 Skipped: 0

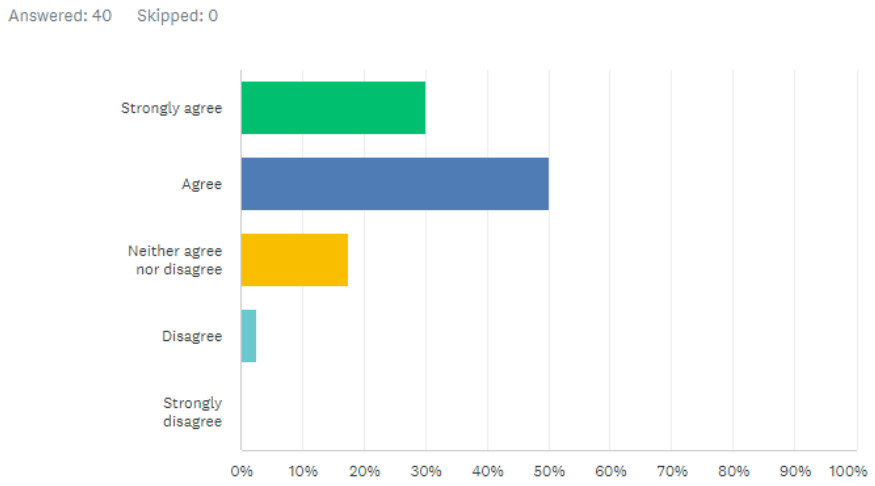


ANSWER CHOICES	RESPONSES	
Amazon	27.50%	11
UPS	5.00%	2
DHL	32.50%	13
No one	35.00%	14
TOTAL		40

In the above analysis, 35% of responses have not availed the logistics services, 32.50% have availed the DHL services for logistics purposes, 27.50% responses have used the Amazon services, but the 5% individuals are such who have availed the services of UPS. The higher number of participants are those who did not use the logistics services as they believe they are less habitual to using the services of the logistics. A small number of the respondents used the UPS services because they feel UPS has the excessive cost of the services.

6: Are the green supply chain concept benefits the logistics companies like Amazon, UPS, and DHL?

Figure 6: Response by Participants

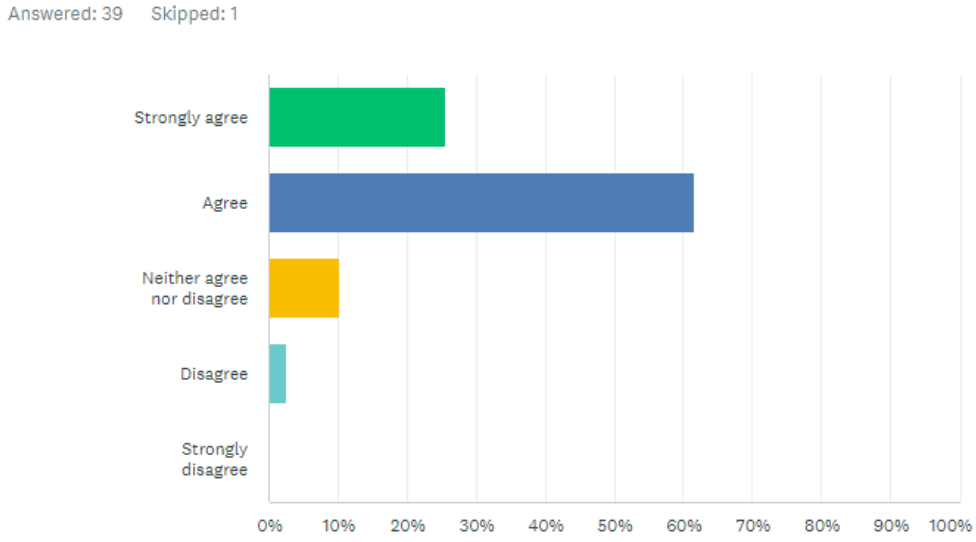


ANSWER CHOICES	RESPONSES	
Strongly agree	30.00%	12
Agree	50.00%	20
Neither agree nor disagree	17.50%	7
Disagree	2.50%	1
Strongly disagree	0.00%	0
TOTAL		40

The above analysis shows that 50% are agreed that the green supply chain services will benefit the logistics market and the companies like Amazon, UPS, and DHL. 30% strongly agreed with the green supply chain services effects on the logistics companies. 17.5% are those who neither agree nor disagree. 2.50% believed that the green supply chain services will not benefit the mentioned companies. A green supply chain can lead to improved financial performance, environmental sustainability, and increased competitiveness for logistics companies. It is implementing sustainable practices can help reduce operational costs by optimizing fuel consumption, minimizing waste, and improving supply chain efficiency. It can enhance the company's brand image and reputation, leading to increased customer loyalty and attracting environmentally conscious consumers.

Q 7: Are green supply chain ideas can be utilized to reduce environmental issues?

Figure 7: Response regarding Green Supply

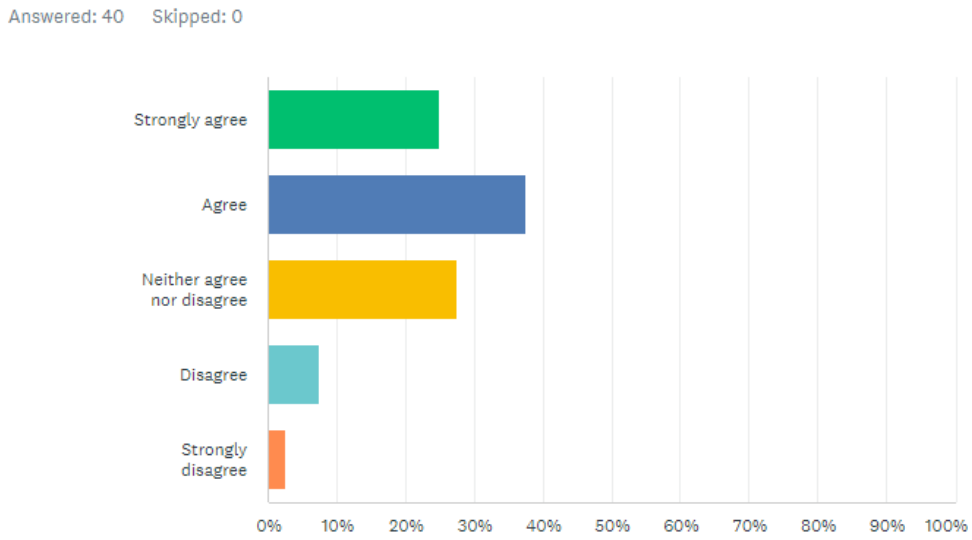


ANSWER CHOICES	RESPONSES	
Strongly agree	25.64%	10
Agree	61.54%	24
Neither agree nor disagree	10.26%	4
Disagree	2.56%	1
Strongly disagree	0.00%	0
TOTAL		39

The above figure shows that 61.54% of individuals are agreed with the statement that green supply chain management will reduce the environmental issues on the global earth. 25.64% are strongly agreed with the mentioned statement about the reduction of environmental issues by employing green supply chain practices. 10.25% are those who neither disagree nor agree with the mentioned statement. 2.56% disagrees with the established statement. The higher number of participants believed that green supply chain ideas can be utilized to reduce environmental issues. The concept of a green supply chain involves integrating environmental considerations into all aspects of the supply chain, from sourcing of raw materials to the end-of-life disposal of products. By implementing sustainable practices throughout the supply chain, companies can reduce their environmental impact and contribute to a more sustainable future.

Q 8: Are companies like DHL, Amazon, and UPS practicing green supply chain management?

Figure 8:Companies using GSCM

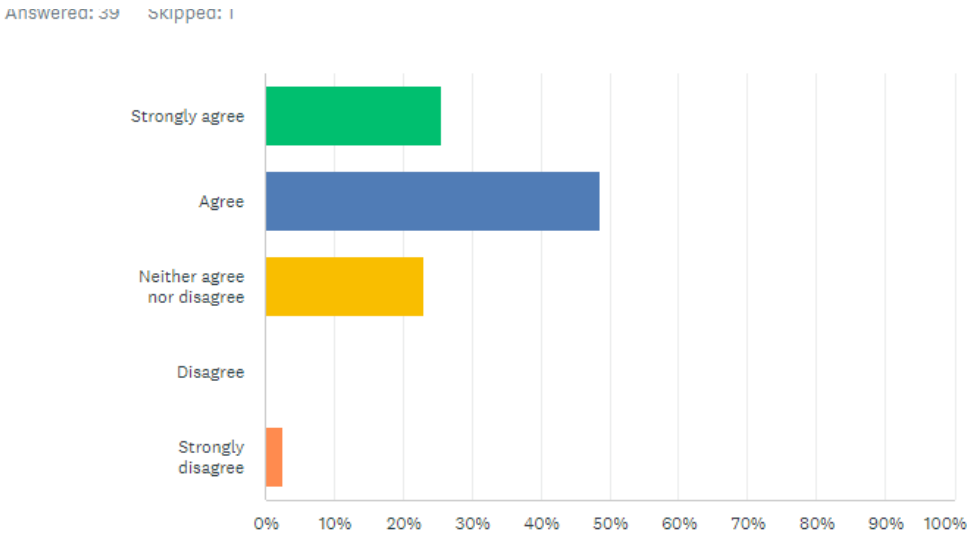


ANSWER CHOICES	RESPONSES	
Strongly agree	25.00%	10
Agree	37.50%	15
Neither agree nor disagree	27.50%	11
Disagree	7.50%	3
Strongly disagree	2.50%	1
TOTAL		40

The analysis shows the results that 37.50% of an individual believed and agreed that the logistics companies like UPS, Amazon, and DHL are practicing green services in the companies. Twenty-five percent of individuals strongly believed and agreed that the logistics companies like UPS, Amazon, and DHL are practicing the green services their processes. 27.50% neither believed nor agreed that the logistics companies like UPS, Amazon, and DHL are practicing green services. 7.50% of individuals have disagreed that the logistics companies like UPS, Amazon, and DHL are practicing green services in the companies. 2.50% of individuals strongly disagreed that logistics companies like UPS, Amazon, and DHL are practicing green services in the companies.

Q 9: Is GSC's idea making the strength of DHL, Amazon, and UPS from both environment and company perspectives?

Figure 9: Response about GSC idea

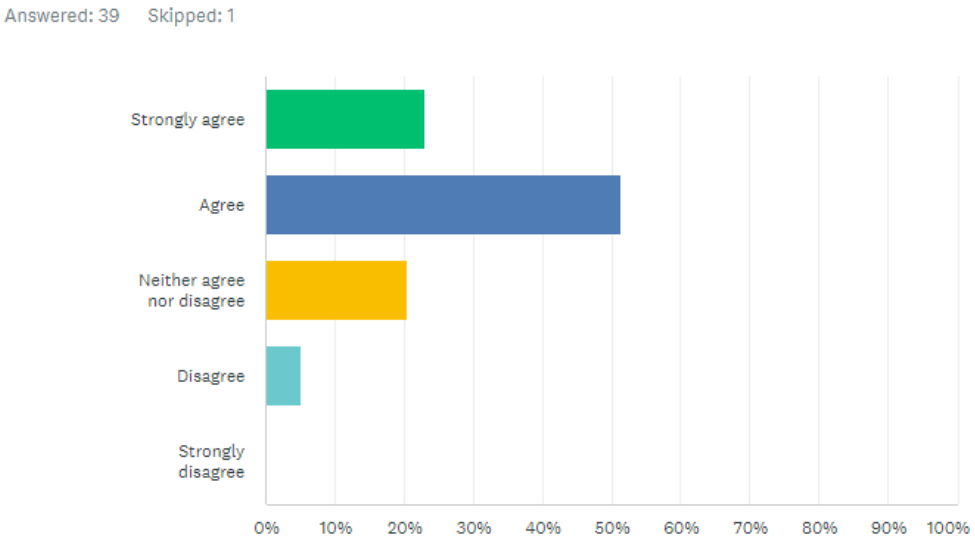


ANSWER CHOICES	RESPONSES	
Strongly agree	25.64%	10
Agree	48.72%	19
Neither agree nor disagree	23.08%	9
Disagree	0.00%	0
Strongly disagree	2.56%	1
TOTAL		39

The above analysis shows the results, the concept about the GSC will be a strength in the logistics market from both company and environmental perspectives. 48.72% of individuals are agreed with the statement, 25.64% individuals are strongly agreed with the statement, 23.08% are neither agreed nor disagreed with a statement about the GSC having a positive impact on the company as well as the environment, and 2.56% of the individual are strongly disagreed with statement mentioned above. The higher number of participants who agreed with the statement as the adoption of green supply chain (GSC) practices can provide several strengths and benefits for logistics companies like DHL, Amazon, and UPS from both environmental and company perspectives. From an environmental perspective, implementing GSC practices can help reduce the carbon footprint and other environmental impacts of logistics operations. By optimizing transportation routes, reducing energy consumption, and minimizing waste, logistics companies can significantly reduce their environmental impact and contribute to a more sustainable future.

Q 10: Is the green supply chain management practices of DHL, Amazon, and UPS promote the well-being of the environment, customer, and company?

Figure 10: Response of companies



ANSWER CHOICES	RESPONSES	
Strongly agree	23.08%	9
Agree	51.28%	20
Neither agree nor disagree	20.51%	8
Disagree	5.13%	2
Strongly disagree	0.00%	0
TOTAL		39

The above results show that 51.28% of people agreed that the GSC management practices will promote the well-being of the environment, customers, and companies like Amazon, DHL, and UPS. 23.08% of people are strongly agreed that the GSC management practices will promote the well-being of the environment, customers, and companies like Amazon, DHL, and UPS. 20.51% of people neither disagreed nor agreed with the statement that the GSC management practices will promote the well-being of the environment, customers, and companies like Amazon, DHL, and UPS. 5.13% of people disagreed that the GSC management practices will promote the well-being of the environment, customers, and companies like Amazon, DHL, and UPS. The adoption of green supply chain management practices can promote the well-being of the environment, customer, and company. By adopting sustainable practices throughout the supply chain, logistics companies like DHL, Amazon, and

UPS can contribute to a more sustainable future while also improving business performance and customer satisfaction.

4.2 SWOT Analysis

4.2.1 DHL

Strength	Weaknesses
• DHL has a global network of 220 nations and territories. Worldwide, DHL is the biggest Logistic Service Provider (LSP). This gives DHL an advantage over the international competitors. DHL's expansion has been aided by excellent in-house advising and superb contacts. • DHL is one of the world's most recognizable brands. • In developed countries, DHL is expanding its operations. Investments in developing countries have been made by Deutsche Post DHL (DHL) to have a strong presence in growing economies.	• To get started and continue to grow, the logistics business needs massive amounts of capital. DHL also needs a lot of money to build its operation and make a profit. • It is expected that DHL will act in accordance with local and federal regulations. It may be impossible to comply with different rules in the source and destination regions, because of the differing regulations.
Opportunity	**Threats**
• DHL has the option to acquire local players in the target market to broaden its reach. • DHL has established a presence in all emerging regions, but it must expand to take advantage of the new opportunities that exist there. • They need to focus on their overseas supply chain, which is customer-oriented, to improve their business. • In addition, the growing popularity of online purchasing provides an additional incentive to enter this sector. Because e-commerce is widely regarded as the future of retail, DHL must increase the scope of its logistical support for online retailers.	• Customers in all areas face stiff competition from FedEx and UPS, the two major competitors of DHL. DHL is also under competition from a slew of local brands. • Logistics is one of the hardest-hit industries when the economy is in decline. • DHL's biggest problem is that it has lower and more competitive costs than local couriers. In addition, they can provide top-notch customer service to these local participants. • Post and letter services have declined because of technological advancements in industrialized and developing countries. • DHL's income and delivery could be affected by government regulations.

Table 4.2. 1 DHL SWOT Analysis

4.2.2 UPS

Strength	Weaknesses
• DHL has a solid financial track record and is financially secure. More companies are relying on DHL's services as a result. As a result of its strong financial position, UPS has been able to expand its business year by year. • UPS aims to be seen as a global logistics leader. As a result, it has developed a DHL Innovation Hub where customers and partners may meet with UPS specialists to learn about new products and services. Resilience360 and Smart Sensor were two of the most popular ideas for logistics systems that came out of the creative center. • Customer service is excellent at UPS.	• UPS's market share in developed and developing economies is limited because of its high pricing approach, which makes it difficult for other companies to compete. • Delivery partners are needed because of a broad market and a large network of delivery partners is necessary.
Opportunity	**Threats**
• UPS can expand its reach by acquiring local players in the target market. • However, UPS must expand to take advantage of the new opportunities that exist in the rising markets. • They need to improve their business by focusing on their customer-focused international supply chain. • An additional reason to enter this market is the rising popularity of internet shopping. It is imperative that UPS expands its logistical support for online businesses because e-commerce is widely seen as the future of retail	• FedEx and Amazon, two of UPS's main competitors, pose a threat to customers in every region. Competition from numerous domestic businesses has put UPS in the crosshairs. • When the economy is weak, logistics is one of the worst-affected industries. • Because UPS has cheaper and more competitive costs than local couriers, it is the company's largest concern. As a result, they can deliver excellent customer service to these residents. • Industrialized and developing countries alike have seen a fall in the use of postal and letter services because of technological improvements. • Government laws could have an impact on UPS's revenue and delivery.

Table 4.2. 2 UPS SWOT Analysis

4.2.3 Amazon

Strength	Weaknesses
• Amazon has a good procedure for handling consumer complaints. • It employs a substantial number of people. Amazon devotes a lot of resources to employee training and development. • The company's output will rise because of encouraging its staff to work harder.	• Amazon relies on smaller and more local businesses for delivery. And this has a direct impact on Amazon's operational efficiency, thus teamwork is essential. • Amazon spends less on advertising and branding than FedEx or UPS since its marketing costs are lower. This influences a company's ability to build and maintain a brand.
Opportunity	**Threats**
• Local payers in the target market are an excellent source for Amazon to broaden its market reach. • To take advantage of the expanding market prospects, Amazon must expand. • Focusing on the international supply chain will help them strengthen their business. • Growing acceptance of online shopping as a means of procuring goods is another reason to enter this sector. Because e-commerce is considered as the future of retail, Amazon must increase its logistical support for online firms.	• Amazon's primary rivals, FedEx, and DHL, represent a threat to customers all over the world. Amazon is now under attack from a slew of domestic rivals. • Logistics is one of the industries hardest hit when the economy is poor. • Amazon is the company's primary focus because it has lower and more competitive costs than local couriers. As a result, they can provide high-quality customer service to these people. • Postal and letter services have declined in both developed and developing countries because of technological advancements. • Laws enacted by the government could affect Amazon’s revenue and delivery.

Table 4.2. 3 Amazon SWOT Analysis

4.3 Discussion

Amazon, UPS, and DHL are examples of companies that have implemented innovation, particularly in their environmental systems.

4.3.1 Discussion about SWOT analysis

The SWOT analysis shows that the selected organization's capabilities or factors might be both a strength and a weakness. This is one of the main drawbacks to SWOT analysis. Changing environmental rules, for example, can be both a threat and an opportunity for a firm, allowing it to compete on a level playing field or gain an advantage over its rivals if it is able to improve its products faster than its rivals. For SWOT to be useful, it must not be seen as an aim.

SWOT analysis is the most often utilised analytical paradigm in strategic analysis. Strengths and weaknesses, opportunities and dangers have also been assessed. Organizations like Amazon, UPS, and DHL, which compete in the market, must be aware of the internal and external elements that influence their ability to perform efficiently and effectively. In this study, we'll show that SWOT analysis is a simple yet useful technique and that its variables are influenced by the environmental effects of businesses.

SWOT analysis includes both strengths and weaknesses as internal elements. Identifying and assessing the environmental components of the organisation that can affect the success or failure of the company's adopted strategy is a necessary step in conducting this analysis. Possibilities and dangers are examples of external influences. Investigating these variables means looking into outside influences that Amazon, DHL, and UPS have no control over, but which may have an impact on their operations. Over emphasizing one internal or external component in designing strategies may result from a SWOT analysis. SWOT does not highlight the interrelationships between the key internal and external aspects that may be crucial in formulating strategies. Even in the early stages of a long-term newcomer, organizational innovation can be a challenge. If top management decides to promote employee involvement, cultural shift, knowledge management, increased employee commitment, increased employee empowerment, and organizational behaviour effects of organizational rewards and incentives systems, efficient training, communication secessions, and team development, the first step toward success can be taken. Studies in environmental management have shown that senior management is properly involved in cross-functional projects like GSCM.

4.3.2 Discussion about research questions

These successes include business process reengineering, the deployment of ISO 14000, enterprise resource planning (ERP), and an enterprise management system also an additive advantage in the logistics market. Success is invariably linked to the support of top management. According to prior research, the efforts of organizational commitment to GSCM have been supported by top management in the executive board. To successfully integrate environmental practices, it is critical that senior management, as well as midlevel management, provide their support. The successful implementation of environmental practices necessitates the participation and cooperation of all departments in the organization at the middle management level. Communication between company managers and environmental professionals is essential for environmental practices to be supported.

Green supply chain management strategies are examined to illustrate their real and potential impact on economic performance and corporate competitiveness. Green logistics, green innovation and green technologies have been studied in a brief literature study to achieve this goal. It has also been included in this review of the literature on these topics. Since the DHL investigation, we have learned more about the impact of green innovation and technology on supply chain management (SCM) and company performance in terms of cost savings, competitiveness, and social integration.

Furthermore, this discipline emphasises reducing harmful emissions, resource consumption, and long-term sustainable development by using sophisticated technology and equipment. (Harris & al. 2009, 5). GSCM is commonly referred to as "closed-loop supply chain management" in the literature because of its emphasis on environmental issues. According to above study three primary players are involved in the greening of logistics: The government, the enterprise, and the consumer all have a role to play in ensuring that laws and regulations are enforced.

In logistics, innovation isn't just about decreasing environmental impact; it's also a key factor in enhancing the company's competitiveness. New ideas can be used to the products, processes, or any other part of a company's activity when it comes to innovation. Logistics management can benefit from green innovation in a variety of ways, including ICT, biological, monitoring, and many more, because it has the potential to enhance the effectiveness and efficiency of service delivery, logistically innovative procedures represent an exciting and rapidly developing area of study and application.

5 Conclusion

It has been concluded from the above study that the environmental issues exploded like wildfire as soon as industrialization got underway. These people then spread across countries before becoming well-known on a global scale. Water contamination, air pollution, and a lack of organic assets cause various diseases, as well as health problems in human beings and ailments including ischemic stroke and heart infection, lung cancer, significant interference with the lungs, and cerebrovascular illness. With the introduction of new environmental concerns, a new supply chain practice technique has evolved, namely green supply chain practice, which fundamentally transforms how firms create and distribute goods and services. To put it another way, the depletion of natural resources creates new chances for manufacturing and providing goods and services. However, environmental concern has arisen as a significant reason for logistics companies like Amazon, UPS, and DHL to embrace supply chain practices that are ecologically friendly, such as green supply chain practices, and this has gained widespread attention across the globe from companies of all sizes.

By incorporating green supply chain practices into firm operations, the green supply chain minimizes environmental concerns like air pollution, water pollution, and waste. The fundamental assumption of a sustainable strategy is to improve ecological liability. A green supply chain, on the other hand, may minimize pollution and manufacturing costs while simultaneously igniting economic growth, boosting consumer happiness, building a wonderful brand and image, and enabling businesses to obtain their products from ecologically friendly nations. According to these criteria, environmental concerns are crucial to everyone's well-being, including businesses. Consider supply chain management: it not only benefits the environment but also ensures optimum advantages.

This is well-documented proof. So, this study looks at three corporations, including DHL, Amazon, and UPS, to see how green their supply networks are. One advantage of the research is that it studies the green supply chain management practices of three separate organizations, which may be utilized for comparative understanding. This investigation also highlighted that DHL is more concerned about green supply chain management. The GSC management practices are implemented in DHL with its core process.

6 Recommendations

It has been also concluded from the above questionnaire results that companies like Amazon, UPS, and DHL can make use of the GSC to benefit the company, their clients, and the environment. The corporation might make use of the thesis' information to minimize the threats and difficulties highlighted by the SWOT analysis to ensure a long-term future. The outcomes of this study can be used in other efforts and publications in the future. Process systems engineering literature has devoted a lot of attention to supply chain management (GSCM). This study can be utilized to maximize economic rewards while reducing environmental impacts. Choosing raw materials and suppliers, as well as technology and transportation routes, are all part of the decision-making process. Economic performance assessments cover criteria like profit and consumer delight.

6.1 Self-learning

About 3 months have passed since I started working on my thesis. In my perspective, it's a little too short. I have learned a lot about my field of study and improved my interpersonal skills by conducting this research, including independent work, communication, and data collection and analysis. I have honed my time-management and task-allocation skills by completing my thesis in such a short period of time. Even though I work mostly with the case company's management, I have greatly improved my communication skills and received business insights from case companies because of survey. My computer abilities have improved in the areas of searching strategies and essay writing. My knowledge of research methodology, specialist knowledge, and societal knowledge is considerably enhanced by reading and browsing paper books.

There were some hiccups in the early stages of deciding what to investigate. My boss and supervisor, on the other hand, have been helpful throughout the entire process of conducting the research. It was not until the writing of my thesis that I had any prior knowledge or experience in the business world, both in Finland and around the world. For my specialisation and future career, the case firm provides valuable insights into doing business in Finland and worldwide trading via sourcing from a wide range of countries. With the help of the case company, each step of the process is completed. In addition, the supervisor's guidance in organising and concluding the study has been invaluable.

The learning process from the above study concluded that when organizations have operations in numerous nations, the rules and regulations in each country can be very varied. Supply chain management is a challenge for logistics firms like UPS, Amazon, and DHL

because of the considerable variation in regulatory environments across regions and countries. When a company has locations in multiple states or countries, ensuring compliance can be impossible. Companies need to realize that government intervention can aid their efforts. Administrations must be aware of the consequences of their daily acts if they want to avoid sanctions. As a result, businesses must pay awareness to and protect themselves from conformance risks most cost-effectively and effectively possible.

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