

Project Dissertation Report on

**Customer Perception of Triple Bottom Line in
Supply Chain**

Submitted by

Sneh Bhandari

2K20/DMBA/129

Under the Guidance of

Mr. Dhiraj Kumar Pal

Assistant Professor



Delhi School of Management

Delhi Technological University

Bawana Road Delhi 110042

CERTIFICATE

This is to certify that Sneh Bhandari (2K20/DMBA/129) has submitted the project report titled “Customer Perception of Triple Bottom Line in Supply Chain” in partial fulfilment of the requirements for the award of the degree of Master of Business Administration (MBA) from Delhi School of Management, Delhi Technological University, New Delhi during the academic year 2021-22.

Project Guide

Mr. Dhiraj Kumar Pal

Head of Department

Dr. Archana Singh

Date:

DECLARATION

I, Sneh Bhandari, Roll No. 2K20/DMBA/129, student of MBA Batch 2020-20 of Delhi School of Management, Delhi Technological University, declare that the Project Report/Dissertation titled “Customer Perception of Triple Bottom Line in Supply Chain” is submitted in partial fulfilment of Degree of Masters of Business Administration is the original work conducted by me. The information and data given in the report is authentic to the best of my knowledge. This report has not been submitted to any other university for the award of any other degree, diploma and fellowship.

Student Name: Sneh Bhandari

Date of Submission:

ACKNOWLEDGEMENT

This report bears sincere thanks to several people who have made contribution towards the completion of this project. Without their dynamic direction, help, collaboration and consolation, I would not have gained ground in the project.

I am also thankful to my faculty project mentor, Mr. Dhiraj kumar Pal (Assistant Professor) & Mr. Himanshu Panwar (Research Scholar) at Delhi School of Management, DTU, for not only for giving excellent guidance, unabated inspiration but also for their never-ending willingness to deliver generous research methodologies, timely attention and kind interest, since beginning of my project.

Further, I would like to express my gratitude to Delhi School of Management, DTU for including the research project program as a course which has provided an opportunity to gain practical working experience.

PLAGIARISM REPORT



Similarity Report ID: oid:27535:17100569

PAPER NAME

SNEH MRP _ 129.docx

WORD COUNT

9276 Words

CHARACTER COUNT

53511 Characters

PAGE COUNT

40 Pages

FILE SIZE

1.0MB

SUBMISSION DATE

May 11, 2022 12:47 PM GMT+5:30

REPORT DATE

May 11, 2022 12:49 PM GMT+5:30

● **18% Overall Similarity**

The combined total of all matches, including overlapping sources, for each database.

- 9% Internet database
- 11% Publications database
- Crossref database
- Crossref Posted Content database
- 15% Submitted Works database

● **Excluded from Similarity Report**

- Bibliographic material
- Cited material
- Small Matches (Less than 8 words)

EXECUTIVE SUMMARY

With few defined theories, models, and frameworks, applying sustainability principles to supply chains is still a work in progress. At the very least, there are two key problems that make supply chain sustainability difficult to achieve right now. To begin, there are a variety of context-dependent factors that might aid or hinder progress toward supply chain sustainability. A greater knowledge of how these factors affect supply chain sustainability is required. Second, achieving sustainability necessitates the development of a triple bottom line strategy that improves environmental, economic, and social outcomes.

The purpose of this research is to examine the impact of integration of triple bottom line practices in supply chain on customer purchase intention. This project specifically focused on how sustainable supply chain operations with a company can lead to its failure or success when it comes to customer perception of a particular company and their willingness to purchase a particular product or service.

This research study involved an in-depth secondary research on the topic followed by a primary research wherein a survey was conducted to understand the customer perception of triple bottom line in supply chain. The findings suggest that customer purchase intentions today are being affected by the product's impact on environment and society and customers today are getting conscious about their purchase choices and want to move towards environmentally and socially sustainable products. These findings further imply that integration and development of triple bottom line practices in organization and supply chain is something that can help a firm to improve its profits while contributing to the environment and society.

TABLE OF CONTENT

<u>S.No</u>	<u>Topic</u>	<u>Page No.</u>
1.	Certificate	i
2.	Declaration	ii
3.	Acknowledgement	iii
4.	Plagiarism Report	iv
5.	Executive Summary	v
6.	List of tables	vii
7.	List of figures	viii
8.	Chapter 1: Introduction	1-7
9.	Chapter 2: Literature Review	8-18
10.	Chapter 3: Research Methodology	19-21
11.	Chapter 4: Data representation and analysis	22-32
12.	Chapter 5: Conclusion	33-34
13.	Bibliography	35-36
14.	Annexure	37-38

LIST OF TABLES

<u>S.No</u>	<u>Topic</u>	<u>Page No.</u>
1.	Mean and standard deviation for environmental impact	23
2.	Mean and standard deviation for social (people) impact	24
3.	Mean and standard deviation with respect to age group	25
4.	T-test with respect to age	25
5.	Mean and standard deviation with respect to gender	26
6.	T-test with respect to gender	26
7.	Anova with respect to employment status	27
8.	Anova with respect to annual income	28
9.	Correlation of groups	29
10.	Grouping correlation for environment perception	30
11.	Grouping correlation for societal (people) perception	30
12.	Grouping correlation for status symbol (money) perception	31
13.	Chi square test for independent variable validation	31

LIST OF FIGURES

<u>S.No</u>	<u>Topic</u>	<u>Page No.</u>
1.	Triple Bottom Line	1
2.	Research Gap sourced from Hendrik Birkel, Julian M.Müller (2020)	10
3.	Word Cloud from literature review	22

CHAPTER 1: INTRODUCTION

With the ever changing business environment, sustainable business strategy is something that has managed to gain wide traction. A sustainable business plan's primary purpose is to generate profits for shareholders while also benefiting the environment, society, or both. Businesses are adapting to long term strategies which is not only necessary for dealing with world's issues related to environment or society but also helps to have better financial performances. However, understanding and determining what sustainability exactly means and implies, as well as setting clear and acceptable goals, and devising a strategy to accomplish those goals, is something that requires a lot of time and efforts. In addition to their financial goals and performance, the Triple Bottom Line has become a popular approach for businesses to understand their sustainability initiatives and analyse their social and environmental responsibilities.

Businesses should give equal attention to social and environmental issues and concerns just as it is given to finances and profits within organization, according to TBL (Triple bottom line). Rather than a single bottom line, the triple bottom line approach emphasises on three Ps: profit, people, and the environment. A triple bottom line is a tool for analysing and determining a company's commitment to CSR as well as its long-term environmental impact. As per triple bottom line theory, a firm that focuses just on profits or money and ignores how it interacts with people will not be able to comprehend the complete picture and thus account for the total cost of doing business.



Fig 1: Triple Bottom Line

1. **Profit:** In a capitalist economy, the success of a company or an organization is mostly determined by its financial performance, or the profit generated by the company for its stockholders. Strategic planning initiatives and key organisational decisions are often precisely intended to maximise revenues while reducing expenses and risk, many companies' goals have already been achieved. Purpose-driven leaders are recognising that they can benefit from their businesses while simultaneously making a difference in the world.
2. **People:** The second component of the triple bottom line that is people, pays emphasis on a company's societal effect or the commitment of company towards its people. This indicator measures a company's social responsibility over time. The distinction between shareholders and stakeholders in a corporation is now crucial. Companies have always used shareholder value as a performance metric to maximise the value of their investors. As companies are increasingly embracing sustainability, businesses are shifting their focus to give value to all stakeholders that can be impacted by their decisions, including consumers, employees, and community members. Employees, communities in which a company operates, supply chain folks, future generations, and consumers are just a few types of people (rather than simply shareholders). The ties with corporate social responsibility are the emphasis of this section of the triple bottom line. Corporate social responsibility is defined as a company's obligation to address the needs of its stakeholders, as well as the responsibility of stakeholders to hold firms accountable for their actions.
3. **Planet:** A favourable environmental impact completes the triple bottom line. This particular P of triple bottom line tries to measure and evaluate a environmental responsibility that the company or an organization holds. While corporations, for the past many years, have been the one of the biggest cause of climate change, today, companies have started focusing on how they can also have a positive impact. Many business leaders are becoming increasingly conscious of the need to do so. Companies are taking steps to become more environmentally conscious, such as ethically sourcing commodities, minimising energy consumption, and optimising shipping processes.

The Triple bottom line concept of sustainability says that the three final supply chain factors are people, planet, and profit. Production and consumption of goods and services gain short and long-term prosperity in supply chain terms, hence Supply Chain and Operations management connect with triple bottom line criteria.

Businesses should prioritise social and environmental challenges alongside profitability. The TBL method emphasises three Ps: profit, people, and the environment, rather than a single bottom line. TBLs are used to evaluate a company's commitment to CSR as well as its long-term environmental impact. According to TBL theory, a company that only focuses on money and ignores how it interacts with customers will be unable to perceive the entire picture and thus account for the total cost of doing business. From senior management to the shop floor, TBL appreciates the establishment and implementation of a clear sustainability vision.

Companies may progress supply chain sustainability internationally by using well-defined standards, industrial practises, and written recommendations from around the world which are some of the paths that would be explored in this project. The project would also aim at evaluating the customer perception of triple bottom line and whether it affects their buying behaviour. The idea is also to introduce the concept of value co creation to increase sustainability at both customers' and suppliers' end.

1.1 Background

With a knowledge of sustainable supply chain, the concept and idea of triple bottom line in supply chain may be conceptualised. The core of sustainable supply chain management is understanding a company's environmental, social, and economic effect, as well as implementing whatever changes are required to lessen it. Everything from a warehouse's electricity supply to product transportation and beyond could be part of the operation. If a warehouse produces items, its sustainability strategy will include an evaluation of the entire manufacturing process, including all raw material suppliers' sustainability practises, product assembly at the facility, and garbage disposal and recycling.

In a supply chain, sustainability is more than just going green. Because environmental stewardship is so crucial in today's economy, a supply chain built on a sustainable platform opens up more chances for collaboration. Environmental awareness in all parts of a company's activities strengthens and legitimises its brand. A long-term supply chain can also help you boost productivity while lowering costs. By utilising sustainable methods and resources, a company can improve the efficiency of buildings, cars, and machinery while saving money. Nike is a fantastic example of long-term corporate success.

A growing number of global corporations have pledged to solely work with ethical and environmentally concerned suppliers in recent years. These multinational corporations often demand that their first - tier suppliers follow those standards, and those suppliers, in turn, demand the same from their suppliers, and so on. The goal is to create a sustainable practises chain that runs the length of the supply chain, or supply network as we prefer to call it. Supply chains are growing increasingly complicated as a result of the current economic crisis and globalisation, making them more difficult to build, coordinate, and work within. Due to escalating environmental and social concerns, a shift in focus from the business to the SC level, as well as harmonisation of organisational goals with sustainability goals, is required.

1.2 Problem statement

The integration of Triple bottom line in supply chain determines how supply chain management as well as industrial purchasing can be regarded in the context of sustainability. Sustainable supply chain management involves the purchasing function participating in activities such as material reduction, recycling, reuse, and substitution, as well as adopting measures that benefit people. Product design, material sourcing and selection, manufacturing methods, final product distribution to users, and product end-of-life management beyond its useful life are all difficult to incorporate into supply chain management. The lack of unanimity on supply chain sustainability in reality and theory is unsurprising, given that the notion of triple bottom line and its integration into supply chains is new and requires further research.

Last few decades have seen much focus on the supply chain management and the governments are also focusing on encouraging the business giants to incorporate sustainable practices in their supply chain.

The goal of this project is to investigate customer perceptions of the triple bottom line in supply chain management practises, as well as the importance of adopting sustainable practises from a customer's perspective, as well as strategies to improve supply chain management practises to have a greater impact on business. The goal is also to look at the concept of value co-creation in the supply chain in order to increase sustainability for both consumers and service providers.

1.3 Objective of the study

The objective of this project is to –

- Determine whether there is a difference in consumer attitudes and buying intentions toward a product with a triple bottom line supply chain.
- Perform content analysis on literature review to identify major theme and find out its coherence with the primary research.
- Develop insights about the relationship between customer purchase intention and supply chain operations while taking into account the concepts of triple bottom line.
- Explore the concept of value co-creation in supply chain in order to increase sustainability at both customer and service provider's end

1.4 Scope of the study

Through this project, we will get a closer look at what all techniques can be used in the traditional supply chain management so that companies can work more efficiently and deliver better products to the customers by reducing much reliance on natural resources and provide back to the environment and people and at the same time achieve better financial performance. It is not a hidden fact now that companies need to strategize more efficiently so that they can compete with the present competition in the market. Now-a-days, any company needs to show that they are focusing on being sustainable in nature and are contributing to the planet and people in one way or the other if they want to gain a good number of customers, without compromising the product quality.

Over the last few decades, there have been huge debates on how the negligence of companies towards the environment and people has created a gap in an organization's responsibility towards the same. Many policies and regulations are made and government around the world which today has led the business giants to incorporate practices that are sustainable in nature and contribute to its people and planet in one way or the other. This not only has encouraged the companies to adopt sustainable practices, in tandem the consumers are also getting more aware and are trying understanding the benefit of these practices.

Hence, with the changing scenarios, the customer perception towards the concept of sustainability is also changing. Today consumers are also trying to make themselves aware about the practices that a particular company or a brand uses in its downstream supply chain or manufacturing processes to say the least. The idea is to gain insights about the gap in theory and practice when it comes to the customer perception of triple bottom line in supply chain. This project would help to understand if there is a need of companies to focus on their supply chain practices and integrate the concept of triple bottom line in order to perform better in terms of financial performance as well as brand awareness among consumers.

CHAPTER 2: LITERATURE REVIEW

Bridget Satinover Nichols, Hannah Stolze, Jon F. Kirchoff (2019) in the research paper titled “**Spillover effects of supply chain news on consumers' perceptions of product quality: An examination within the triple bottom line**” studied that any unfavourable news about a company's triple bottom line has a detrimental impact on customer perceptions of product quality, and a negative impression of a supply chain leads to poor buy intentions. Customer impressions are strongly influenced by concerns relating to social and environmental bottom lines, according to the research. The paper talks about sustainable supply chain and the perception of consumers towards the same in case of a spillover effect.

Sustainable supply chain management (SSCM) - Sustainable supply chain management is the cooperative management of material, information, and capital flows among enterprises along the supply chain, with a strategic focus on all three TBL aspects resulting from an understanding of customer and stakeholder requirements and perceptions. Social components of operations are product-process-related components of operations that affect human safety, welfare, and community development. SCM "in long-term supply chain studies" "Including product design, material sourcing and selection, manufacturing processes, final product distribution to the user, and product end-of-life management after its useful life," says the environmental supply chain manager. "An effort to boost total (firm) value while minimising supply chain expenses tied to the firm's business practises," according to SCM.

Even though incorporating the environmental and social components may yield better total benefits for organisations than the economic dimension alone, the study reveals that supply chain managers still prioritise the economic aspect of TBL. Environmental initiatives, for example, can reduce a company's carbon footprint, fuel consumption, and transportation miles, whereas social initiatives can boost revenue, reduce risk, and improve operational performance. As managers seek competitive advantage through openness and trust, the incorporation of social and environmental goals into corporate planning has gained importance, albeit slowly. Using a

triangulated methodology that incorporates all three TBL dimensions, this study investigates the relationship between supply chain news, consumer quality perceptions, and purchase intentions. Given the increasing speed with which information will continue to flow and be available to consumers, businesses must consider how and when to mitigate the release of negative TBL news, supply chain and otherwise, that could negatively impact their brand and other performance indicators, according to the study.

Tim Kraft ,León Valdés, YanchongZhengc (2018) in research paper titled “**Supply Chain Visibility and Social Responsibility: Investigating Consumers’ Behaviors and Motives**” have suggested that to achieve transparency, a firm must acquire visibility into its supply chain as well as provide information to consumers, allowing the company to profit from increased supply chain visibility. It also suggests that consumers appreciate increased visibility into a company's social responsibility activities in the upstream supply chain. The paper provides an insight that When there are disadvantaged parties in a company's upstream supply chain, consumers seek greater transparency about its social responsibility practises (e.g., poorly treated labor).This is especially true if consumer awareness is currently low and they have a self-serving bias. The findings show that improved visibility into a supply chain operating in developing countries, where visibility is low and labour is frequently vulnerable to bad economic conditions, could have a market benefit. This finding is applicable to a wide number of businesses and situations, including the garment and consumer electronics industries, where the employment of low-cost foreign labour is ubiquitous. Another insight that the study has provided is that when the outcomes of social responsibility initiatives are widely visible, information about them can lead to increased customer valuations. This is especially true for consumers who aren't very social. Researchers found that if customers are inherently concerned about the well-being of others (i.e., if they are high prosocial consumers), they are less interested in learning about a company's effort and more interested in observing exact information about the outcomes of that effort. This is due to the fact that high prosocial customers desire higher visibility over indirect reciprocity. If, on the other hand, consumers are more motivated by self-interest (i.e., low prosocial consumers), then information about the company's activities may have an impact on their valuations, depending on

the level of visibility. Low prosocial consumers display strong indirect reciprocity when a company's social responsibility efforts are very visible, which boosts their valuations of the company's social responsibility efforts.

Hendrik Birkel, Julian M.Müller (2020) in their paper titled “**Potentials of industry 4.0 for supply chain management within the triple bottom line of sustainability – A systematic literature review**” The current state of the literature on Industry 4.0's potentials in supply chain management's triple bottom line is discussed. This is accomplished by a thorough literature study based on 55 peer-reviewed publications that have been thematically analysed and classified according to supply chain management processes in industrial value development. First, this article examines the supply chain management potential presented by Industry 4.0 from a triple bottom line standpoint. Second, the interrelationships between the triple bottom line dimensions are studied in terms of potential conflicts and enabling technologies. The role of SMEs in Industry 4.0, developing economies, multi-tier supply chain management, information sharing across the supply chain, and the interaction of ecological and social dimensions with economic benefits, as reflected in new business models, are all examined to identify research gaps and managerial implications.

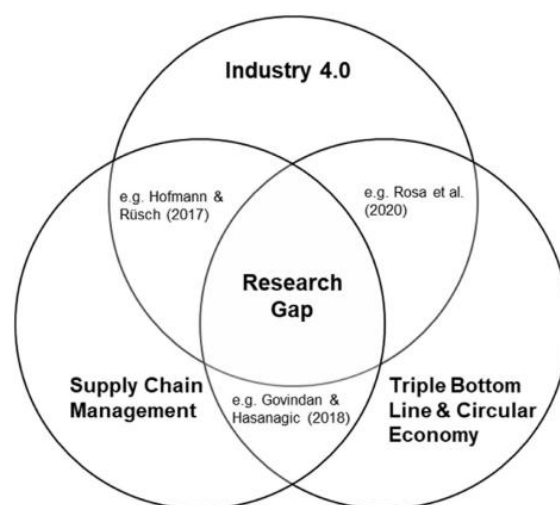


Fig 2: Research Gap sourced from Hendrik Birkel, Julian M.Müller (2020)

Hyejune Park &Youn-Kyung Kim (2016) in the paper titled “**An empirical test of the triple bottom line of customer-centric sustainability: the case of fast fashion**”; The TBL model is a valuable tool for characterising a customer's perception of a fashion brand's long-term viability, according to the findings. As the environment, economy, and social injustice grow more interconnected, a comprehensive model of sustainability is needed to conceptualise the relationship between the three essential components of sustainability. Customers, regardless of brand type, believe fashion enterprises to be economically, environmentally, and socially sustainable, according to the survey. From a CCS viewpoint, the TBL model's three dimensions of sustainability were applied to consumers' perceptions of fashion producers' sustainability. The TBL model has been proven to be a valuable method for analysing a consumer's impression of a fashion brand's sustainability in terms of factor structure and construct validity. This study's research methodologies and measures reveal more about how customers evaluate a fashion brand's sustainability and the criteria they will utilise to do so. This study looks into the predicted efficacy of several sustainability qualities on brand success across a number of fashion businesses. From a CCS viewpoint, the TBL model's three dimensions of sustainability were applied to consumers' perceptions of fashion producers' sustainability. The TBL model's factor structure and construct validity have been established, proving that it is a useful tool for analysing a consumer's opinion of a fashion brand's long-term viability. The research technique and metrics used in this study disclose more about how shoppers assess a fashion brand's sustainability and the criteria they utilise. This research investigates the impact of many sustainability attributes on brand success in a variety of fashion enterprises.

Abigail McWilliams, Annaleena Parhankangas, Jason Coupet, Eric Welch, Darold T. Barnum (2014) in the research paper titled “**Strategic Decision Making for the Triple Bottom Line**” used DEA to demonstrate how to compute the costs of trade-offs between profits, people, and the environment. The empirical method used in the study has the advantage of assisting managers in resolving the economic trade-

offs that are sometimes necessary when attempting to improve the environment and human well-being while also addressing the triple bottom line. The study suggests that managers can build sustainable competitive strategies that include socially responsible judgments if the trade-offs are appropriately recognised. It demonstrates how managers may use DEA to estimate trade-offs between efficiency, costs, and pollution reduction using publicly available data from the electric power business, allowing them to make and support socially acceptable decisions. The study also discusses how the triple bottom line technique for making strategic decisions can be used to a variety of scenarios.

Cristina Gimenez, Vicenta Sierra, Juan Rodon (2012) in their paper titled “**Sustainable operations: Their impact on the triple bottom line** Environmental action enhances environmental, social, and economic performance, according to the report, but internal social programmes boost environmental and social performance while raising manufacturing costs. It shows that internal and external environmental action programmes benefit each component of the triple bottom line (environmental, social, and economic performance). This demonstrates that taking environmental action (such as developing products with the environment in mind, addressing transportation's environmental impact, and establishing supplier development programmes) improves environmental, social, and economic performance. The triple bottom line's impact on social action programmes is a little more nuanced. Internal social programmes boost production costs while improving environmental and social performance. The following explanation can be given for the improvement in environmental performance as a result of adopting social programmes: Participation and training of workers may result in a reduction of potentially harmful environmental activities. Furthermore, implementing social action programmes, such as community-oriented projects, can help the plant's social reputation and performance. The findings show that external sustainable programme deployment only accounts for a modest percentage of the triple bottom line variance. Long-term projects should be extended throughout the supply chain, and companies should develop the skills needed to do so. The study also shows that supply chain cooperation, as opposed to supply chain evaluation, has a statistically significant influence on the triple bottom line, emphasising the need of chain-wide commitment

and a partnership strategy. Finally, the findings have some management implications: First, environmental and social programmes pay off in terms of the triple bottom line; nevertheless, more work needs to be done to reduce social programmes' negative influence on economic performance.

Despite the fact that social initiatives reduce manufacturing costs in the short term, firms must implement them since they assist them improve their own social and environmental performance. Collaborative techniques should be given special attention. Supplier evaluation can be a good place to start when looking for areas to improve; however, this should be done in a collaborative manner.

Shu Yen Hsu, Chiao-Chen Chang, Tyrone T. Lin (2018) in the research paper titled **“Triple bottom line model and food safety in organic food and conventional food in affecting perceived value and purchase intentions”** discovered that CSR has a considerable impact on perceived value, and that perceived value has a big impact on attitudes and purchasing intentions. Environmental issues, according to the report, have a major impact on consumer attitudes and purchasing intentions. Consumers are keen to reduce environmental damage, according to the report, thus the perceived value of environmental impact is crucial. Environmental concern, food safety concern, CSR, and customers' perceived value for organic or conventional food have no significant differences on attitudes and buy intentions, according to the study's findings, which were based on multiple group analysis. Consumers of conventional food place a higher importance on corporate social responsibility (CSR), and the effects of environmental and food safety concerns on attitudes toward conventional food are greater than those toward organic food, according to a path analysis of two groups. Environmental concerns have an impact on conventional food purchases, but not on organic food purchases. Organic food can only be found in organic food stores or department store organic food departments. Traditional cuisine can be found in most supermarkets and markets. Purchasing conventional food is easier and less expensive than purchasing organic food. As a result, consumers worried about the environment and food safety

will place a higher value on a company's CSR operations, increasing their perceived value and buy intentions.

Food safety concerns have a considerable impact on consumers' attitudes toward a series of food safety events, according to the study. The establishment of a strong food safety management system is the primary priority in the food sector. Consumer food safety is the major purpose of corporate sustainable management. Furthermore, the outcomes of the study will assist businesses in achieving not only economic success but also environmental and ecosystem balance.

Simon Norris, Julia Hagenbeck, Stefan Schaltegger (2021) in the research paper titled “**Linking sustainable business models and supply chains — toward an integrated value creation framework**” has suggested that, the value proposal of a sustainable business model comprises direct and indirect stakeholders as well as the natural environment, and that stakeholder and ecological value given along the supply chain can be incorporated into the customer value proposition as well. Extending the connection view on sustainable business models beyond dyadic and direct interactions to include relationship chains, according to the findings, aids in the study and management of these indirect value-generating links in sustainable business models. Despite the importance of supply chain sustainability, the focus organization's relational view of its direct stakeholders, such as supplier stakeholder stakeholders, has not been expanded to value creation for and among direct stakeholders. By combining a relational approach to sustainable supply chain management into the management of sustainable business models, this conceptual paper fills in the gaps. In addition to direct stakeholder contacts, it broadens the notion of sustainable business models to include indirect stakeholder interactions with suppliers. The development of a framework for analysing and managing value-creating interactions between the focus firm, its suppliers, and their stakeholders. This study suggests that a focus firm should actively manage interactions with both suppliers and suppliers' stakeholders by expanding the concept of sustainable business models to include connecting chains beyond direct links. The article provides a multi-tier sustainable business model architecture that specifies the default

structure of connections and value exchanges and may be customised to meet the demands of a company. While the framework (like Wilhelm, Blome, Wieck, & Xiao, 2016) combines a multi-tier supply chain perspective in a condensed fashion, it is flexible enough to be extended with new networked branches of varied businesses. Following that, the framework will be described in terms of supply chain stakeholder relationships in the context of sustainable business model. There are two main reasons why sustainable supply chain management should be included in sustainable business models when looking at the value proposition from the perspective of the supply chain: First, value propositions must address the indirect stakeholders in supply chains of the primary firm, and second, customers may feel greater value if the business model also benefits these indirect stakeholders. Furthermore, value creation considers the stakeholder relationships, behaviours, and resources required to generate the value offer. Because value creation in sustainable business models is multi-directional and reciprocal, it's crucial to analyse whether and how value creation differs for indirect stakeholders along supply networks, as well as how supply chain interactions can contribute to the value creation of a focal firm. Finally, value delivery is concerned with delivering intangible value to customers based on value for supply chain stakeholders and the natural environment in terms of upstream supply chain sustainability. Customers must be able to easily identify both the resources utilised to make the offer and the value created for other stakeholders. However, because these characteristics cannot be physically delivered with the commodities, they are usually intangible. qualities: Intangible supply chain-related sustainability qualities, unlike product-embedded sustainability qualities (e.g., reparability), are neither observable or experienceable by the consumer without significant effort and third-party assistance.

Joe Miemczyk, Davide Luzzini (2018) in the research paper titled “**Achieving triple bottom line sustainability in supply chains: The role of environmental, social and risk assessment practices**” The impact of social, environmental, and risk - based strategies on TBL performance results varies depending on the type of sustainability priority pursued. However, because these approaches have limited influence on cost and operational performance, supply managers may struggle to justify dedicating additional resources to SSCM unless it is combined with other

initiatives. According to the paper, social supply chain priorities are linked to risk assessment practises, which have a substantial impact on TBL performance. Companies that place a high priority on environmental or social sustainability are more likely to embrace environmental and social practises that help them meet their objectives. Given this link between strategy and practise, it may appear that corporations implement their strategies in silos, with an environmental strategy being followed by specific environmental practises. On the other hand, the data imply that social practises can influence environmental performance. Many businesses have only recently begun to adopt social supply chain practises, as opposed to environmental supply chain practises, potentially signalling that businesses are progressing and that practise investment can spread to other industries. Furthermore, because green technologies provide a higher return on investment or better social compliance has a longer-term reputational benefit, both environmental and social changes may only have a long-term impact on performance. However, other procedures, including risk assessment, are required to support this position. Another intriguing conclusion is that the method used to estimate risk has an impact on the link between social priorities and cost performance. While other research have revealed that social priorities and practises have little effect on costs, risk assessment appears to be associated to cost savings. This could be related to the reduced need to deal with suppliers' opportunistic behaviour, and therefore to the risk assessment mandated focus of resources, reducing supply-chain management work. As a result, it appears that simply engaging in social supply chain practises for financial gain is insufficient; risk assessment is also required if social priorities are to have a higher impact than mere compliance.

Payman Ahi, Cory Searcy (2014) in their paper titled “**Assessing sustainability in the supply chain: A triple bottom line approach**”; By focusing on the concepts included in the triple bottom line and understanding it to the sustainability perspective, the suggested model can be utilised as an integrated, three - dimensional sustainability tool used to analyse and evaluate the effects of various environmental, economic, and social issues in the supply chain context.

From a scientific standpoint, the work responds to an explicit call in the literature for the development of probabilistic models for analysing supply chain sustainability. This is significant because probabilistic models can handle the complexity and uncertainty that comes with modelling sustainability performance. Further study on ways to effectively connect data collecting, indicator development, and reporting efforts across the entire supply chain is also highlighted in the paper.

Until far, most research has concentrated on data collection, indicator development, and reporting for single supply chain firms rather than the entire chain. The difficulty of determining supply chain sustainability is widely acknowledged. Even in supply networks with a small number of actors, collecting and reporting data across the whole supply chain is difficult. The hurdles become more intense as the number of participants increases. The fact that various vendors are involved in different supply chains adds to the confusion. As a result, the report emphasises the importance of conducting additional research into allocating suppliers' environmental, economic, and social impacts to their (potentially multiple) clients. In terms of application, the model proposed in this study provides a simple way to assess a supply chain's long-term sustainability performance. As a result, it's a perfect place for decision-makers to start identifying difficulties and opportunities for enhancing the long-term viability of supply chains under their control.

Paul F. Skilton (2014) in the research paper titled “**Value Creation, Value Capture, and Supply Chain Structure: Understanding Resource-Based Advantage in a Project-Based Industry**” has combined the resource-based perspective with the value creation and value capture approaches to demonstrate how supply chain structures are organised to support product market strategy while limiting supplier control. This research employs a resource-based approach to supply chain linkages to account for the numerous options available to buyers and suppliers, revealing how overall supply chain structure effects the value capture potential of supplier capabilities. This research adds value by finding situations where supplier competencies are distinctive, useful, and difficult to reproduce yet do not give suppliers a competitive advantage. Although top-tier effects providers work with service incidental and domestic groups on occasion, their price power is limited

because these clients can function without the capacity. Finally, the uncovering of links between buyer strategy, supplier expertise, and offshore sourcing is another contribution. Measuring the impact of offshore sourcing on value development and capture without taking buyer strategy into account will be difficult. This study demonstrates how global strategy buyers use offshore non-specialists while continuing to use onshore suppliers' competencies, demonstrating that when offshore sourcing is combined with other criteria, new insights can be gained.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Hypothesis

Customer purchase intent is a customer's judgement or perception of a particular product or service and the value it offers. With the changing time the customer perception towards the same has also changed. Customers today look for a product that not only serves the utilitarian purpose but also adds value which could be in terms of environment value, societal value or economic value. Supply chain is often something that could determine a product's or service's upstream and downstream journey. The focus of this research is to identify if customer purchase intention is something that is affected by environmental, societal, or economic concerns as well as to understand if a customer's age, gender, employment status and annual income play a role in the same. Lastly, the idea is also to determine if the research attitude of customers pertaining to a product or service aligns with the environmental, societal and economic concerns as defined by the concept of triple bottom line.

H1: Customer purchase intention will not be affected by product's (a) environmental impact (b) societal impact

H2: The (a) gender (b) age group (c) employment status and (d) annual income will not have an impact on purchase intention pertaining to their perception of product's environmental and social impact

H3: Stronger research attitude of a customer will not impact the purchase decision owing to a product's (a) environmental impact and (b) social impact

H4: The relevance of environmental impact and social impact will diminish if the customer purchase intention lies with the status symbol of the product.

3.2 Participants

Research participants were randomly selected. Participants were asked questions related to environment, people and money with respect to their buying perception. Before starting the research, the research survey was introduced to the participants and then they were asked to fill in the survey. The research data were collected through an online google survey form. A total of 110 people participated in the study. Of the 110 people participating in the research, 40% were women, 60% were men and 76.4% were between the ages of 18-25.

3.3 Research Survey and Procedure

4. The research survey consisted of five parts.
5. In the first part of the survey, there are characteristic questions like age of the participant, gender, employment status and annual income of the participants.
6. The second part consisted of questions that test the research attitude of consumer towards a particular brand. The research attitude could be defined as construct in theory that explains the adherence of consumers to sustainable practices. Consumers who conduct extensive study and have strong research attitude before purchasing a product are more likely to make environmentally and socially responsible purchases. The third part of the survey tested the perception of consumers towards environment while making a purchase decision while fourth part tested the perception towards society or people where as the last or the fifth part of the survey tested the perception of consumers towards money in the sense that if money aspect and status symbol is something that consumers focus on or there is certain awareness amongst the consumer which make them focus on the environment and people aspect of the product in the supply chain. The data of this research was obtained objectively wherein the question were based on a likert rating scale ranging from 1 to 5 with 1 being high disagreement with the given statement and 5 being high agreement with the given statement.
7. Age, gender, employment status and annual income are categorical variables of which gender and employment status are nominal in nature whereas age

and annual income are ordinal in nature. Since environment perception, society (people) perception and money (status symbol) perception are measured using a likert scale, they could be considered as numerical data. For nominal and ordinal variables, independent T test and Anova test has been used whereas correlation test has been used to determine relation between the dependent variables.

7.1 Data Collection

Participants' ratings of the perception of environment, society (people) and money were accepted as dependent variables whereas participants' gender, age, employment status and annual income were accepted as independent variable. The gathered study data was analysed using the statistical tool SPSS and the impact of differences in gender, age, employment and income characteristics on the customer perception of triple bottom line in supply chain was investigated using ANOVA, T-test, Correlation test, chi-square test.

4.2 Study 1

A descriptive analysis was carried out to understand the purchase intention of customers with respect to product's (a) environment impact (b) social impact.

(a) Environmental impact

	Mean	Std. Deviation	N
I try to convince my family and friends to not to buy products that are made by companies under poor work conditions	3.47	1.171	110
When I have a choice between two equal products, I would purchase the one that is made under fair labor practices even if it is slightly costlier	3.77	0.983	110
It would bother me to buy a product from a company that mistreats its workers	4.13	0.987	110
Concern for the health and well-being of people who make products I buy are the issues that are important to me	3.89	0.881	110
I research about the labour practices of a particular brand and I am willing to switch to a brand with better practices and concern for its people	3.20	1.172	110

Table 1: Mean and standard deviation for environmental impact

From the above table, since the mean for each of the questions pertaining to environmental impact is greater than 3 (scale of 1 -5 was taken), hence it can be interpreted that the customer purchase intention will be affected by the product's environmental impact.

(b) Social impact

	Mean	Std. Deviation	N
It is important to me that the products I use do not harm the environment.	3.74	1.029	110
I consider the potential environmental impact of my actions when making many of my purchase decisions	3.50	1.107	110
My purchase habits are affected by my concern for our environment	3.25	1.060	110
I am concerned about wasting the resources of our planet.	3.99	0.914	110
I am willing to tolerate slight inconvenience in order to take purchase actions that are more environmentally friendly	3.76	0.995	110

Table 2: Mean and standard deviation for social (people) impact

From the above table, since the mean for each of the questions pertaining to societal impact is greater than 3 (scale of 1 -5 was taken), hence it can be interpreted that the customer purchase intention will be affected by the product's environmental impact.

The above analysis suggests that Customer purchase intention will be affected by product's environmental impact and societal impact and hence we can reject the null hypothesis (H1). Through the above result it can be concluded that environmental impact and societal impact is something that might affect the purchase intension of consumers and this results is very well aligned with literature.

4.3 Study 2

An independent T-test was performed to analyse the impact of different age groups on customer perception related to environment, people (society) and money (status symbol). Here only 0 represents the age group from 18-25 whereas 1 represents age group from 25-30. The age groups from 30-40, 40-50 and above 50 have been eliminated due to limited number of responses in each of them.

Age Group		N	Mean	Std. Deviation	Std. Error Mean
Environment perception(q5+q6+q7+q8+q9)	0	84	3.586	0.8563	0.0934
	1	20	3.830	0.7146	0.1598
People perception(q10+q11+q12+q13+q14)	0	84	3.676	0.7648	0.0835
	1	20	3.720	0.7266	0.1625
money perception(q15+q16+q17+q18)	0	84	2.9881	1.05846	0.11549
	1	20	2.8500	1.02405	0.22899

Table 3: Mean and standard deviation with respect to age group

Age	Levene's Test for Equality of Variances	
	F	Sig.
Environment perception(q5+q6+q7+q8+q9)	2.216	0.140
People perception(q10+q11+q12+q13+q14)	0.003	0.958
money perception(q15+q16+q17+q18)	0.059	0.808

Table 4: T-test with respect to age

From table 3 it can be interpreted that for both the age groups that is 18-25 and 25-30, consumers will get affected by the impact a product or service will have on environment as well as society (people) as the mean for each of them is greater than 3. Now, from table 4 it can be seen that the significance difference for each of them is greater than 5% and hence it can be said that age group of consumers is something that will not have an impact on

purchase intention pertaining to their perception of product's environmental and social impact and is statistically insignificant.

An independent T-test was performed to analyse the impact of gender on customer perception related to environment, people (society) and money (status symbol). Here 0 represents male consumers whereas 1 represents female consumers.

Gender		N	Mean	Std. Deviation	Std. Error Mean
Environment perception(q5+q6+q7+q8+q9)	0	66	3.494	0.8494	0.1046
	1	44	3.877	0.7386	0.1113
People perception(q10+q11+q12+q13+q14)	0	66	3.594	0.7837	0.0965
	1	44	3.841	0.6746	0.1017
money perception(q15+q16+q17+q18)	0	66	3.1553	0.91753	0.11294
	1	44	2.6648	1.16007	0.17489

Table 5: Mean and standard deviation with respect to gender

Gender	Levene's Test for Equality of Variances	
	F	Sig.
Environment perception(q5+q6+q7+q8+q9)	1.696	0.196
People perception(q10+q11+q12+q13+q14)	0.006	0.939
money perception(q15+q16+q17+q18)	3.679	0.058

Table 6: T-test with respect to gender

From table 5 it can be interpreted that for both the males and females, consumers will get affected by the impact a product or service will have on environment as well as society (people) as the mean for each of them is greater than 3. The status symbol attached to a product or service is something that impacts male customer perception as the mean in this case is more than 3 whereas for female consumers the mean is less than 3 and hence can be said

that a status symbol attached to a product is something that will not impact the purchase intent of female consumers.

Now, from table 6 it can be seen that the significance difference for environment perception and societal (people) perception is greater than 5% and hence it can be said that gender of consumers will not have an impact on purchase intention pertaining to their perception of product's environmental and social impact. However, the significance difference for money perception (status symbol) is almost 5% and hence it can be said that gender is statistically significant when comes to the perception of money or the status symbol attached to a product.

Employment Status		Sum of Squares	df	Mean Square	F	Sig.
Environment perception(q5+q6+q7+q8+q9)	Between Groups	4.581	3	1.527	2.324	0.079
	Within Groups	69.654	106	0.657		
	Total	74.234	109			
money perception(q15+q16+q17+q18)	Between Groups	2.049	3	0.683	0.619	0.604
	Within Groups	116.892	106	1.103		
	Total	118.941	109			
People perception(q10+q11+q12+q13+q14)	Between Groups	4.724	3	1.575	2.961	0.036
	Within Groups	56.370	106	0.532		
	Total	61.094	109			

Table 7: Anova with respect to employment status

From table 7, it can be seen that the significance difference for environment perception is slightly greater than 5% and hence it can be said employment status is a not factor that will significantly impact the purchase intention when environmental impact is at consideration. Further it can be also said that employment status is a factor that will significantly impact the purchase intention when societal impact is at consideration as the significant difference is less that 5% suggesting that consumer's perception across different employment status will differ owing to societal (people) perception. However, for money status, employment status is something that will not have a significant impact.

Annual Income		Sum of Squares	df	Mean Square	F	Sig.
Environment perception(q5+q6+q7+q8+q9)	Between Groups	3.572	3	1.191	1.786	0.154
	Within Groups	70.662	106	0.667		
	Total	74.234	109			
money perception(q15+q16+q17+q18)	Between Groups	7.271	3	2.424	2.301	0.081
	Within Groups	111.670	106	1.053		
	Total	118.941	109			
People perception(q10+q11+q12+q13+q14)	Between Groups	2.323	3	0.774	1.396	0.248
	Within Groups	58.772	106	0.554		
	Total	61.094	109			

Table 8: Anova with respect to annual income

From table 8, it can be seen that the significance difference for environment perception, societal perception and money (status symbol) perception is greater than 5% and hence it can be said annual income is not a factor that will impact the purchase intention when environmental impact and societal impact is at consideration.

4.4 Study 3& 4

A correlation test was conducted between environment perception, societal (people) perception, research attitude of consumers and money (status symbol) perception to understand their relation with each other and develop an understanding of customer purchase intention depending on these variables.

		People perception(q10+q11+q12+q13+q14)	money perception(q15+q16+q17+q18)	Environment perception(q5+q6+q7+q8+q9)	research attitude(q1+q2+q3+q4)
People perception(q10+q11+q12+q13+q14)	Pearson Correlation	1	.199*	.782**	.483**
	Sig. (2-tailed)		0.037	0.000	0.000
	N	110	110	110	110
money perception(q15+q16+q17+q18)	Pearson Correlation	.199*	1	0.127	.255**
	Sig. (2-tailed)	0.037		0.185	0.007
	N	110	110	110	110
Environment perception(q5+q6+q7+q8+q9)	Pearson Correlation	.782**	0.127	1	.418**
	Sig. (2-tailed)	0.000	0.185		0.000
	N	110	110	110	110
research attitude(q1+q2+q3+q4)	Pearson Correlation	.483**	.255**	.418**	1
	Sig. (2-tailed)	0.000	0.007	0.000	
	N	110	110	110	110

Table 9: Correlation of groups

From the above table we can significance difference between people perception and environment perception with research attitude is 0 and hence it can be interpreted that there exist a strong correlation between societal (people) perception and research attitude as well as environment perception and research attitude. Hence it can be said that consumers with strong research attitude will tend to have purchase decisions that will be impacted by environmental and societal (people) impact of a product or service.

Further, from the above table we can also see that the significance difference between money (status symbol) perception and environmental perception is greater than 5% and hence it can be interpreted that these two groups are negatively correlated suggesting that consumer focusing on the monetary value of the product or the status symbol attached to a product, their purchase intentions will not be affected by the environment impact of the same. However, the significance difference between money (status symbol) perception and societal (people) perception is less than 5% but greater than 0% and hence it can be interpreted that these two groups are although positively correlated but does not share a strong relation and hence it is difficult to comment on purchase intentions of a customer owing to societal perception with a focus on monetary value of the product.

4.5 Validation for grouping

		It is important to me that the products I use do not harm the environment.	I consider the potential environmental impact of my actions when making many of	My purchase habits are affected by my concern for our environment	I am concerned about wasting the resources of our planet.	I am willing to tolerate slight inconvenience in order to take purchase actions that are more
It is important to me that the products I use do not harm the environment.	Pearson Correlation	1	.729**	.632**	.525**	.593**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	110	110	110	110	110
I consider the potential environmental impact of my actions when making many of my purchase decisions	Pearson Correlation	.729**	1	.739**	.458**	.492**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	110	110	110	110	110
My purchase habits are affected by my concern for our environment	Pearson Correlation	.632**	.739**	1	.381**	.517**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	110	110	110	110	110
I am concerned about wasting the resources of our planet.	Pearson Correlation	.525**	.458**	.381**	1	.543**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
	N	110	110	110	110	110
I am willing to tolerate slight inconvenience in order to take purchase actions that are more environmentally friendly	Pearson Correlation	.593**	.492**	.517**	.543**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	110	110	110	110	110

Table 10: Grouping correlation for environment perception

		I try to convince my family and friends to not to buy products that are made by companies under poor work conditions	When I have a choice between two equal products, I would purchase the one that is made under fair labor practices even if it is slightly costlier	It would bother me to buy a product from a company that mistreats its workers	Concern for the health and well-being of people who make products I buy are the issues that are important to me	I research about the labour practices of a particular brand and I am willing to switch to a brand with better practices and concern for its people
I try to convince my family and friends to not to buy products that are made by companies under poor work conditions	Pearson Correlation	1	.509**	.384**	.415**	.332**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	110	110	110	110	110
When I have a choice between two equal products, I would purchase the one that is made under fair labor practices even if it is slightly costlier	Pearson Correlation	.509**	1	.437**	.543**	.518**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	110	110	110	110	110
It would bother me to buy a product from a company that mistreats its workers	Pearson Correlation	.384**	.437**	1	.332**	.287**
	Sig. (2-tailed)	0.000	0.000		0.000	0.002
	N	110	110	110	110	110
Concern for the health and well-being of people who make products I buy are the issues that are important to me	Pearson Correlation	.415**	.543**	.332**	1	.243*
	Sig. (2-tailed)	0.000	0.000	0.000		0.010
	N	110	110	110	110	110
I research about the labour practices of a particular brand and I am willing to switch to a brand with better practices and concern for its people	Pearson Correlation	.332**	.518**	.287**	.243*	1
	Sig. (2-tailed)	0.000	0.000	0.002	0.010	

Table 11: Grouping correlation for societal (people) perception

		I purchase things because I know they will impress others irrespective of their utility	I believe that money is the ultimate symbol of success	For a brand to be successful, there is a need for them to focus exclusively on money making.	I purchase products with a perception of attaining a status symbol
I purchase things because I know they will impress others irrespective of their utility	Pearson Correlation	1	.611**	.526**	.686**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	110	110	110	110
I believe that money is the ultimate symbol of success	Pearson Correlation	.611**	1	.566**	.679**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	110	110	110	110
For a brand to be successful, there is a need for them to focus exclusively on money making.	Pearson Correlation	.526**	.566**	1	.588**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	110	110	110	110
I purchase products with a perception of attaining a status symbol	Pearson Correlation	.686**	.679**	.588**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	110	110	110	110

Table 12: Grouping correlation for status symbol (money) perception

For the purpose of easy analysis, the questions related to environment, society (people) and money (status symbol) were grouped together. From table 10, 11, 12, we can see that the significance difference of the questions in the same group in of the case is 0 and hence the questions in each group are highly correlated and hence we can say that the analysis done on the basis of the grouping is valid.

4.6 Validation for independent variable

	Age Group	Gender	Employment status	Annual Income
Chi-Square	229.545 ^a	4.400 ^b	80.036 ^c	18.800 ^c
df	4	1	3	3
Asymp. Sig.	0.000	0.036	0.000	0.000

Table 13: Chi square test for independent variable validation

A chi square test was performed to validate if the independent variable taken for the study are applicable or not. Since the significance difference for each of the variable is less than 0.05 or 5% we can say that we can accept these independent variables valid for the given study.

4.7 Findings

The findings from the above analysis has been stated below -

- Customer purchase intention will be affected by product's (a) environmental impact (b) societal impact
- The (a) gender (b) age group (c) employment status and (d) annual income will not have an impact on purchase intention pertaining to their perception of product's environmental and social impact. However (c) employment status is a factor that will significantly impact the purchase intention when considering the status symbol attached to a product.
- Stronger research attitude of a customer will impact the purchase decision owing to a product's (a) environmental impact and (b) social impact
- The relevance of environmental impact diminishes if the customer purchase intention lies with the status symbol of the product whereas the same cannot be said about the societal impact
- The above findings further suggest that customers are conscious about their purchases intentions and want to move towards environmentally and socially sustainable products.
- Customers are willing to pay higher prices for products that are sustainable in nature and offers value in more than just monetary terms.
- If a company promotes sustainable practices, consumers are likely to buy that product.

4.8 Recommendations

- To increase sustainability in an organization specifically with respect to supply chain; the concept of value co creation can be introduced. Value co creation suggests that value along the supply chain can be created through customer driven processes instead of just supplier driven process. Connecting the supplier and customer networks, for example, can result in value co-creation by developing sustainable products through product improvement or redesign (at the supplier network level) and focusing on the end consumer or user (at the customer network level) by including them in product functionality.

- Value co-creation can be derived by incentivising customer to shift to service-based offering to reduce cost.
- Initiatives could also be conducted to support their customer base by raising sustainability awareness or gaining a better knowledge of their end users' sustainability behaviours.
- A thorough understanding of the customer and the customer's customer (retailer) can assist the company in developing a hybrid offering with cost savings across the supply chain, resulting in more sustainable practises such as product weight reduction and lean logistics, to name a few. The new "servitization" trend, which pushes producers to integrate products and services, is also something that could be utilized by the sustainable value co-creation process.
- Value is created at the end of the value chain (for example, focusing on a supplier's sustainability performance leads to enhanced customer benefits) or along the supply chain, which is led by value chain integration (for example, the customer outsourcing the service to the supplier). As a result of supplier assistance, customers benefit from improved sustainable value co-creation, allowing them to improve performance or connect their supply chain with sustainable initiatives.

CHAPTER 5: CONCLUSION

The Triple Bottom Line is a relatively recent idea that has gained traction in supply chain operations. According to TBL theory, a firm that focuses solely on money while disregarding how it interacts with people will be unable to grasp the whole picture and hence account for the total cost of doing business. Studies have also shown that integration of triple bottom line in supply chain operations would not only help the organization to contribute towards the planet and the people but would also ultimately lead to better profits in long run.

With the changing times the customers have also started looking into the integrities of a product and have started to base their purchase decision based on various factors throughout the product journey and supply chain is one the most important aspects of the same. The aim of the study was to determine if customer purchase intentions are being affected by the environmental impact and social impact that a product may have throughout its journey.

The results of the study concluded that customer purchase intentions today are being affected by the product's impact on environment and society. Further, age, gender and employment status is also something that affects the customer purchase intentions owing environment and societal impact. Lastly, the study also found out that customer research attitude is something that positively impacts the purchase intentions owing to environmental and societal concerns whereas the outlook of status symbol associated with the product is something that negatively impacts the purchase decisions owing to environmental concerns.

This study offers a preliminary study for the concept of triple bottom line and further research of such a subject could help the organizations to better understand customer needs and perceptions and at the same time give back to the planet and its people while maintaining or improving their profits.

Currently, most Indian firms are still in the early stages of developing, integrating, and implementing triple bottom line into their practices. Organizations that embrace TBL activities such as learning and benchmarking and communicate these concepts

to their employees will undoubtedly successfully implement TBL business practices. The company's long-term viability will be based on the natural environments' as well as the society's viability. As a result, environmental and societal considerations must be appropriately incorporated into business operations, and TBL activities must be vigorously encouraged and applied by firms.

5.1 Limitations

- The research is primarily concerned with understanding customer perception towards triple bottom line in supply chain operations in general and does not account for specific situations, techniques or practices adapted in supply chain that might change their perception.
- The numbers of respondents are limited in nature and hence the study might not be generalized to a larger audience.
- The participants of the survey were majorly of a specific age group (18-30 years) as well as limited to a specific geography which limits the generalization of the research.
- The research survey used general perception and did not focus on the type of product or service and hence customer perception might change depending upon the same.

REFERENCES

Journals:

- Ahi, P., & Searcy, C. (2015). *Assessing sustainability in the supply chain: A triple bottom line approach*. *Applied Mathematical Modelling*, 39(10-11), 2882–2896.
- Ahmed, W., & Sarkar, B. (2019). *Management of next-generation energy using a triple bottom line approach under a supply chain framework*. *Resources, Conservation and Recycling*, 150, 104431.
- Birkel, H. S., & Müller, J. M. (2020). *Potentials of Industry 4.0 for Supply Chain Management within the Triple Bottom Line of Sustainability – A Systematic Literature Review*. *Journal of Cleaner Production*.
- Gimenez, C., Sierra, V., & Rodon, J. (2012). *Sustainable operations: Their impact on the triple bottom line*. *International Journal of Production Economics*, 140(1), 149–159.
- Grunwald, G. (2022). *Sustainability co-creation in digitalized global value chains*. *Strategic Change*, 31(1), 19– 29.
- Miemczyk, J., &Luzzini, D. (2018). *Achieving triple bottom line sustainability in supply chains*. *International Journal of Operations & Production Management*.
- Nichols, B. S., Stolze, H., &Kirchoff, J. F. (2019). *Spillover effects of supply chain news on consumers' perceptions of product quality: An examination within the triple bottom line*. *Journal of Operations Management*.
- Norris, S., Hagenbeck, J., & Schaltegger, S. (2021). *Linking sustainable business models and supply chains — Toward an integrated value creation framework*. *Business Strategy and the Environment*, 30(8), 3960– 3974
- Park, H., Kim, YK.(2016) *An empirical test of the triple bottom line of customer-centric sustainability: the case of fast fashion*. *Fash Text* 3, 25
- Paul F. Skilton (2014), "Value Creation, Value Capture and Supply Chain Structure: Understanding Resource-Based Advantage in a Project-Based Industry," *Journal of Supply Chain Management*, Vol. 50 No. 3.

- *Remko Van Hoek, Carlos Mena, John Gattorna (2014), Mind the Gaps: Exploring How Value-Creation Perceptions Across the Internal Triad Influence Identity and Impact, Journal of business logistics.*
- *Shu Yen Hsu, Chiao-Chen Chang, Tyrone T. Lin, (2018) "Triple bottom line model and food safety in organic food and conventional food in affecting perceived value and purchase intentions", British Food Journal*
- *Tim Kraft, León Valdés, Yanchong Zheng (2018) Supply Chain Visibility and Social Responsibility: Investigating Consumers' Behaviors and Motives. Manufacturing & Service Operations Management*
- *V. Perinparajah, H. N. Perera, J. Ishara Sudusinghe and U. Hewage, "Young Consumers' Perception Towards Downstream Green Supply Chain Practices," 2020 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM), 2020, pp. 494-498*

Websites:

- <https://www.ylxgear.com/en/blog/sustainability/the-triple-bottom-line>
- <https://sustain.wisconsin.edu/sustainability/triple-bottom-line/>
- [https://www.iiscm.org/cscp/post/51/supply-chain-sustainability-uncovering-the-triple-bottom-line.html#:~:text=The%20triple%20bottom%20line%20\(TBL,%2C%20profit%2C%20and%20a%20planet.](https://www.iiscm.org/cscp/post/51/supply-chain-sustainability-uncovering-the-triple-bottom-line.html#:~:text=The%20triple%20bottom%20line%20(TBL,%2C%20profit%2C%20and%20a%20planet.)
- <https://ideas.repec.org/a/inm/ormsom/v20y2018i4p617-636.html>
- <https://www.investopedia.com/terms/t/triple-bottom-line.asp#:~:text=In%20economics%2C%20the%20triple%20bottom,%2C%20people%2C%20and%20the%20planet.>
- <https://online.hbs.edu/blog/post/what-is-the-triple-bottom-line>
- <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it>

ANNEXURE

Research attitude:

1. I research about the brand values before investing in a particular product.
2. To make sure I buy the right product or brand, I often observe what others are buying and using
3. I often consult with other people to help choose the best alternative available from a product class
4. I frequently gather information about a product and the brand before I buy.

Environment Perception:

5. It is important to me that the products I use do not harm the environment.
6. I consider the potential environmental impact of my actions when making many of my purchase decisions
7. My purchase habits are affected by my concern for our environment
8. I am concerned about wasting the resources of our planet.
9. I am willing to tolerate slight inconvenience in order to take purchase actions that are more environmentally friendly

People Perception:

10. I try to convince my family and friends to not to buy products that are made by companies under poor work conditions
11. When I have a choice between two equal products, I would purchase the one that is made under fair labor practices even if it is slightly costlier
12. It would bother me to buy a product from a company that mistreats its workers
13. Concern for the health and well-being of people who make products I buy are the issues that are important to me
14. I research about the labour practices of a particular brand and I am willing to switch to a brand with better practices and concern for its people

Money Perspective:

15. I purchase things because I know they will impress others irrespective of their utility
16. I believe that money is the ultimate symbol of success
17. For a brand to be successful, there is a need for them to focus exclusively on money making.
18. I purchase products with a perception of attaining a status symbol