



SEINÄJOEN AMMATTIKORKEAKOULU
SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

Hasibul Hossain

Role of Circular Economy Practices in Customer Relations and Satisfaction

A study on Ready Made Garments Exporting Countries

Master's Thesis

Spring 2025

Master of Business Administration

International Business Management 2024



SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

Thesis abstract

Degree Programme: Master of Business Administration (MBA), International Business Management 2024

Author: Hasibul Hossain

Title of thesis: Role of Circular Economy Practices in Customer Relations and Satisfaction

Supervisor: Dr. Dario Liberona

Year: 2025

Number of pages:92

Number of appendices: 1

The ready-made garment (RMG) industry plays a pivotal role in the economies of exporting countries, contributing significantly to employment and foreign exchange earnings. However, concerns over environmental sustainability and resource depletion have led to increasing interest in circular economy (CE) practices. This study explores the impact of CE on customer relations and satisfaction within the RMG sector. This research employs a positivist philosophy with a deductive approach to examine circular economy practices in the RMG sector of Bangladesh, China, and Turkey. Using a quantitative method, it collects primary data via surveys from 104 purposively sampled customers. Statistical analysis like descriptive and inferential statistics identifies patterns between circular economy practices and customer satisfaction.

The findings reveal that Customer perceptions in the Ready-Made Garments sector reveal distinct regional evaluations of circular economy practices. Respondents rate the Europe and China as leading sustainable sources; the EU is viewed very positively with consistent ratings, while China's sustainability efforts are acknowledged despite varied opinions. In contrast, India and Vietnam are perceived as less committed, with Bangladesh receiving mixed assessments. Also, the findings indicate that a significant positive relationship exists between the implementation of circular economy practices and enhanced customer relations and satisfaction. Statistical analyses indicate that as businesses adopt more sustainable practices, improvements in customer trust, loyalty, and overall satisfaction become apparent, underscoring the value of sustainability initiatives. Then, the findings show that comparative results indicate that customer satisfaction in China and Turkey is slightly higher and more uniform than in Bangladesh. Moreover, the recommendations of the research emphasize expanding recycling programs, improving waste management systems, using sustainable materials, and increasing transparency, alongside stricter government regulations, to further enhance customer relations and drive industry sustainability. These measures ensure long-term success.

¹ Keywords: circular economy, customer satisfaction, ready-made garments, sustainable practices, consumer relations

TABLE OF CONTENTS

Thesis abstract	2
TABLE OF CONTENTS.....	3
Pictures, Figures, and Tables	5
Terms and Abbreviations	7
1 INTRODUCTION.....	8
1.1 Background of the Research.....	8
1.2 Research Gaps	10
1.3 Research Aim, Questions and Objectives	11
1.4 Scope of the Study	12
1.5 Key Concepts	12
1.6 Structure of the Study.....	13
2 CIRCULAR ECONOMY PRACTICES IN CUSTOMER RELATIONS AND SATISFACTION: THEORETICAL PERSPECTIVE.....	15
2.1 Theoretical Framework.....	15
2.2 Customer Perceptions of Circular Economy Practices	16
2.3 Role of Circular Economy Practices in Customer Relations and Satisfaction	21
3 RESEARCH METHODOLOGY	27
3.1 Research Philosophy	27
3.2 Research Approach.....	28
3.3 Research Method	29
3.4 Data Collection	30
3.5 Sampling Strategy and Sample Size	31
3.6 Data Analysis	32
3.7 Reliability, Validity and Ethical considerations.....	33
4 THE RESULTS AND FINDINGS	34
4.1 Introduction	34
4.2 Demographic Statistics.....	34
4.3 Customer Perceptions of Circular Economy Practices in The Ready-Made Garments (RMG) Sector	36

4.4	Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction in The RMG Sector	45
4.4.1	Correlation between Circular Economy Practices and Customer Relations and Satisfaction	45
4.4.2	Regression of Circular Economy Practices and Customer Relations and Satisfaction	45
4.5	Comparison of Customer Satisfaction with Circular Economy Practices in Bangladesh, China and Turkey	47
4.6	Recommendations For Improving Circular Economy Strategies to Strengthen Customer Relations and Satisfaction in The RMG Sector	48
5	DISCUSSIONS OF THE FINDINGS.....	52
5.1	Identification of Customer Perceptions of Circular Economy Practices in The Ready-Made Garments (RMG) Sector.....	52
5.2	Exploration of Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction in the RMG Sector	54
5.3	Comparison of Customer Satisfaction with Circular Economy Practices in Bangladesh, China and Turkey	57
5.4	Recommendations For Improving Circular Economy Strategies to Strengthen Customer Relations and Satisfaction in The RMG Sector	58
5.5	Summary of the Relationship Between Sustainable Brands and RMG Suppliers	63
6	SUMMARY AND IMPLICATIONS	66
6.1	Summary of the Study.....	66
6.2	Theoretical Implications.....	67
6.3	Managerial Implications.....	67
6.4	Policy Implications for the Industry and Government	68
6.5	Conclusion	69
6.6	Limitations of the Research	75
6.7	Recommendations for Future Research.....	75
	BIBLIOGRAPHY	77
	APPENDICES	82

Pictures, Figures, and Tables

Figure 1: Export of RMG Sector of Bangladesh; Source: (Le et al., 2024).....	8
Figure 2: Structure of the Study.....	13
Figure 3: The ReSOLVE Framework.....	15
Figure 4: Age Group of Respondents.....	34
Figure 7: Relative Preference to Consume.....	42
Table 1: China's and Turkey's RMG Sector.....	9
Table 2: Key Concepts.....	12
Table 3: Relative importance of the most sustainable source.....	36
Table 4: Comparison between Turkey, Bangladesh and China.....	37
Table 5: Customer Perceptions of Circular Economy Practices.....	42
Table 6: Correlation between Circular Economy Practices and Customer Relations and Satisfaction.....	45
Table 7: Regression of Circular Economy Practices and Customer Relations and Satisfaction.....	45
Table 8: Comparison of Customer Satisfaction.....	47
Table 9: Recommendations for Improving Circular Economy Strategies.....	48
Table 10: Identification of Customer Perceptions.....	52
Table 11: Exploration of Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction.....	54
Table 12: Comparison of Customer Satisfaction with Circular Economy Practices.....	57

Table 13: Recommendations for Improving Circular Economy Strategies	58
Table 14: Summary of the Relationship Between Sustainable Brands and RMG Suppliers ..	63

Terms and Abbreviations

RMG	Ready-Made Garments
CE	Circular Economy
EU	European Union
EVFTA	EU-Vietnam Free Trade Agreement
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
ReSOLVE	A framework for circular economy practices based on principles such as Regenerate, Share, Optimize, Loop, Virtualize, and Exchange

1 INTRODUCTION

This chapter of the research presents research background and gaps. Then, it covers research aim, objectives and questions. Also, this chapter includes scope of the study, key concepts and thesis structure.

1.1 Background of the Research

The ready-made garments (RMG) industry in Bangladesh, China, and Turkey is a key driver of economic growth. The RMG industry constitutes about 84 percent of Bangladesh's export receipts and over 4.4 million workers, the great majority of whom are female. However, the sector is experiencing growing pressure regarding the environmental sustainability specifically in the engineering of waste and resource consumption (Rodríguez-Espíndola et al., 2022). As a solution, circular economy practices aimed at resource recycling, minimization of waste and sustainability seem to respond to these challenges whilst contributing to improved customer contacts and satisfaction. Circular economy currently holds potential to unlock \$4.5 trillion in world economy by the year 2030 when implemented (Amin et al., 2024). The propensity to go green is growing day by day in Bangladesh since more than 62% of apparel buyers globally are now focusing on sustainable sourcing. Customer have now shifted their focus to embrace brands that embrace environmental management hence making the cell of circular economy a moral and business advantage. These practices can enhance customer loyalty, customers' satisfaction and pave way forward to enable the RMG sector to sustain itself in the long run (Ahmed et al., 2022).

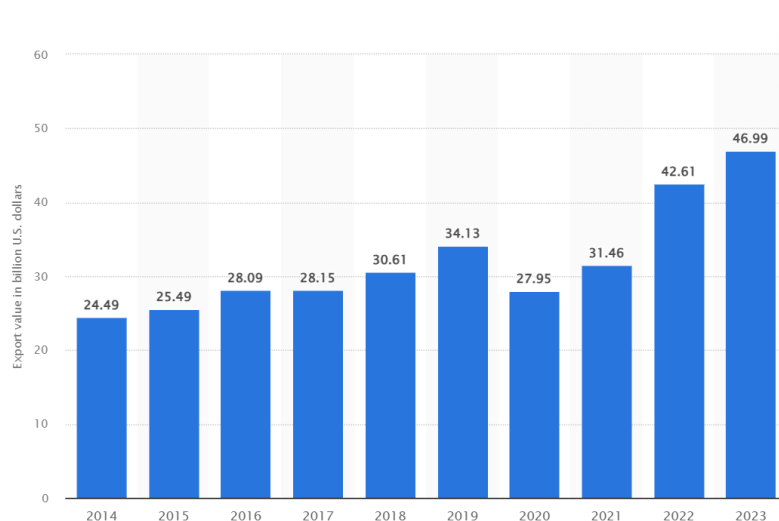


Figure 1: Export of RMG Sector of Bangladesh; Source: (Le et al., 2024)

The export value of RMG for the fiscal year 2022-2023 was nearly 47 billion USD and increased from 42.6 billion USD in the last year. This growth proves the stamina of the sector and international demand, even with different environments.

Table 1: China's and Turkey's RMG Sector

	China in 2023	Turkey in 2023	Bangladesh
Export Value	\$165 billion	\$19 billion	\$47 billion
Global Market Share	31.6%	3.6%	7.9%
Ranking	1st	4th	2nd

China maintained its position as the worldwide leader for readymade garments (RMG) exports in 2023 by becoming the largest exporter in the global market. The World Trade Organization reports China exported RMG products worth \$165 billion during 2023 which represented 31.6% of the worldwide market (Fibre2Fashion, 2024). China maintains its leading export position in readymade garments through its advanced manufacturing capabilities including efficient production methods and interconnected supply chain operations. China holds its top position in the global market by consistently delivering large exports of apparel with both high efficiency and reliability despite rising competition from new garment-producing nations. The international market positions Turkey as the fourth largest exporter of ready-made garments in 2023. The international clothing exports from Turkey amounted to \$19 billion for a 3.6% value share within the worldwide RMG industry (Fibre2Fashion, 2024). Turkey maintains its strong market position because of its advantageous geographic links between Europe and Asia and its educated workforce combined with premium production standards. The textile and raw materials sector of Turkey produced \$9.56 billion in export revenue while exporting to 199 countries along with free zones (E-Textile Magazine, 2024). These stats establish Turkey as a vital force due to its strong capabilities in textile creation and apparel delivery to worldwide garment markets. For 2023 Bangladesh stood as the second-largest worldwide supplier of ready-made garments to serve global markets worth \$47 billion. Bangladesh contributed 7.9% to the world market value through its textile and apparel exports which reached \$47 billion in 2023. Ready-made garment manufacturing has become the economic fundamentally important sector of Bangladesh as it gives employment opportunities to millions of people and attracts crucial foreign money (Le et al., 2024). The ready-made garment sector of Bangladesh combats increasing production expenses alongside foreign market competition through its adaptive approach to sustainable and circular economy approaches which keeps it competitive internationally.

The RMG sector represents a vital industrial sector across China and Turkey while presenting individual market-specific issues to each country. The world's leading RMG exporter position belongs to China because it possesses huge manufacturing capacity with its well-organized supply chains along with smart labor automation functions. Due to increasing labor expenses China established a gradual transition toward luxury apparel production while maintaining its original emphasis on budget-friendly textiles. The country gained extensive prominence because of affordable labor expenses combined with substantial free trade agreement portfolios specifically including EVFTA and CPTPP. The export-driven economic policy of this nation seeks U.S. and EU markets while facing difficulties from importing raw materials for its operations. The European market access combined with Turkish supply chain connections allows Turkey to serve European consumer demands. The industry produces fashionable clothing through its strong textile industry despite facing economic uncertainties alongside continuous inflation difficulties.

Customer expectations and preferences have increasingly gravitated toward sustainable and ethical production practices. Circular economy strategies, such as recycling textiles, upcycling discarded garments, and designing for durability, not only reduce the environmental footprint but also resonate with customers' desire for responsible purchasing (Ahmed et al., 2022). In this regard, it becomes crucial for the firms of RMG sector to understand how these practices affect their customer relations as well as customers' satisfaction level that can enhance the competitiveness and brand loyalty in the sector. All these though have an opportunity aspect of realizing CE practices in the RMG sectors, there are challenges such as inadequate infrastructure, knowledge, and costs involved in implementing CE practices (Amin et al., 2024). In addition, the existing body of knowledge extends little understanding of customers' attitudes towards such strategies and the role they play in customer-brand connections and satisfaction levels. Filling these gaps is vital in developing coherent circular economy strategies to fit business and customer strategy.

1.2 Research Gaps

Despite the fact RMG sector of Bangladesh has become one of the most important exporters in the apparel field and plays an important role in the country's economy, the studies on its sustainability perspective are rather less explored. Sustainability management, the circular economy particularly through the reduction of waste and maximizing use of resources is on the

rise internationally due to environmental issues and the need to cultivate improved customer relations (Amin et al., 2024). However, few studies have specifically examined the implementation of these practices within RMG sector of Bangladesh, China and Turkey. Existing research predominantly focuses on production efficiency, environmental impacts, or labor issues, leaving a gap in understanding how circular economy strategies influence customer relations and satisfaction. Also, most of the research used quantitative method (Ahmed et al., 2022). Moreover, while global studies highlight the growing importance of sustainability to customers, less research addresses how Bangladeshi RMG firms can align with these expectations. This gap underscores the need to explore customer perceptions of circular economy practices in the RMG sector, identify their role in enhancing customer satisfaction, and provide actionable recommendations tailored to Bangladesh's unique context (Moktadir et al., 2018). There are also few studies which compare the role of circular economy practices in customer relations and satisfaction across Bangladesh, China, and Turkey.

1.3 Research Aim, Questions and Objectives

The research aims to explore role of circular economy practices in customer relations and satisfaction in the ready-made garments exporting countries like Bangladesh, China and Turkey. The research question of this research is: What is the role of circular economy practices in customer relations and satisfaction in the ready-made garments sector of Bangladesh, China and Turkey? The research objectives are presented as follows:

- To identify customer perceptions of circular economy practices in the Ready-Made Garments (RMG) sector of Bangladesh, China and Turkey.
- To explore the role of circular economy practices in enhancing customer relations and satisfaction in the RMG sector of Bangladesh, China and Turkey.
- To compare the satisfaction level of customers regarding circular economy practices of Bangladesh with other garments exporting counties like China and Turkey.
- To provide recommendations for improving circular economy strategies to strengthen customer relations and satisfaction in the RMG sector.

1.4 Scope of the Study

This study focuses on the fact how circular economy practices can help to improve customer relation and customer satisfaction in Ready-Made Garments (RMG) sector of Bangladesh, China and Turkey. It revolves on how customer perceive these practices including recycling, upcycling, and sustainable purchasing of fabrics in the RMG industry and how it will affect the level of customer satisfaction and their loyalty (Le et al., 2024). It also takes into account the relevant viewpoint of the Customers because it will be them who will execute these strategies. Integrating both perspectives the study offers an analyzing of the opportunities and threats of implementing CE practices to alter the business model of a company. These two-pronged methods that the value of the work arising from it back to stakeholders is a complex process, and thus addresses the complexity of stakeholder engagement in achieving sustainability. The study is quantitative in nature, feature survey with the customers of the Ready-Made Garments (RMG) sector of Bangladesh, China and Turkey. Hopefully with these options, following the perspectives of these essential stakeholders, the study will be able to offer practical solutions for a validated circular economy mechanism in the RMG industry (Islam et al., 2023). Thus, the overall purpose of the study is to provide recommendations and initially propose an empirically validated circular economy framework suitable for the RMG industry. Therefore, basing on stakeholders' opinions the study is expected to give practical recommendations that will not only increase customer satisfaction and loyalty for one of Bangladesh's most important sectors but will also advance the sustainability agenda.

1.5 Key Concepts

The key concepts of the research are presented below.

Table 2: Key Concepts.

Term	Explanations
Circular Economy	This idea entails the utilization of resources in a manner that can sustain the production and usage processes throughout their entire life cycle (Aryee et al., 2024). It aims at establishing a circular economy where any impact on the physical environment is unavoidable while insisting on the most effectiveness of resource use. With reference to the RMG sector, circular

	economy means the recycling of sustainable material, less generation of waste in the production process, implementation of advanced recycling strategies compatible with the environment or customer demands.
Customer Relations	Customer relations can be described as ways and attempts that are used by enterprises to develop, maintain and enhance relationships with customers. This way, companies can guarantee the faith, proper communication and individual approach that will ultimately lead to engagements in long-term relationships (Singh & Singh, 2019). The so-called circular economy concepts in the context of the RMG sector are increasingly gaining importance for customer relationship management.
Customer Satisfaction	Customer satisfaction is a measure of how much a product or service is satisfactory to the client or a consumer. In the context of RMG companies, there is a role of circular economy to enhance satisfaction as globalization has shifted its gears towards sustainable living and consumerism (Singh & Singh, 2019).

1.6 Structure of the Study

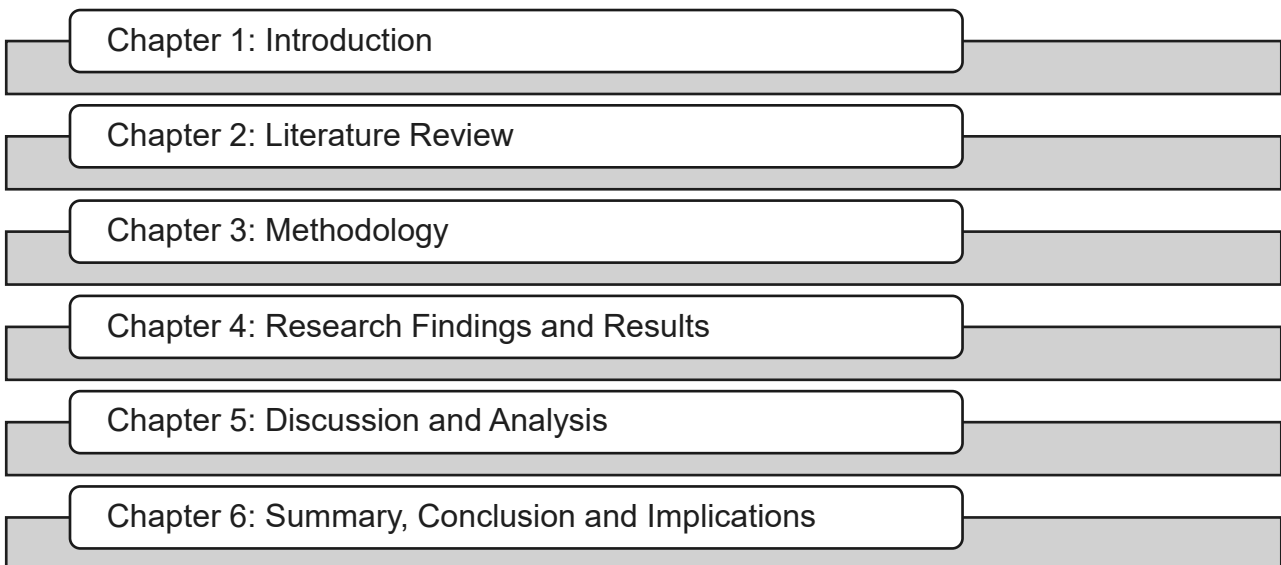


Figure 2: Structure of the Study.

The study is structured into seven chapters: In Chapter 1, the reader is informed of the research subject matter and purposes of the research. Chapter two provides a discussion of the literature on the topics of role of circular economy practices in customer relations and satisfaction. They included the following bits The methodology is described in chapter 3. Chapter 4 of the study evaluates the results, with the analysis and discussion presented in Chapter 5 of the study. Chapter 6 offers a summary of the chapter and some implications of the study.

2 CIRCULAR ECONOMY PRACTICES IN CUSTOMER RELATIONS AND SATISFACTION: THEORETICAL PERSPECTIVE

This chapter of the research covers the existing literature. Theoretical framework like ReSOLVE Framework is presented in this research. It presents customer perceptions of circular economy practices. Also, it covers role of circular economy practices in customer relations and satisfaction.

2.1 Theoretical Framework

The ReSOLVE Framework is a set of principles designed to help organizations implement Circular Economy practices. The framework holds seven fundamental principles beginning with Regenerate then proceeding through Share followed by Optimize and Loop before reaching Virtualize and finishing with Exchange. Each of these components was used as a lens through which the countries' sustainability efforts were analyzed. These principles work to establish restorative systems through regeneration of resources and asset sharing followed by efficiency optimization then material loop closure alongside process virtualization to lower physical resource consumption and inter-industry value exchange systems. The framework accelerates circular sustainable methods along with waste reduction efforts to optimize resource utilization.

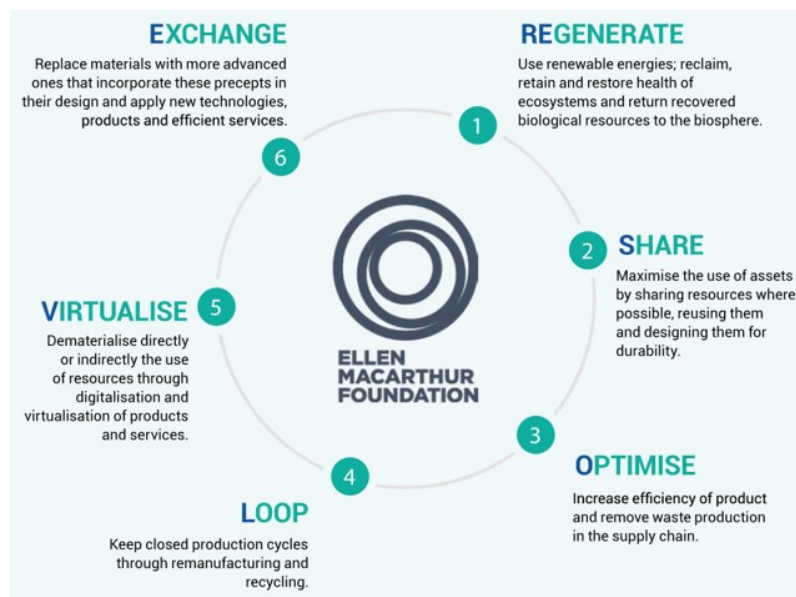


Figure 3: The ReSOLVE Framework

The research uses the ReSOLVE Framework as a tool to measure and develop circular economy implementations in Bangladesh's Ready-Made Garments sector. The framework uses its principles to examine customer perspectives while demonstrating how circular strategies from material regeneration to value trading affect customer interactions and satisfaction standards. The framework enables an evaluation of Bangladesh's practices against China and Turkey to identify improvements while recommending actionable plans to boost circular economy approaches for better customer loyalty and satisfaction in the RMG sector. The combination of consumer research results and industrial measurement along RESOLVE model criteria allowed researchers to determine each country's CE principle adoption levels through quantitative assessment. The structured comparison allowed for evaluating the success and failing points regarding the CE approach in each national context. The RESOLVE model achieved essential linkages between CE approaches and customer sustainability perception and trust and satisfaction levels therefore providing strong analysis for improvement recommendations.

2.2 Customer Perceptions of Circular Economy Practices

Aryee et al. (2024) describes that circular economy (CE) practices have become increasingly significant as businesses, governments, and societies collectively work towards creating more sustainable systems. These practices emphasize reducing waste, reusing resources, and promoting sustainable production and consumption. Customer perceptions of CE initiatives are critical to their successful adoption and implementation. In this essay, we delve into the factors shaping customer perceptions of circular economy practices and their implications for businesses and policymakers.

Le et al. (2024) mention that from the perspective of the participants, customer sentiments about CE practices are highly dependent on their discrete understanding of CE. Circular economy is also concerned with the reduction of inputs as well as waste and emission, the maximization of product and material use as well as their utilization in the form of products that include reuse, repair, upgrading and recycling. However, the public is still not well aware of what circular economy is and what kind of practices belong to it. To these people, CE seems unconcreted or complicated thus it might be hard for the two to form positive attitudes towards it (Amin et al., 2024). CE practices can be introduced by undertaking awareness creation among the customers concerning the experiences. Graphics and some appealing style advertising campaigns are realistic straightforward ways of intervention. When consumers find out how CE

practices fit into sustainability objectives and the resultant improvement to the planet, then they will appreciate these practices. Organizations show ways that recycling minimizes waste disposal within dumps or explain how product repair decreases the need to acquire new materials (Ranta et al., 2018). On the other hand, Aarikka-Stenroos et al. (2021) contrast that some customers may not appreciate CE because of the extra effort that is taken in executing CE practices as compared to convenience. Some people may be discouraged from engaging with the application through difficulty in interpreting recycling symbols, repairing processes, or a product lifecycle. Also, those people who do not trust the given information or who do not feel concerned about environmental problems see CE practices as unrelated to their experiences (Saha et al., 2021). Thus, eliminating these barriers calls for more social marketing and concrete examples of practices which are actually advantageous from CE and the surrounding community's perspectives.

Ackermann et al. (2018) state that customers and their perceptions relate heavily with the environment and the ethical views. In fact, the CE adoption practices are likely to be perceived favorably by those top managers involved in sustainability and social responsibilities. They regard these programs as the concept of the corporations in question and a chance to be a part of the global sustainable consumption community. Another reason is that customers with a set of ethical norms also prefer to cooperate with companies that widely use CE practices. They are confident of these companies and consider that these companies are innovating and reliable (Singh & Singh, 2019). While Patagonia's 'Worn Wear' store initiative, a company encourages consumers to repair clothes and share clothes rather than buying new products, the environmentalist brigade is interested. CE practices should be linked to the values of customers so as to foster a proactive organisational customer relationship likely to enhance brand loyalty (Tukker, 2015). On the other hand, Bocken et al. (2014) disagree as has been pointed out not all customers are sensitive to the environmental and ethical issue. To such people, other factors like cost or efficiency might have higher influence over their perception of CE practices. Customers that are less sensitive about sustainability are likely to perceive repair or reuse campaign as irritating or irrelevant. However, some consumers may consider that ethical marketing strategies are fake and that companies are only concern with their own benefit (Stahel, 2016). Such skepticism can help disengage customers and create a sharp cleavage between those who care about the environment and those who do not.

Aryee et al. (2024) indicate that customer's decision on CE practices can mainly depend on economic factors. Most customers evaluate these schemes in terms of monetary returns in terms of prices reduction, cost cutting or incentives offered to participate in the recycling or take back programs. Consumers might get the endorphin rush that comes from recycling items in exchange for vouchers on new similar products. Thus, clarification of potential economic advantages that companies can get through CE practices can help expand their popularity (Ta et al., 2022). Companies selling products that have some defects and thus the prices are cheaper are likely to attract many shoppers. Circular activities which have involved resale of used furniture have truly brought an understanding of how CE practices can generate environmental and economic value for consumers. On the contrary, Maria et al. (2019) contrast that economic issues can also give rise to a negative attitude. Some customers are reluctant to buy cheaper products because they link cheap prices to substandard products especially those that have been returned or recycled. Others may regard CE initiatives as vying strategies that help enterprises avoid costs than genuine ways to improve consumers' lives (Geissdoerfer et al., 2017). In addition, CE customers who cannot experience tangible benefits right from the programs may lose interest or consider the providers as mere exploitative con artists. In order to overcome these problems, the focus should be made on the quality and the long-term benefits for the client apart from stress on economic benefits that should be practical and transparent (Pecorari & Lima, 2021).

Ghisellini et al. (2016) state that determining how quality and functionality concerns affect the CE practices' positive customer perception is one major hurdle. Every now and then, customers have raised eyebrows and wondered whether products resulting from recycled or reused material are as good as normal products. They also make Low quality sustainable products lead to negative experiences that in turn lessen confidence in CE initiatives. To counter these problems, quality and transparency becomes a driving force in the strategic agendas of commercial organizations (Ackermann et al., 2018). They should be able to articulate that their products that have been recycled or reused are just as durable and safe and performant as the products that are not recycled or reused. Adidas Parley for the Oceans that extends shoes from the plastic from the ocean and at the same time provides excellent performance. It also means that such elements as testimonials, recommendations, self- and braged certification may play a crucial role in establishing the trust. Good perception and experience about the products help the customers to perceive the CE practices in a positive manner to others when they find some proofs of quality and functionality (Henriques et al., 2023). However, Tabas et

al. (2024) criticize that there are those customers who always consider products made from reused or recycled products to be of low quality. This perception may be due to absence of visible quality symbols or previous unfavorable experience. This could work hand in hand with the idea that customers might regard sustainable products as costly compared with their utility making them resistant to CE practices. Through constant supply of quality products and service delivery that meets the required standards, firms can ensure that the perceived-truth dissonance is closed (Maria et al., 2019).

Le et al. (2024) explain that time convenience plays the key role in customer perceptions of CE practices. The general perception that people have with the programs is that if the program is easy to follow and there are strategies in place that the average Joe can get involved in then the perception will be positive. Take-back programs under which consumers can return used products at no extra cost or effort will go down very well. Likewise, repair service with relatively low cost and easy reach increases customer's reach to CE practices. On the other hand, the difficult or tedious processes leads to limited customer engagement and formation of negative attitudes. If recycling programs involve a lot of sorting or transportation to a long-distance facility, customers will consider them as cumbersome (Stein et al., 2020). COP dealing with this has to come up with CE schemes that enhance customer convenience; they should also be incorporated in customers' day to day activities. Technology can also extend the availability and measurability of CE practices. Applications and Internet platforms that post information on where to recycle or where to repair things, as well as second-hand marketplaces, could help customers do this. Similarly, embracing the use of digital capabilities in production processes enables organizations in developing endearing experiences for consumers in order to encourage positive reception for CE activities (Aryee et al., 2024). On the other hand, Lewandowski (2016) contrast that such programs are not available to everyone who seeks them, even within regions or certain demography. Specifically, some of the customers in the rural areas may never get good places to recycle their products, while others may be inadequately endowed with the technological skills to carry out operations online. When customers cannot participate in ce practices they can become frustrated and skeptical of other's ability to transform products and services (Soh & Wong, 2021). It is therefore important to approach the eradication of these barriers in such a way that meets equity of the company's all individuals towards CE.

Amin et al. (2024) outline that CE practices are therefore strongly influenced by customer perception of the trust level they have for their suppliers. The customers are more likely to support

these initiatives if they feel that they are reactions to actual environmental and social concerns and not a mere corporate strategy or considered an effort to cut costs. There is little room for secrecy and learners must be able to understand that these are consistent actions carried out in good faith. Misleading or completely false environmental claims pose a very high risk of harming the customers' impression (Kalmykova et al., 2018). CE practices have to be scientifically grounded and, in their turn, reported to stakeholders to meet the demands of the society. Also, social audit on the extent of the impact of CE initiatives on the environment, or sharing of CE success stories can act as a source of 'proof'. Other factors include the relationships; credibility can also be obtained when business partners with other recognized third-party organizations. Purchases of certificates from organizations such as Cradle to Cradle or collaborations with environmental NGOs can help to calm clients' fears about the authenticity and relevance of a CE approach within a particular company (Zink & Geyer, 2017). Conversely, Henriques et al. (2023) criticize that customers who feel that firms are insincere or are only following CE practices to gain profit will probably stop engaging altogether. The Agency came across instances where people made bland statements or did not present any substantial evidence can breed skepticism and hostility among the communities. Further, those customers who have certain concerns regarding CE practices regarding the effectiveness of the recycling process or the possibility of developing closed-loop systems, and so on, such customers may not support such programs (Arekrans et al., 2022). Trust is therefore not only earned by revealing information, but it also means that an organization or individual has to provide evidence of sustained efforts in support of sustainability objectives.

Sairanen et al. (2024) state that in some cultures, these concepts are familiar as reuse has always been regarded as wise and resourceful, thus the adoption of CE is easy. Recycling and reusing products are part of many Asian cultures, which coincides entirely with CE. However, in areas where single-use products are prevalent or where there is no infrastructure for recycling and selling of renovated items customers may be reluctant to engage in CE practices (Bocken et al., 2014). Solving these issues can only be possible considering the local values, behaviors, and available infrastructure in the regions. More also, public officials responsible for policies that govern the various regions also equally contribute to the shaping of the various region's perceptions. Policy and action strategies include raising of awareness, offering incentives for CE, investing in the recycling and repair value chain. Thus, sustainability culture operations can be adopted by governments to propagate and improve the customer perceptions of such practices (Ghisellini et al., 2016). On the other hand, Maria et al. (2019) explain that

the culture may not embrace CE, or the government may not subsidize it. CE practices may still be incompatible with consumers' behavior in societies that are run based on convenience and consumption. Such issues can only be solved through sustained campaigns that also aim at changing people's perception and ensuring that everything is put in place for this to work.

2.3 Role of Circular Economy Practices in Customer Relations and Satisfaction

Szilagyi et al. (2022) state that circular economy (CE) practices demonstrate a company's dedication to sustainability, significantly enhancing its brand image and reputation. In an era where environmental consciousness is increasingly influencing consumer behavior, businesses that adopt CE practices are often perceived as forward-thinking and responsible. By integrating recycling, upcycling, and resource optimization into their operations, companies project a commitment to sustainability that resonates with environmentally conscious customers (Lopez & Legardeur, 2024). Brands like Adidas and IKEA, known for their CE initiatives, have successfully positioned themselves as leaders in sustainability. This positive perception not only attracts new customers but also strengthens the loyalty of existing ones. However, failure to adopt or effectively communicate CE practices may lead to skepticism, undermining a company's reputation in an increasingly competitive market (Henriques et al., 2023).

On the other hand, Stein et al. (2020) contrast that failure to adopt or effectively communicate CE practices can lead to skepticism and accusations of greenwashing. Companies that fall behind in sustainability efforts risk being perceived as outdated and irresponsible, damaging their competitive edge. This can alienate eco-conscious customers who increasingly favor brands demonstrating genuine environmental commitment, undermining reputation and market share (Linder & Williander, 2017).

Henriques et al. (2023) explain that customer trust and openness are the key friendship implications that are immensely supported by CE practices. Failure to fully disclose the kind of communication being made regarding the CE initiatives including how materials used in their products are sourced or how products are recycled dents customers' confidence. When companies offer evidence that they are concerned with the effects that their actions have on the environment, qualms over greenwashing are subdued, and they get legitimacy (Kalmykova et al., 2018). Also, sustainability reports and/or seals from independently accredited sources can strengthen confidence. On the other hand, vaguer or even overemphasized communication of

CE practices can introduce sceptics and harm the business customer relationship. CE practice as applied here, make companies more upfront and therefore can be used as starter for building trust in customer connections. On the other contrary, Lopez & Legardeur (2024) criticize that only a clear and cautious description or an exaggeration of CE activities and results can cause misunderstandings and lead to accusations of fraudulence and superficiality. As such, without concrete and measurable gains companies who seek to embrace the environment will be accused of being insincere. Such a situation also creates distance between a company and its consumers, which may not be good for the overall relationship as people get more conscious of what they consume (Zink & Geyer, 2017).

Soh & Wong (2021) indicate that the contemporary consumer trend is to select the brand, which shares similar values with the buyer, especially the environmental ones. CE practice conforms business to these changing features of customers to ensure that businesses capture the emotions of their clients. Manufacturers who focus on sustainable procurement and supply chain, or overall minimal waste and sustainable product design attract 'green' consumers who wish their purchases were to have a positive impact on the environment. Organizations such as Patagonia and The Body Shop have been very popular due to the adoption of customer values in their business (Aryee et al., 2024). Nevertheless, the companies that do not adopt such approaches will leave such a promising and actively developing part of the market for their competitors. With the help of CE initiatives, it remains committed to customer values, which is critical to the continued attractiveness of a firm to consumers. On the other contrary, Soh & Wong (2021) contrast that this is especially so because failure to embrace the concept of sustainability when undertaking operations is likely to push away people who value the environment. CE adopted as a set practice can have its advantages as firms that do not adopt it may seem out of touch with the changing consumer needs and preferences, and therefore irrelevant (Lopez & Legardeur, 2024). Such a disconnect may lead customers away in search of other products/ services that are known empathetically to represent their ideals eroding brand loyalty and reducing the brand's attraction to a rising class of customers that are increasingly placed by values.

Tabas et al. (2024) describe that customers and societies in general are assured that sustainable solutions do not reduce perfect performance; instead, they favour durability, repairability and quality inherent to circular economy practices. Products that have been up-cycled or refurbished may be as good as new and present consumers with a sustainable option to buying

new products. Firms such as Fairphone, makers of the modular phone have shown how CE practices create new, high value products that are fully responsive to customer requirements (Stein et al., 2020). While, uncertainty over the quality of recycled or refurbishing products may pull back some customers. Companies need to work extra hard to meet strict quality control measures and address these pre-existing consumer impressions to guarantee satisfaction. On the other hand, Pecorari & Lima (2021) contrast that customers are also reluctant to purchase such products due to perceived lower quality in recycled or refurbished goods. If the designing and manufacturing quality assurance is not up to standard, concerns such as durability, reliability, and performance may well outweigh the environmental advantage. Failing to meet these expectations only enhances skepticism about CE practices, lessening satisfaction and preventing the adoption necessary for the critical segments (Maria et al., 2019).

Sairanen et al. (2024) outline that engagement CE initiatives is an effective model of managing stakeholder relationships because customers are able to engage in sustainability efforts. Basing on initiatives like recycling campaigns, take-back programs, or repair events, clients are encouraged to participate in actual environmental targets. The garment collection program of the brand H&M gives the customers a reason to return the old clothes they no longer wear in exchange for a discount. Such efforts promote customer interaction but at the same time foster a corporate social responsibility felt by all (Szilagyi et al., 2022). However, complex or inconvenient steps typifying the process are sufficient to discourage customers and decrease their activity levels. The three aspects of participation simplification and measurable benefits guarantee that various CE initiatives are open and effective. On the contrary, Soh & Wong (2021) criticize that customer engagement in any CE initiative is hampered by complicated or cumbersome programs that are hard to follow. They found that when programs fail to offer tangible gains or demand a good deal of work, they are associated with Sources of Loss - which demotivate Customers. This kind of disengagement can dilute customer-brand bonds, which was one of the primary objectives of CE practices, to enhance such ties and bring more customers to the brand's side (Ackermann et al., 2018).

Geng et al. (2012) explain that economic incentives act as a strong driver of customer participation in CE practices. Cash incentives from trade-in, and genuinely recycled products, second-hand items, and refurbished computers offer values for recycling that can be monetized to augment the value perception of sustainability efforts. People find it comforting when companies have elements of the circular economy that save them money, like buying remanufactured

electronics or getting rewards for returning products (Henriques et al., 2023). Trade-in programme of Apple is quite popular, according to which people get credit for the products they sell and get an offer back in return which they can use to buy a new product this creates the economic value as well as the environmental value. Nevertheless, it is crucial for business organisations to ensure that all such programmes and activities yield tangible and actual financial returns since perceived deceit or concealed charges would anger end users. Relative CE benefits and sustainable driving force improve the attractiveness of CE practices through transparent and meaningful economic incentives (Pecorari & Lima, 2021). On the other hand, Arekrans et al. (2022) disagree that lack of proper or unclear financial motivation associated with CE initiatives has negative implications for customers. If the benefits or the incentives are less than what they expect most of the customers may end up seeing the programs as an exploitation of their needs. This creates a problem of lack of trust, and weakens the economic benefits behind CE practices, which in turn makes it challenging to foster customer participation (Moktadir et al., 2018).

Lewandowski (2016) state that the analysis shows that if brands help their customers minimize their environmental impact, the emotional bond to that brand increases. CE incorporates direct concern over environmental issues due its measures of pro-ecological behavior including efficiency, wastage and carbon footprints. When consumers understand the ecological impact of certain products, firms are able to make them feel like they are able to participate in a cause greater than themselves (Ranta et al., 2018). A washing machine that claims to effectively reduce the amount of waste ending up in the landfill site through recycling program developed stronger brand association among the consumers who are aware of the environment. On the other hand, organized businesses that ignore the environmental challenges may be pulled apart for criticism from the eco-sensitive individuals. Being committed to sustainability through CE practices means that a company is credible and customers are confident in sticking with the company (Amin et al., 2024). On the other contrary, Kirchherr et al. (2018) criticize that this work also shows that where companies neglect environmental aspects, they are likely to be criticized by environmentally conscious consumers and investors. Businesses that fail to incorporate sustainability into their strategies are likely to lose the audience who demand corporal action towards climate matters. Such negligence impacts the reliability of the brand which in turn decreases customer allegiance while pulling the brand image as anti-environment globally.

Urbinati et al. (2017) describe that strategies tied to sustainability involve the CE concepts of sustainable customer relationships because of the emotional links established between the consumer and the company. Purchases by customers who have identified a brand as green are likely to maintain their loyalty because they feel that are making a positive contribution towards sustainable living. The association of CE activities with loyalty programs that allow people to earn more rebuffs by constantly involving themselves in recycling activities increases commitment. Conversely, lack of consistency, uncertainty or dishonesty about CE practices that are in place can undermine that trust and result in customer defection. When the business stays constant and keeps to the principles of sustainability, it is more likely to build sustainable relationships that elicit loyalty (Singh & Singh, 2019). Rodríguez-Espíndola et al. (2022) criticize that CE initiatives, therefore, should be uniformly and consistently to avoid compromising customer trust and loyalty. Consumers can stop trusting brands that do not meet their sustainability initiatives or policies goals or lack dedication. This disillusionment causes customers to churn – customers will seek more reliable products that conform to their expectations of sustainability and product worthiness (Saha et al., 2021).

Lieder & Rashid (2016) outline that companies must work together with the customers to establish a reciprocal sense of responsibility for the removal of waste from the circulate economy systems. Using customer contribution in sustainability initiatives like co-creation or community-based recycling, employees make use of people's resources to achieve a good result. Programs encouraging customers to contribute to the creation of new product designs from recycled materials or motivate clients to support environmental programs are the best examples of creating the shared value. Such affiliation also contributes to customer relations and customer loyalty as well (Bocken et al., 2016). Thereby, while CE practices could be implemented successfully, the lack of effective customer engagement may hinder their effectiveness. Active engagement guarantees customers are engaged in the brand's mission towards sustainability. On the other contrary, Murray et al. (2017) criticize that lack of an adequate level of contact with customers in CE practices reduces the development of shared value. Lack of depth and perceived meaningful involvement in implementation of initiatives can lead to customers' exclusion or perceived low valuation by the organization. It also pulls down the spirit of teamwork and may decrease the influence of CE activities to foster better, value-oriented relationships.

Geissdoerfer et al. (2017) explain that strategic CE advancements make organizational initiatives unique to compete within sophisticated markets, improving customer satisfaction.

Introducing advanced procedures closed production cycles or creating products with a flexibility of usage are the valuable ways of being ahead of others in terms of sustainable management. The following innovations are in demand since they will be delightful to the customers, innovative and liberal. Nike shifts towards CE via its Move to Zero strategy targeting zero waste and zero carbon emissions; this innovation grabs the consumer's attention. But, in many ways, innovation must go hand in hand with functionality and relatively low cost to guarantee high levels of application (Tukker, 2015). Thus, CE practices drive differentiation, which in turn, helps companies form greater customer impressions more permanently. On the other hand, Stahel (2016) contrast that some CE innovations may seek to go overboard or implement some ideas that customers may find hard to subscribe to due to high costs or complicate the production of other CE products. Where solutions are unattainable or do not align with key consumer trends, they have possible negative side effects that increase their rejection (Tabas et al., 2024). Inexplicably, it is possible for CE practices, while being innovative, to be perceived as out of touch with the customer, thus threatening satisfaction and subsequent loyalty.

3 RESEARCH METHODOLOGY

This chapter of the research presents the methodology of this research. It outlines the research philosophy and research approach. Then, it covers the research method, data collection, sample size and sampling strategy. Then, it presents the data analysis and validity, reliability and ethical considerations of the research.

3.1 Research Philosophy

This research adopts an positivism research philosophy to explore the role of circular economy practices in customer relations and satisfaction in the ready-made garments (RMG) sector of Bangladesh, China and Turkey (Hennink et al., 2020). There are three types of research philosophies like Interpretivism, positivism and pragmatism. Research philosophies guide the approach to understanding and interpreting data in research. Positivism is based on the belief that knowledge is derived from observable phenomena and that the world operates according to laws that can be discovered through empirical research. Interpretivism focuses on understanding the meaning behind human experiences and social phenomena, emphasizing subjective interpretation and context (Liamputtong, 2019). It values qualitative methods. Pragmatism, on the other hand, is a practical approach that combines elements of both positivism and interpretivism, allowing researchers to use the most suitable methods to address specific research questions, regardless of the philosophical tradition. This study uses positivist research philosophy, where the rationale behind this approach is the emphasis on an objective reality and empirical evidence. It relies on the principle that Customer perceptions and satisfaction regarding circular economy practices can be measured and analyzed through numbers related to the RMG (Ready-Made Garments) sector (Liamputtong, 2019). By gathering quantitative data from customers, the research aims to validate hypotheses and investigate the impact of circular economy practices on customer satisfaction in a systematic and quantifiable manner.

This study on the role of circular economy practices in driving customer relations and satisfaction in the RMG sector aligns well with positivism research philosophy, which relies on objective, empirical data (Saunders et al., 2023). The use of quantitative approach will ensure that the relationship between circular practices and perceived customer satisfaction can be empirically analysed. Positivism underpins the use of structured surveys to gather data, which allow for the identification of patterns and relationships that can be extrapolated to a wider population (Walliman, 2022). Such an attitude is in line with the goal of this research, which is to

provide data-driven suggestions for enhancing customer relations and satisfaction prospect through the implementation of circular economy methods.

3.2 Research Approach

This research adopts a deductive research approach to explore the role of circular economy practices in customer relations and satisfaction in the RMG sector. There are three types of research approaches like inductive, deductive and abductive approaches (Saunders et al., 2023). Research strategies indicate how researchers develop knowledge and how hypotheses are going to be confronted. Inductive processes are the development of theories from data with the conclusion being drawn from the particulars of the observed facts. The most common research design associated with the use of phenomenology is exploratory research. Post is a deductive strategy as it involves starting with a theory or hypothesis then draws evidence to prove it, going from broad postulates to certain conclusions. This makes it suitable for testing existing theories of event supply. Abductive approaches are a mix of the two, it begins with shocking findings and aims for the best possible explanations (Walliman, 2022). Due to the flexibility which allows for revisiting and refining the theory and data at each step this approach is also helpful for coming up with new perspectives. Each is chosen with respect to research objectives and settings. A deductive research plan has been used at this investigation to elaborate circular economy practices coupled with customer relations and satisfaction in the Ready-Made Garments (RMG) industry. With a deductive approach, the researcher will start with existing theories and hypotheses, and test which come up with through data collection and analysis (Taylor et al., 2020). In this scenario, the research builds upon the assumption that such practices positively affect customer relations and satisfaction since previous studies and theoretical frameworks have shown a relation between sustainability perpetration and customer satisfaction. This is an attempt to verify or reject these postulates supported from empirical data collected from RMG sector in Bangladesh to add to the existing knowledge base available on circular economy practices of business (Acharyya & Bhattacharya, 2020).

Using a deductive research process, the purpose of this research is to examine the role of circular economy practices for customer relations and satisfaction in the RMG sector of Bangladesh, China and Turkey (Kothari, 2022). The deductive approach was chosen because it starts with existing theories and hypotheses on how circular economy practices affect customer satisfaction. This research will use empirical data from various countries to test these

theories to either validate or refute the assumptions. This will help compare customer perceptions from different garment-exporting countries, highlighting the applicability of circular economy strategies to improve customer satisfaction in a wider sense (Saunders et al., 2023).

3.3 Research Method

This research adopts a quantitative research method to explore the role of circular economy practices in customer relations and satisfaction. There are three types of research methods like qualitative, quantitative and mixed methods (Dul & Hak, 2007). Quantitative methods aim at collecting objective data related to behavior by using data that is derived in numerical form, while qualitative methods will cover behaviors, experiences or perceptions that are gained without strict numerical data like interviews, observations and thematic analysis. Qualitative on the other hand is lexical in type using words and analysis and is interested in the generalization of variables and measurement of concepts. Mixed research however uses both qualitative and quantitative approaches by incorporating the implementation of study questions in an attempt to understand research questions better (Sachdeva, 2009). The decision on the procedure adopted depends on the aim of the research where the qualitative research method seeks to gain depth, quantitative method goes for width and the mixed method provides the blend of the two in order to get the required width and depth. Both, accordingly, are efficient in meeting specific needs of research. This research employs a quantitative research approach for investigating the function of circular economy progressive practices in customer interaction and gratification (Krishnaswamy & Satyaprasad, 2010). This is justifiable given that a quantitative approach enables the collection and analysis of numerical data via surveys to objectively measure customer perceptions and satisfaction levels. Utilizing statistical analytical tools, this research endeavors to systematically discover patterns and correlations, essentially providing us with a coherent data-based perspective which shows the extent of explanatory power of circular economy actions towards consumer satisfaction (Saunders et al., 2023).

Accordingly, the study adopts a quantitative research approach to systematically capture and compare customer perceptions and satisfaction regarding circular economy practices in Bangladesh, China and Turkey in the context of the Ready-Made Garments (RMG) industry (Bryman & Bell, 2007). This method allows to quantify the customer attitudes and satisfaction by collect and analyze numerical data which will be up to objective determination and comparisons. The statistical techniques, including correlation and regression, will be employed to identify the

patterns or relationships between circular economy practices and customers' gratification, generating insights that are beneficial to make suggestions of strategy for better customer relations towards RMG sector (Walliman, 2022).

3.4 Data Collection

This research uses primary data collection through survey questionnaire to explore the role of circular economy practices in customer relations and satisfaction. The survey questionnaire will be sent through email. There are three types of data collections like primary, secondary and mixed data collections (Dul & Hak, 2007). Primary data collection means collecting information from original sources by using methods like questionnaires, interviews and observations etc., to make the data relevant to the objectives of the study. Secondary data collection involves collection of data from already published work in books, journals, newspapers, and other publications, other databases, is relatively cheaper, and swift as compared to primary data collection. Both primary and secondary data are collected in an amalgamated manner when using mixed data collection to give a broader perspective of the research problem. Deciding on the method depends on the goals of the research, resources available, and other conditions, but all forms of approach do what is expected well (Liamputtong, 2019). This study uses original data collected using a survey questionnaire to investigate the role of circular economy practices in customer relation and satisfaction (Taylor et al., 2020). A questionnaire is formed to find out the perception of the people regarding the Circular Economy practices in RMG sector and their satisfaction regarding it. The survey will be conducted through email, allowing for a wider reach and convenient collection of data from the customers of Bangladesh, China, and Turkey (Saunders et al., 2023).

A survey questionnaire is a good source of primary data collection to obtain first-hand understanding of customer perceptions and satisfaction towards the circular economy practices in RMG Sector (Acharyya & Bhattacharya, 2020). It is designed to collect specific input that can be tailored to your research objectives, providing you with precise data allowing a deep understanding of how circular economy increases customer relations and satisfaction in Bangladesh, China and Turkey. Adopting a structured survey allows for the collection of comparable data across the four countries. Emailing the survey is a feasible option and meets the criteria for most international research as it is a more efficient method to conduct research. It also enables responses to be collected by a wide range of customers improving the robustness and

diversity of the data (Bryman & Bell, 2007). The questionnaire was distributed using a self-administered survey, an affordable approach where participants are able to return it at their convenience, allows a higher rate of return and improves the quality of data yielded.

3.5 Sampling Strategy and Sample Size

This research adopts a purposive sampling strategy. The sample will include 104 customers who have purchased products from companies in the RMG sector that have implemented circular economy practices across garments exporting countries like Bangladesh, China and Turkey. There are two types of sampling technique like random sampling and purposive sampling (Hennink et al., 2020). The principle of random sampling requires a researcher to choose participants at random from the population of interest without even one participant feeling that another has a higher probability of being selected than he does. This technique targets on being general and unbiased. Purposeful sampling, on the other hand, calls for sample subject based on specific characteristic or features in regard to the research. This strategy is applied if the researcher has an interest in certain group or population that would give rich information regarding the subject of the study (Saunders et al., 2023). This research employs a purposive sampling technique which means that the participants are chosen with an intention of meeting certain prerequisites for undertaking the study. The participants of the study will be 104 customers who bought products from companies in the Ready-Made Garments (RMG) sector that follow circular economy principles. They are selected for their direct experience with such practices to enrich the study on how circular economy strategies impact customer relation and customer satisfaction (Kothari, 2022). This purposive approach helps to relate the sample directly to objectives of the study and only include only those participants who will be able to offer useful information. The selected sample will consist of customers who have firsthand experience with these practices, ensuring that the data gathered is directly relevant to the research aims (Liamputtong, 2019). This approach minimizes the collection of irrelevant data, focusing specifically on customers who have engaged with circular economy practices.

Selecting participants using purposive sampling is crucial for this research due to the reason that it provides opportunity to select participants whose experience and knowledge about circular economy in Ready Made Garments (RMG) Sector of Bangladesh can be verified (Bryman & Bell, 2007). By using 104 buying experiences with customers across garments exporting countries like Bangladesh, China and Turkey who have bought from companies with these

practices, first-hand information on customer perception and satisfaction is gathered. Thus, the possibility for the research to examine closely those specific participants whose data will be most useful in achieving study goals; this can result in richer, more concentrated information that is directly applicable to the research program and question (Saunders et al., 2023).

3.6 Data Analysis

This research will employ statistical data analysis such as descriptive statistics like mean, median and mode. It will also employ inferential statistics like correlation and regression analysis to explore the role of circular economy practices in customer relations and satisfaction. There are three types of data analyses like thematic analysis, content analysis and statistical data analysis. Thematic analysis works with qualitative data, analyzing patterns of certain qualitative data, in this case, derived from interviews or focus groups in order to identify themes (Saunders et al., 2023). Content analysis encompasses a method of analyzing messages contained in text or images in a manner that categorizes them and identifies their frequency. Statistical data analysis is the use of quantitative methods, applying mathematics and statistics, to arrive at conclusion about quantities, looking for relationships, means, variances, etc. They are used according to the nature of data and purpose of the research needed to achieve the overall goals and objectives. This study will employ systematic analysis of the survey responses using statistical data analysis to extract meaningful insights. Customer perceptions and satisfaction levels regarding circular economy practices will be summarized using descriptive statistics (mean, median, and mode) (Krishnaswamy & Satyaprasad, 2010). The correlation and regression analysis will be part of inferential statistics to be used, identifying relationships and patterns between variables, examining the influence of circular economy practices on customer satisfaction. Such analyses will inform the discussion of major conclusions and recommendations (Saunders et al., 2023).

For this study, statistical data analysis, both descriptive and inferential statistics, is vital in order to gain a holistic and indispensable insight regarding the extent of customer relations and satisfaction in the context of the RMG sector of Bangladesh, China, and Turkey. Descriptive statistics such as mean, median, and mode will be used to summarize customer perceptions and satisfaction levels, providing a snapshot of central tendencies and distribution in the four countries (Liamputtong, 2019). This will help find out how customers feel holistically about circular economy practices in the sector. Correlation and regression analysis will facilitate

uncovering the relationships between the circular economy practices undertaken by businesses and subsequent customer satisfaction levels, highlighting significant patterns and determining which elements contribute to higher levels of satisfaction. This country's satisfaction comparison will give better insights on how practices of circular economy influence customer relations in a global context and gives recommendations on measures to take to improve it in respective sectors (Acharyya & Bhattacharya, 2020).

3.7 Reliability, Validity and Ethical considerations

Reliability, validity, and ethical considerations are crucial components of this research to ensure the quality and integrity of the findings. Reliability is the degree to which the research instruments and its results are consistent. The survey questionnaire will be pilot-tested on a small sample to detect living ambiguities and inconsistencies and to assure their reliability. Utilizing existing metrics for customer perceptions and satisfaction increases reliability in that the results would be replicable across different contexts (Hennink et al., 2020). Validity is about whether research is actually measuring what it claims to measure. The development of the questionnaire ensures comprehensive coverage of the key elements of circular economy practices and customer satisfaction, thus confirming its content validity. To establish construct validity, established theories and frameworks for circular economy practices and building customer relations will be applied (Bryman & Bell, 2007). To improve external validity four more countries (Bangladesh, China, and Turkey) will be included and in response this survey will provide a broad view of how customers perceive. Ethical considerations will be prioritized throughout the study. Participation in the research will be voluntary with informed consent obtained from all participants. Also, the anonymity and confidentiality of participants will be ensured, and they will be given the option to withdraw from the study at any time without penalty. These ethical practices will help ensure that the research is conducted fairly and respectfully (Walliman, 2022).

4 THE RESULTS AND FINDINGS

4.1 Introduction

This chapter of the research presents customer perceptions of circular economy practices in the ready-made garments (RMG) sector. Also, this chapter covers role of circular economy practices in enhancing customer relations and satisfaction. Then, it compares customer satisfaction with circular economy practices in Bangladesh, China, and Turkey and provides recommendations for improving circular economy strategies to strengthen customer relations and satisfaction.

4.2 Demographic Statistics

A. Age Group of Respondents

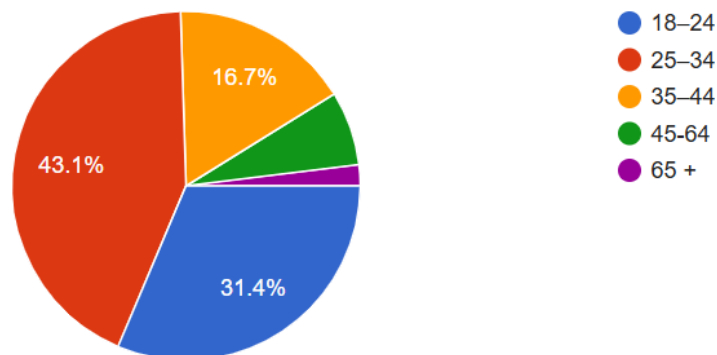


Figure 4: Age Group of Respondents

A total of 41.1% of respondents fall within the 25–34 age range with 31.4% from the 18–24 age group second in number. A total of 16.7% of the participants fall into the 35–44 age category alongside a 6.9% representation of people in the 45–64 bracket. Only 2% of respondents belong to the 65+ age group while they represent the smallest group in this survey.

B. Country of Residence and Gender of Respondents

Country of Residence	Gender of Respondents			
	Male	Female	Other	Prefer not to Say
Bangladesh	21	11		
China	14	7		
Turkey	14	7		
Europe	13	8		
Other	2	1		
Subtotal	64	34	4	2
Total	104			

The survey respondent demographic breakdown allows identification of the diversity and sampling representativeness within this study. Surveys under the study spanned five regional categories that include Bangladesh, China, Turkey, Europe, and Other countries which together form a substantial part of the global ready-made garments (RMG) market as both producers and consumers. This country breakdown ensures the data includes diverse perspectives about how the industry responds to circular economy (CE) practices through its implementation and views.

The analysis from Bangladesh region showed the highest number of participants reaching 32 individuals. Among these 32 participants 21 were male and the remaining 11 were female. As a leading RMG exporter Bangladesh maintains critical importance in the global market. The data from Bangladeshi respondents provides fundamental understanding of a vital sourcing center that faces extensive sustainability evaluation because of its economic difficulties and regulatory restrictions. The research involved twenty-one participants coming from China and Turkey as part of its overall sample base. The research includes these countries because their participation allows for the establishment of critical supply chain perspectives between textile-producing nations. The gender split for China and Turkey included two female researchers per seven male researchers or 14 males and 7 females equally in the study.

A total of 21 European participants took part in the survey with 13 male and 8 female respondents. The consumer segment constitutes an essential focus because they influence policy-related demands for responsible production within the RMG supply chain. European consumers excel at expressing their views about environmental standards thus serving as the main

standard for testing the effectiveness of CE initiatives and public acknowledgment of their reception. Three participants identified with "Other" nationalities including 2 men and 1 woman among them. The minority segment plays a crucial role in enhancing dataset variance because their insights reveal perspectives which otherwise would remain unremarked.

A gender analysis revealed that the entire sample included 64 male respondents along with 34 female participants but also contained 4 individuals who identified as other than male or female and 2 who declined to show their gender. The predominantly male sample (62%) indicates the effort to introduce non-binary and undisclosed gender participants which ensures more universal representation in the study. The gender breakdown in our sample helps identify possible distinctions between how sustainability approaches and satisfaction assessments are received by male and female customers making interesting research opportunities possible.

The demographic make-up of study participants serves as an effective base for investigating circular economy practices on customer relations and satisfaction evaluation. The research includes participants chosen from various geographic locations which advocate for representative coverage of production areas along with consumption centers. Also, the diverse gender distribution enriches the interpretation of analyzed outcomes. The research findings maintain greater validity because these characteristics enable richer knowledge of CE practice reception and evaluation across various socio-economic and cultural settings.

4.3 Customer Perceptions of Circular Economy Practices in The Ready-Made Garments (RMG) Sector

Table 3: Relative importance of the most sustainable source

Relative importance of the most sustainable source of sustainable and circular economy clothing producer	Mean	Median	Mode	Standard Deviation
China	3.8	4	4	1.095
European Union	3.92	4	4	0.947
Bangladesh	3.66	4	5	1.328
Vietnam	3.54	4	4	1.061
India	3.03	3	3	0.914
Turkey	3.81	4	4	0.923

United States	3.76	4	4	1.088
Indonesia	3.58	4	4	1.035
Cambodia	3.59	4	4	1.068
Mexico	3.72	4	4	1.049

The table provided shows the Customer perceptions of circular economy practices in the Ready-Made Garments (RMG) sector, focusing on the relative importance of various countries as sustainable and circular economy clothing producers. The data includes mean, median, mode, and standard deviation values, which give us insights into the general perception of sustainability in these countries' RMG sectors. In general, the European Union (EU) and China are seen as the most prominent sustainable sources, with the EU having the highest mean score of 3.92 and China at 3.8. Both countries scored highly on the median and mode, with most respondents indicating a rating of 4, suggesting a strong consensus on their sustainability efforts. The EU's slightly lower standard deviation (0.947) indicates that perceptions about its sustainability practices are relatively consistent, while China's higher standard deviation (1.095) suggests a wider variation in Customer opinions. Bangladesh, another major player in the RMG sector, has a mean score of 3.66, indicating a moderate level of perception towards its circular economy practices. With a mode of 5, some respondents view Bangladesh positively, but the higher standard deviation (1.328) suggests more uncertainty and mixed views about its sustainability practices. Other countries like Turkey, the United States, and Mexico have mean scores ranging between 3.7 and 3.8, suggesting a similar level of perception towards their sustainability efforts, with Turkey showing a relatively consistent response (standard deviation of 0.923). On the lower end, India and Vietnam are perceived as less sustainable, with India receiving the lowest mean score of 3.03. This indicates that, compared to other countries in the RMG sector, India is viewed as less committed to circular economy practices. Overall, the data shows that there are varying perceptions of sustainability in different countries, with the EU and China being seen as the most sustainable sources of circular economy clothing, while countries like India and Vietnam face more skepticism regarding their efforts.

Table 4: Comparison between Turkey, Bangladesh and China

Country	Key Strengths	Challenges	CE Practice Visibility	Customer Perception	Verdict

				Score (Mean)	
Turkey	<ul style="list-style-type: none"> - Arguably the Most Circular in Practice - Strong innovation in sustainable textiles: Companies like Isko Denim are leading globally in recycled materials and clean production technologies. - Integration of circularity in design: Participation in initiatives like the Jeans Redesign by the Ellen MacArthur Foundation signals a systemic shift toward long-term circular models. - Proximity to European markets: Turkey is closely aligned with EU regulations and sustainability goals, accelerating adoption of circular standards in the supply chain. 	<ul style="list-style-type: none"> - Limited global branding/communication of CE practices 	Moderate – practices exist but may not be widely marketed or visible to global consumers	3.81	Most advanced in CE implementation and innovation
Bangladesh	<ul style="list-style-type: none"> - 2nd largest RMG industry globally - Major global 	<ul style="list-style-type: none"> - Limited post-consumer recycling 	High – strong international	3.66	Bangladesh is rapidly

	<p>partnerships (e.g., Circular Fashion Partnership, SWITCH2CE)</p> <p>- Growing momentum and international support</p>	<p>- Infrastructure still developing</p> <p>-However, most recycling is still focused on pre-consumer waste, and large-scale infrastructure for post-consumer recycling is not yet fully developed</p>	<p>backing creates visibility despite infrastructure gaps</p>		<p>catching up, with high levels of global collaboration. If supported by better regulation and infrastructure, it could soon become a leader.</p>
China	<p>- Strong regulatory framework on CE</p> <p>-Extensive circular economy laws and cleaner production programs, and manufactures textiles at a massive scale.</p> <p>- Largest global textile manufacturer</p> <p>- Large-scale production and cleaner production initiatives</p>	<p>- Low transparency in RMG-specific CE</p> <p>- Few visible initiatives in circularity marketing</p>	<p>Low – CE practices exist but are not industry-specific or widely promoted.</p> <p>- But circularity in RMG is less visible, with fewer industry-specific initiatives publicly known or reported compared to Bangladesh or Turkey</p>	3.80	<p>China has the capacity and policy foundation but lacks visibility and industry-specific innovation in RMG compared to the others.</p>

Several countries apply different methods to adopt sustainable textile and garment business principles based on circular economy (CE) principles in modern times. The leading textile nations Turkey and Bangladesh and China display unique approaches to circular economy practices resulting in different levels of customer satisfaction.

Turkey: Most Advanced in CE Innovation and Implementation

Turkey displays exceptional leadership in sustainable textile innovation through the efforts of Isko Denim alongside other companies which drive the development of recycled materials coupled with clean production technologies. Turkey successfully brings circularity principles to design while taking part in global sustainability initiatives through its participation in Jeans Redesign by the Ellen MacArthur Foundation. Turkey demonstrates its dedication to enduring sustainable practices through its current actions. The integration of EU regulations helps Turkey implement circular economy standards as it positions itself as a leader in sustainable practices for the global textile market. Current global brand recognition and communication of Turkish CE practices remain challenging for the country despite significant progress made in this area. The textile sector of Turkey exhibits substantial innovation but its global market recognition remains limited. Customers have moderate insight into the CE practice activities undertaken by Turkey since vital initiatives fail to reach enough visibility. Turkey faces a visibility issue because global consumers cannot see that the country leads sustainable textile manufacturing worldwide. Turkey's innovation-based reputation among customers reports a value of 3.81 which reflects both strong product development and execution while facing recognition challenges. The leadership position Turkey holds in circular economy practice does not necessarily generate customer loyalty since there exists an undeveloped link between innovative circular economy developments and customer recognition.

Bangladesh: High Potential with Growing Global Collaboration

The ready-made garment sector of Bangladesh represents the world's second-largest industry while holding great capacity to adopt circular economic principles. Strong international partnerships such as the Circular Fashion Partnership and SWITCH2CE work to develop circular fashion initiatives for the country that is garnering worldwide notice. Global garment manufacturing leadership in Bangladesh receives support from international collaboration which has helped establish advanced visibility regarding circular economy (CE) practice. Through international collaborations the country maintains global recognition of its circular economy work while

building a national infrastructure for post-consumer recycling plus developing circular systems. The country's CE practice visibility stands high because it benefits from international support and worldwide collaboration dedicated to generating visibility. The development of an advanced post-consumer recycling infrastructure requires time and this stage hinders Bangladesh from implementing a complete circular economy system across whole production lifecycle. The customer perception score in Bangladesh currently stands at 3.66 which indicates positive prospects for the future. The country demonstrates potential to become an influential CE leader at a global level by improving infrastructure and expanding multinational relationships in the circular economy space. The increasing partnerships bring more recognition to Bangladesh's sustainability initiatives leading to potential growth of consumer loyalty.

China: Largest Producer but Lacking Transparency

The world's leading textile manufacturer China maintains well-defined regulatory measures for circular economy management. Large-scale cleaner production initiatives and extensive circular economy laws help Chinese authorities support sustainable practices in textile manufacturing throughout the country. Due to its extensive size and policy structures China's circular economy systems remain less apparent than Turkey or Bangladesh. Inadequate disclosure of circular economy programs in the textile sector coupled with unclear industry-level circularity practices result in low customer awareness regarding Chinese sustainability initiatives. Due to its robust regulatory strength and large size China presents a powerful circular economy platform yet its minimal promotional strategy hinders the development of customer trust toward its sustainable practices. A low level of visibility regarding China's CE practices correlates with diminished customer understanding of its environmental initiatives. China holds strong capabilities to be a leader in sustainable practices yet its insufficient consumer interaction and insufficient transparency in CE operations keeps it from maximizing its potential as measured by its 3.80 customer perception score. China operating as the world's largest textile producer faces problems with circular economy implementation because its sustainable practices remain invisible to consumers. The insufficient visibility of branding in China's textile sector prevents customers from linking sustainability to the nation's textiles sector reducing potential loyalty.

Here, the study finds diverse circular economy implementation levels together with visibility degrees within the textile sector across Turkey, Bangladesh and China. Although innovative and an adopter of circular economy Turkey lacks worldwide branding that would enhance its customer identification and loyalty. Also, the textile industry of Bangladesh advances with

momentum through international partnerships which makes it an emerging force in circular economy practices but confronts obstacles in infrastructure development. Besides, China remains a dominant player in the textile market because of its great size and regulatory capabilities yet its weak branding visibility along with low transparency blocks it from gaining consumer loyalty for its circular economy initiatives. Then, the ability of countries to convey their circular economic practices to customers efficiently will decide which nations emerge as leaders in sustainable fashion since the textile industry develops globally.

Relative Preference to Consume

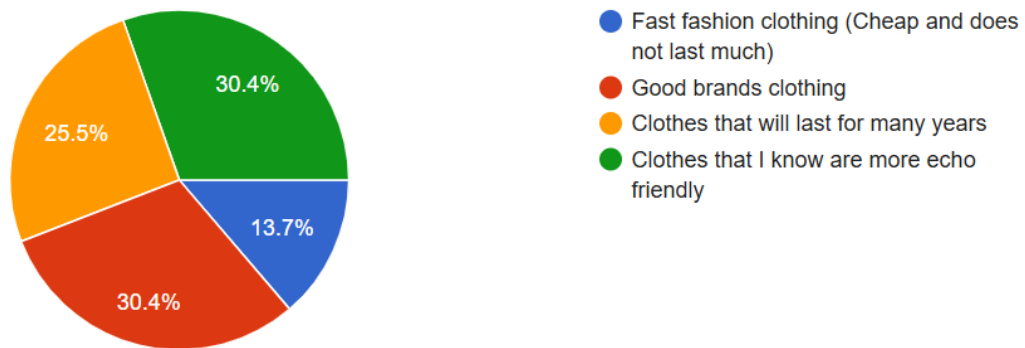


Figure 5: Relative Preference to Consume

The survey reveals diverse clothing preferences. While 13.7% opt for fast fashion due to affordability, 30.4% prefer well-known brands for quality and style. Also, 25.5% prioritize durability and thus, valuing long-lasting clothes. Also, 30.4% choose eco-friendly clothing which reflects a growing awareness of sustainability and ethical consumption in fashion choices.

Table 5: Customer Perceptions of Circular Economy Practices

		Mean	Median	Mode	Standard Deviation
Relative familiarity with Circular Economy		4.18	4	5	0.959
Relative Familiarity with Circular Economy Practices in the Ready-Made Garments (RMG) Sector		4.14	4	5	0.955
Relative Prevalence of the Most Commonly Adopted Circular	Recycling of materials	3.71	4	4	1.256

Economy Practices in the RMG Sector					
	Waste reduction	3.88	4	5	1.198
	Reusing garments	3.64	4	5	1.336
	Use of sustainable raw materials	3.78	4	5	1.273
	Reduce Energy consumption	3.87	4	5	1.159
	Take back and repair programs	3.67	4	5	1.27
	Water and chemicals consumption reduction	3.8	4	5	1.23
Relative Importance of Circular Economy Practices (e.g., Recycling, Reusing Materials, Reducing Waste, Reducing Energy Consumption) in the RMG Sector.		4.21	4	5	0.871
Relative ratings of the implementation of circular economy practices in the RMG sector in your country		3.98	4	4	0.916

The dataset provides insights into the familiarity, prevalence, importance, and implementation of Circular Economy (CE) practices in the Ready-Made Garments (RMG) sector. Also, the statistical measures presented include Mean, Median, Mode, and Standard Deviation, which help summarize survey responses. Then, regarding familiarity with the Circular Economy, respondents demonstrated a relatively high level of understanding, with a mean of 4.18, a median of 4, and a mode of 5. Also, the standard deviation of 0.959 indicates that responses were closely clustered around the mean, showing consistency in familiarity levels. Similarly, familiarity with Circular Economy practices within the RMG sector was also rated highly with a mean of 4.14, a median of 4, a mode of 5, and a standard deviation of 0.955. Thus, this suggests that respondents are not only aware of CE but also understand how it applies to the garment industry.

When assessing the prevalence of commonly adopted Circular Economy practices in the RMG sector, different practices showed varying levels of adoption. Recycling of materials had a mean score of 3.71, a median of 4, a mode of 4, and a standard deviation of 1.256, indicating

moderate adoption with some variation in responses. Waste reduction was rated slightly higher, with a mean of 3.88, a median of 4, a mode of 5, and a standard deviation of 1.198, suggesting it is more widely implemented. The practice of reusing garments had a mean of 3.64, a median of 4, a mode of 5, and a standard deviation of 1.336, indicating that while some respondents see it as common, others perceive it as less prevalent. The use of sustainable raw materials scored a mean of 3.78, a median of 4, a mode of 5, and a standard deviation of 1.273, showing moderate implementation. Reducing energy consumption was rated 3.87 on average, with a median of 4, a mode of 5, and a standard deviation of 1.159, indicating a relatively stronger presence compared to some other CE practices. Take-back and repair programs, which allow customers to return old garments for repair or recycling, had a mean of 3.67, a median of 4, a mode of 5, and a standard deviation of 1.270, showing moderate adoption. Lastly, water and chemical consumption reduction scored a mean of 3.8, a median of 4, a mode of 5, and a standard deviation of 1.23, suggesting this practice is somewhat prevalent but with differing levels of perception.

The relative importance of Circular Economy practices, such as recycling, reusing materials, reducing waste, and minimizing energy consumption, was rated highly, with a mean score of 4.21, a median of 4, a mode of 5, and a standard deviation of 0.871. This indicates that respondents generally agree on the significance of these practices in the RMG sector, and there is little variation in their opinions. However, when it comes to the actual implementation of Circular Economy practices in the RMG sector in their country, respondents rated it slightly lower, with a mean of 3.98, a median of 4, a mode of 4, and a standard deviation of 0.916. This suggests that while CE practices are recognized as important, their execution is not yet fully optimized, and there is still room for improvement.

4.4 Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction in The RMG Sector

4.4.1 Correlation between Circular Economy Practices and Customer Relations and Satisfaction

Table 6: Correlation between Circular Economy Practices and Customer Relations and Satisfaction

	<i>Circular Economy Practices</i>	<i>Customer Relations and Satisfaction</i>
Circular Economy Practices	1	
Customer Relations and Satisfaction	0.600683	1

A correlation value of 0.600683 indicates a moderate to strong positive relationship, meaning that as Circular Economy practices improve, customer relations and satisfaction also tend to increase. This suggests that businesses that adopt sustainable strategies in their operations can expect better customer loyalty, increased trust, and higher levels of satisfaction.

4.4.2 Regression of Circular Economy Practices and Customer Relations and Satisfaction

Table 7: Regression of Circular Economy Practices and Customer Relations and Satisfaction

<i>Regression Statistics</i>	
Multiple R	0.600683
R Square	0.36082
Adjusted R Square	0.354553
Standard Error	0.80725
Observations	104

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	37.52177	37.52177	57.57936	1.58E-11
Residual	102	66.46862	0.651653		
Total	103	103.9904			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.968127	0.312186	6.304331	7.49E-09	1.348906	2.587347	1.348906	2.587347
Circular Economy Practices	0.564727	0.074423	7.588106	1.58E-11	0.41711	0.712344	0.41711	0.712344

Here, to analyze the impact of Circular Economy (CE) practices on Customer Relations and Satisfaction, a regression analysis was conducted. The results show a moderate to strong relationship which is indicated by the Multiple R value of 0.600683. So, this suggests that Circular Economy practices and Customer Relations & Satisfaction are positively correlated, meaning that as businesses implement more CE practices, customer satisfaction and relationships improve. Then, the R-Square value of 0.36082 indicates that approximately 36.08% of the variation in Customer Relations and Satisfaction can be explained by Circular Economy practices. The Adjusted R-Square of 0.354553 confirms that this estimate remains stable even after adjusting for potential biases in the model. Besides, the Standard Error of 0.80725 represents some level of variability in the data, but overall, the model provides a good fit for understanding the relationship between these variables.

The ANOVA (Analysis of Variance) results further validate the model's significance. The F-statistic of 57.57936 is relatively high and thus, indicating that the independent variable (CE practices) significantly predicts the dependent variable (Customer Relations & Satisfaction). Also, the Significance F value of 1.58E-11 is extremely low, meaning that the probability of obtaining these results by random chance is almost zero. This confirms that Circular Economy practices have a statistically significant influence on Customer Relations and Satisfaction in the Ready-Made Garments (RMG) sector. The regression equation derived from the analysis is:

$$\text{Customer Relations \& Satisfaction} = 1.968127 + 0.564727 * \text{Circular Economy Practices}$$

The intercept (1.968127) suggests that even in the absence of Circular Economy practices, there is a baseline level of customer satisfaction. This could be due to other factors such as product quality, customer service, or brand reputation. However, the coefficient for Circular Economy Practices (0.564727) indicates that for every 1-unit increase in CE practices, Customer Relations & Satisfaction improves by 0.564727 units. This positive effect is statistically significant, as confirmed by the p-value of 1.58E-11, which is far below the conventional threshold of 0.05. Furthermore, the 95% confidence interval for the Circular Economy Practices coefficient ranges from 0.41711 to 0.712344, meaning we can be highly confident that the true

impact of CE practices on Customer Relations & Satisfaction lies within this range. This reinforces the reliability of the findings and suggests that businesses investing in CE initiatives can expect tangible improvements in customer perceptions, trust, and satisfaction levels.

4.5 Comparison of Customer Satisfaction with Circular Economy Practices in Bangladesh, China and Turkey

Table 8: Comparison of Customer Satisfaction

Relative Satisfaction with Circular Economy Practices in the RMG Sectors of China and Turkey	Mean	Median	Mode	Standard Deviation
Bangladesh	3.753	4	5	1.323119
China	3.907	4	4	1.154306
Turkey	3.874	4	4	1.009312

In this section, customer satisfaction with Circular Economy (CE) practices in the Ready-Made Garments (RMG) sectors of Bangladesh, China, and Turkey is compared to understand the differences in how customers in these countries perceive the implementation of CE practices and their impact on satisfaction levels.

In Bangladesh, the mean satisfaction score for CE practices is 3.753, indicating a moderate level of customer satisfaction. The median score of 4 suggests that most customers rate their satisfaction with CE practices positively. However, the mode score of 5, which is the most frequently occurring score, shows that a significant number of customers are very satisfied. Despite this, the standard deviation of 1.323119 indicates that there is considerable variation in satisfaction levels among customers. This high variation suggests that while some customers are highly satisfied, others might not feel as positive about the implementation of CE practices, indicating potential areas for improvement.

In China, the mean satisfaction score is 3.907, slightly higher than Bangladesh's, reflecting a somewhat greater level of customer satisfaction. The median score of 4 and the mode score of 4 indicate that most customers have a neutral to satisfied view of the CE practices in the Chinese RMG sector. The standard deviation of 1.154306 is lower than that of Bangladesh, suggesting that customer satisfaction in China is more consistent across respondents. This

indicates that Chinese RMG companies may have a more standardized approach to implementing Circular Economy practices that meets the general expectations of a broader range of customers.

For Turkey, the mean satisfaction score is 3.874, which is very similar to China's score. This suggests a comparable level of satisfaction with CE practices in the RMG sector. The median and mode scores of 4 indicate that most customers in Turkey rate their satisfaction as moderate to high. Notably, Turkey has the lowest standard deviation of 1.009312, which means that satisfaction levels are more uniform across the population. This could imply that Turkish RMG companies have implemented CE practices that are more effective and consistent in delivering satisfaction to their customers, compared to Bangladesh and China.

4.6 Recommendations For Improving Circular Economy Strategies to Strengthen Customer Relations and Satisfaction in The RMG Sector

Table 9: Recommendations for Improving Circular Economy Strategies

		Mean	Median	Mode	Standard Deviation
Relative Importance of Areas for Improvement in the RMG Sector's Approach to Circular Economy Practices in Bangladesh.	More recycling initiatives	3.719	4	5	1.331
	Better waste management systems	3.699	4	5	1.323
	Use of more sustainable materials	3.724	4	5	1.227
	Greater transparency about sustainability efforts	3.826	4	5	1.276
Relative Importance of Factors	Discounts or promotions	3.663	4	4	1.161

Encouraging Increased Purchases from Garment Brands That Promote Circular Economy Practices.					
	Greater transparency in sustainability efforts	3.647	4	5	1.27
	Improved product quality	3.874	4	5	1.159
	Easy access to sustainable products	3.894	4	5	1.175
Relative Importance of Government Increasing Sustainability Requirements for the Clothing Industry.		4.069	4	5	1.003

In this section, recommendations are made for enhancing Circular Economy (CE) strategies within the Ready-Made Garments (RMG) sector in Bangladesh, aimed at strengthening customer relations and satisfaction. These suggestions are based on customer feedback regarding key areas that influence their purchasing decisions and satisfaction levels. A significant area for improvement is the increase in recycling initiatives within the RMG sector. Customers rated this aspect with a mean score of 3.719, reflecting a moderate desire for more comprehensive recycling efforts. The high standard deviation of 1.331 shows that while some customers strongly advocate for better recycling practices, others may not prioritize it as highly. To better meet customer expectations, companies should explore expanding their recycling programs and emphasize their efforts in this area to appeal to eco-conscious consumers.

Similarly, better waste management systems were identified as another area for improvement, with a mean score of 3.699. Waste reduction and management are crucial for reducing the environmental impact of garment production. The standard deviation of 1.323 suggests variability in how much customers value this aspect, yet it remains clear that improving waste management could significantly enhance customer satisfaction, particularly for consumers concerned with environmental sustainability. Another crucial area is the use of more sustainable

materials in garment production. With a mean score of 3.724 and a standard deviation of 1.227, customers consistently express interest in more eco-friendly raw materials. Incorporating such materials into production processes would not only reduce the environmental footprint of the RMG sector but also align with consumer preferences for sustainability. By focusing on sustainable material sourcing, brands can strengthen their reputation as environmentally responsible. Additionally, greater transparency about sustainability efforts received a mean score of 3.826, underscoring the growing importance of clear and accessible information on sustainability practices. The standard deviation of 1.276 suggests that transparency is valued across a broad range of customers, but there is still room for improvement. Brands that openly share their sustainability efforts and practices will likely build stronger trust and loyalty with their customers.

When considering factors that would encourage more purchases, discounts or promotions were seen as influential, with a mean score of 3.663. However, the standard deviation of 1.161 reveals that not all customers respond equally to promotional offers, suggesting that while price incentives may attract some customers, others may be more focused on quality or sustainability. Therefore, offering discounts alongside sustainable product lines could be a strategy to boost sales while supporting Circular Economy initiatives. Another important factor is greater transparency in sustainability efforts, which received a mean score of 3.647. Consumers are more likely to make purchases from brands that clearly communicate their sustainability practices. By offering more information on their sustainable sourcing and production methods, brands can encourage loyalty and increase consumer confidence in their products. The importance of improving product quality was highlighted by a mean score of 3.874, which reflects that consumers place significant value on high-quality products in addition to sustainability. The lower standard deviation of 1.159 shows that this is a relatively consistent expectation across customers. To meet customer expectations, RMG companies should focus not only on sustainable practices but also on ensuring the durability and quality of their garments.

Furthermore, easy access to sustainable products received a mean score of 3.894, suggesting that consumers desire convenience when shopping for eco-friendly options. The standard deviation of 1.175 shows a moderate variation in how customers perceive the accessibility of sustainable garments, indicating that making these products more widely available, both in stores and online, would enhance customer satisfaction and encourage repeat purchases. Lastly, government regulation plays a crucial role in promoting sustainability within the RMG

sector. The mean score of 4.069 reflects strong support from customers for increased government sustainability requirements in the clothing industry. The standard deviation of 1.003 indicates that this is a widely held belief among consumers. Companies in the RMG sector should advocate for and comply with stricter sustainability standards, not only to meet consumer expectations but also to contribute to a more sustainable future for the industry.

5 DISCUSSIONS OF THE FINDINGS

5.1 Identification of Customer Perceptions of Circular Economy Practices in The Ready-Made Garments (RMG) Sector

Table 10: Identification of Customer Perceptions

Country	General Awareness	Customer Sentiment	Trust in CE Implementation	Key Insights
Bangladesh	Moderate	Mixed—recognition with skepticism	Higher trust than China due to visible recycling practices	Lacks consistent practice; CE awareness not widespread
China	Moderate to High	Generally positive, some doubts about authenticity	Moderate—perceived as advanced but not uniformly trusted	CE efforts seen as progressive but trust varies by individual
Turkey	Moderate	Positive, with doubts about practical execution	High—standardized implementation improving perceptions	Strong implementation, but uncertainty in CE integration process

Different understandings of Circular Economy (CE) approaches in the Ready-Made Garments (RMG) sector emerge between Bangladesh and China and Turkey because these countries implement sustainability initiatives at varying levels of awareness. The public in Bangladesh acknowledges CE practices with moderate awareness yet displays blended emotions about sustainability initiatives within the RMG sector. People recognize the RMG sector's sustainability initiatives while expressing doubt because of variable practices and minimal awareness spread. The drive for sustainability has surpass the difficulties of creating enduring circular procedures that function effectively. The general public in China views the circular economy methods positively even though understanding varies among individuals. Chinese customers generally view their country as ahead in sustainability but some consumers doubt both the extent and authenticity of these initiatives. The circular economy initiatives in Bangladesh seem to receive higher confidence than those in China because recycling programs and waste reduction strategies have started to take effect within the sector. Turkish views about CE practices within the RMG sector parallel Chinese views in showing positive attitudes. Unlike Bangladesh, Turkish actors display doubts about how circle economy practices will be executed in

practice. The Turkish market sees sustainability's importance yet understands that the textile sector needs to advance circular economy implementation to maximize its benefits. The execution of sustainable practices shows inconsistency which leads people to believe that progress occurs gradually but not immediately throughout the industry.

Research indicates that customer assessment of circular economy practices matches specific points documented in the literature regarding the Ready-Made Garments (RMG) sector of Bangladesh, China, and Turkey. The findings of the survey match those in the literature which show that customer knowledge about CE directly impacts their perception and involvement levels. Le et al. (2024) together with Amin et al. (2024) confirm that insufficient CE practice knowledge obstructs sustainable attitudes among consumers. Survey results demonstrating high mean scores for circular economy practice knowledge indicate that customers from the selected countries possess moderate awareness about circular economy principles similar to findings presented by Le et al. (2024) and Ranta et al. (2018) regarding awareness building campaigns to improve customer comprehension. The observed differed implementations of CE practices in the RMG field match existing research about practical limitations and adoption hurdles for this area. The survey shows split opinions toward CE practices involving garment reuse and repair because customers often oppose taking additional steps as explained by Aarikka-Stenroos et al. (2021). Research evidence shows that customers with environmental and ethical perspectives tend to endorse CE practices since they prefer sustainable clothing items (Ackermann et al., 2018; Tukker, 2015). Customers hold distinct driving factors that influence their sustainability awareness with sustainability being only one factor according to Bocken et al. (2014) and Maria et al. (2019). Businesses need to address environmental and economic factors to achieve broader acceptance of CE practices according to these research findings.

Research findings about Circular Economy practices in Ready-Made Garments sectors of Bangladesh, China and Turkey show differences from existing studies. The research data reveals a substantial understanding of CE practices among consumers because consumers need to understand CE for its effective implementation according to Le et al. (2024). The ratings which show moderate levels of practice optimization for Circular Economy implementation contrast with the findings Aryee et al. (2024) presented about successful CE implementation depending on clear benefits for both the environment and economy. In accordance with literature findings (Aarikka-Stenroos et al., 2021) some consumers display negative reactions

toward CE practices because of the extra work involved in recycling and waste reduction. Customer reactions towards sustainable practices in the RMG industry might be influenced by their assessment of effort required to implement them. According to research CE programs should be based on ethical principles and environmental considerations to build sustained customer relationships (Ackermann et al., 2018). The results from the survey reveal different levels of customer understanding which show Bangladesh customers remain uncertain about sustainable initiatives even though CE practices may not match their individual values in the market. The survey insufficiently addresses the economic value of customer incentives despite their essential role in CE initiative participation according to Aryee et al. (2024) and requires stronger economic benefit ties with customer engagement per Ta et al. (2022).

5.2 Exploration of Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction in the RMG Sector

Table 11: Exploration of Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction

Aspect	Findings	Supporting Literature
Customer Loyalty	Increases with visible CE commitment and transparent communication	Henriques et al. (2023); Szilagyi et al. (2022)
Customer Trust	Built through ethical, clear sustainability practices	Lopez & Legardeur (2024); Soh & Wong (2021)
Brand Image	Improved through CE integration (recycling, upcycling, resource efficiency)	Sairanen et al. (2024); Stein et al. (2020)
Satisfaction Drivers	Environmental responsibility, clear CE goals, simplified sustainable choices	Ackermann et al. (2018); Bocken et al. (2014)
Communication Importance	Lack of transparency creates skepticism; clear messaging boosts engagement	Lopez & Legardeur (2024); Henriques et al. (2023)

The adoption of circular economy principles represents a vital element for better customer satisfaction and relationships across the Ready-Made Garment (RMG) industry within Bangladesh, China and Turkey. Essential sustainable business approaches including recycling and waste reduction together with product lifespan extension enable companies to create better relationships with environmentally sensitive consumers. This method creates environmental benefits while responding to escalating market expectations regarding sustainable products in

the consumer market. The execution of circular economy methods by business-organizations leads to higher customer loyalty and trust levels resulting in increased satisfaction. The positive attitude of consumers toward brands with sustainable commitment leads them to build stronger relationships with the company. Companies dedicated to circular economy practices achieve market differentiation that enhances their corporate brand perspective and overall reputation. The RMG sector in Bangladesh and China and Turkey utilizes this practice to gain market advantages through sustainability contributions that support worldwide sustainability objectives. These markets show clear positive results for customer satisfaction because customers now want to buy from brands which demonstrate environmental responsibility. The study findings demonstrate how sustainability affects what buyers think of brands. Customers now prefer brands with environmental practices because these practices simultaneously improve their experience and create positive brand awareness. The research outcome underlines the necessity for RMG enterprises to adopt Circular Economy models to produce sustained customer involvement and business achievement.

The results from the circular economy practice investigation conform to published studies that measure customer relations and satisfaction. The regression analysis confirms that circular economy practices enhance customer satisfaction while improving brand loyalty because they strengthen sustainability credentials of businesses. According to Szilagyi et al. (2022) resource optimization and recycling through CE practices create positive impacts on brand image which attracts environmentally mindful customers. The rise of CE practices creates more loyal customers whose satisfaction matches the observed improvements. The study authored by Henriques et al. (2023) indicates that CE initiatives must be transparently communicated to customers. Organizations that clearly present their sustainability programs gain customer trust by reducing fears about propaganda regarding green initiatives. The study confirms that clear communication produces favorable results because organizations implementing CE practices achieved substantial elevations in customer satisfaction. Studies in literature indicate that when CE practices have inadequate communication consumers become suspicious and believe trust is compromised, Lopez & Legardeur (2024) and Stein et al. (2020) note. Trust from contemporary consumers drives them toward brands that share their environmental values as Soh & Wong (2021) explain. The statistical analysis confirms that firms implementing CE practices gain trust from customers while providing sustainable products which serves as a fundamental market strategy for maintaining competitive positions. When companies adopt CE practices,

they achieve dual objectives of environmental conservation and strategic business goals which link sustainability initiatives to better customer satisfaction and increased loyalty.

Circular Economy practices demonstrate a substantial positive relationship towards improving customer relations and satisfaction in the Ready-Made Garments (RMG) sector. Customer loyalty and trust and satisfaction increase together with advancements in CE practices. The literature backs this finding since Szilagyi et al. (2022) point out that CE practices demonstrate responsible and forward-thinking business approaches which improve brand reputation and customer loyalty. The implementation of recycling and upcycling methods under CE practices creates positive effects on eco-conscious customer relations (Lopez & Legardeur, 2024). The current study results do not fully match prevailing literature about potential challenges that CE practices present. Stein et al. (2020) along with several other scholars note that excessive communication about CE initiatives alongside their possibly incorrect presentation results in skepticism according to research by regression analysis but the study by Stein et al. (2020) demonstrates positive correlations between CE practices and business advancement. The authors Henriques et al. (2023) emphasize the importance of transparent communication about CE initiatives to establish better customer trust. Companies gain benefits from CE practices when their genuine and clear communication of these efforts ensures proper customer perception without ambiguity. Studies demonstrate that recycling programs established as CE initiatives contribute to enhanced customer engagement (Sairanen et al., 2024) according to findings which indicate improved CE practices yield higher customer satisfaction. The analysis of Soh & Wong (2021) shows CE initiatives should be kept straightforward to maintain high customer participation levels even though complicated programs might decrease participation rates. The analysis reveals a robust connection yet business implementation complexities of effective CE practices together with their communication methods might hinder attainment of peak customer satisfaction.

5.3 Comparison of Customer Satisfaction with Circular Economy Practices in Bangladesh, China and Turkey

Table 12: Comparison of Customer Satisfaction with Circular Economy Practices

Country	Customer Satisfaction Level	Implementation Consistency	Notable Observations
Bangladesh	Moderate	Low	Satisfaction varies across brands; inconsistency noted
China	High	Medium-High	More standardized practices; lower score variation among consumers
Turkey	High	High	Consistent satisfaction; broad acceptance of CE due to effective implementation

Research shows that customer satisfaction about circular economy practices in Ready-Made Garments sectors of Bangladesh, China and Turkey demonstrates country-specific opinions about CE programs. The level of customer satisfaction toward CE practices in Bangladesh shows moderate ratings though the responses exhibit considerable discrepancy. A substantial portion of customers give positive ratings to these practices yet a sizable section rates them poorly which shows that implementing these practices needs further enhancement. The inconsistent level of Customer Experience practices among different brands and regions creates the possibility of uneven customer interactions throughout Bangladesh. Chinese consumer satisfaction regarding CE practices operates at a slightly superior level than what has been observed in Bangladesh. The consistency of customer satisfaction improves because the scoring variation remains lower. Chinese RMG companies maintain successful CE practices according to most customer ratings and demonstrate a narrow standard deviation showing standardized implementation of customer-aligned practices. Turkey shows satisfaction results comparable to China coupled with higher consistency levels. Circular economy implementation by Turkish companies demonstrates effective execution since these practices generate positive responses from a broad spectrum of customers as shown by low satisfaction score variability. Turkey maintains high customer satisfaction levels for CE because its standardized implementation prevails consistently throughout the RMG industry sectors. The standardization efforts in CE practices by China and Turkey exceed those of Bangladesh since it produces consistent results in satisfied customers.

5.4 Recommendations For Improving Circular Economy Strategies to Strengthen Customer Relations and Satisfaction in The RMG Sector

Table 13: Recommendations for Improving Circular Economy Strategies

Strategy Area	Recommendation	Expected Outcome
Recycling Programs	Expand and promote textile recycling and take-back initiatives	Higher customer engagement and improved brand perception
Waste Management	Implement effective waste segregation and partner with responsible disposal firms	Greater trust in environmental responsibility and cleaner operations
Sustainable Materials	Incorporate organic, recycled, and biodegradable materials in production	Enhanced product appeal and alignment with eco-conscious values
Transparency & Communication	Share sustainability efforts across sourcing, production, and partnerships	Increased customer trust, loyalty, and confidence in brand ethics
Marketing & Incentives	Offer discounts on sustainable lines and rewards for recycling participation	Encouraged eco-friendly purchases and stronger customer incentives
Product Quality	Ensure sustainable products maintain high durability and comfort	Higher customer satisfaction and long-term brand credibility
Accessibility	Make sustainable options widely available in-store and online	Easier customer access and increased adoption of CE products
Policy Engagement	Support and comply with stronger government sustainability regulations	Positive public image and alignment with national goals

Enhancing Recycling Initiatives: The Ready-Made Garments sector in Bangladesh needs recycling initiatives as their centerpiece to build Circular Economy (CE) strategies. Consumer environmental consciousness keeps rising alongside increasing pressure for brands to lead sustainable practices. Brand sustainability measures now use post-consumer waste and excess fabric scrap recycling as indicators of environmental commitment. Consumer surveys consistently indicate a rising need for apparent and potent recycling programs. The fundamental desire of customers to recycle continues to shape consumer behavior especially between younger generations and environmentally aware groups. A complete textile recycling program

can be established by RMG companies to address this need. Brands must establish take-back programs for customers to return older clothes combined with recycling plant relations for creating circular cycles which convert textiles into new clothing items. These marketing initiatives should focus on presenting recycling efforts because they promote environmentally friendly conduct while developing deeper consumer brand ties. A brand gains credibility by showing customers the complete product lifecycle and how waste management leads to both minimization and repurposing of materials. Competitive markets now require companies to establish these initiatives as crucial strategic elements for building trust along with customer loyalty.

Improving Waste Management Systems: The RMG industry needs to implement efficient waste management strategies throughout the entire production process as a critical measure for improvement. Industrial waste occurs throughout RMG operations spanning from fabric preparation until the time packaging and shipping begins. The majority of customers have started to notice how industrial waste management failures contribute to environmental damage thus they have become concerned. Production waste management at RMG companies requires an immediate review and development of modern waste control systems. Organizations should advance lean manufacturing and invest in cutting reduction equipment along with seeking waste management partners holding sustainability certifications to handle industrial by-products properly. The transparency of these operations also matters equally important. Organizations that disclose their waste management practices to customers through reports and infographics earn better customer trust. Companies should create circular business alliances with different industry sectors that transform textile waste into construction materials and insulation raw materials. Company practices that showcase innovative responsible waste management strategies help brands build environmental value along with stronger connections to their environmentally conscious customers.

Prioritizing the Use of Sustainable Materials: Raw material choices determine how a brand establishes its sustainability perspective in the market. Current consumers deeply focus on textile selection within their clothing because they choose materials that remain natural yet renewable along with being easily recyclable. The current consumer base seeks brands to create ethical and sustainable products that surpass mere visual appeal. The integration of sustainable materials becomes essential for every production operation. The production of sustainable apparel requires organic cotton and bamboo fabric and hemp and recycled polyester as well as other degradable alternatives. The use of natural and less resource-consuming

materials results in reduced environmental effects as a contrast to standard synthetic fabrics. To use sustainable materials companies, need supply chain capabilities investigation and possibly new collaborations with suppliers having sustainable certifications. RMG companies need to use material labeling together with consumer education programs to provide buyers with information about environmentally friendly purchase options. Certifications like GOTS (Global Organic Textile Standard) and OEKO-TEX® provide customers with assurance about international sustainability compliance of their purchased garments. The sustainable initiative demonstrates both worldwide sustainability support and operates as an excellent market distinction. The efficient use of sustainable materials for sourcing and marketing allows brands to lead ethical fashion while increasing customer trust and accessing expanding markets of conscious consumers.

Increasing Transparency in Sustainability Efforts: Modern consumers now expect transparency to become their minimum requirement rather than treating it as a differentiating factor. Today's customers need detailed information about their purchases which includes production location data and employee and manufacturing conditions. People are interested mostly in understanding the sustainability practices of the brand from end to end within the supply chain. The demand for openness demands that RMG companies develop precise and genuine channels to display their sustainability initiatives to consumers. Brand transparency can be achieved through publishing sustainability reports as well as behind-the-scenes social media content and tagging products with QR codes which direct to origin information followed by working together with independent certification institutions. Openness requires organizations to disclose their present difficulties together with their system limitations. The disclosure of authentic information regarding accomplishments alongside vulnerabilities builds greater customer trust in any organization. Sustainability-oriented brands gain more customer loyalty by being transparent about their sustainability progress rather than producing a formal false view. The brand-consumer relationship improves when customer service staff receives sustainability question training combined with digital customer feedback platforms. The market dynamics require full brand transparency because consumers need assurance through complete disclosure to maintain their loyalty over time.

Leveraging Promotions to Support Sustainable Choices: The surge in environmental awareness does not outweigh economic factors which determine consumer purchase decisions. Consumers show appreciation toward brands that provide discounts and loyalty rewards

and promotional deals specifically when such opportunities promote sustainable initiatives. Properly designed promotional methods work as valuable mechanisms for motivating people to buy sustainably. The sustainable effort of retail textile manufacturers benefits from using promotional activities linked with environmentally conscious behavior. The practice of offering price reductions on new products when customers bring used clothing to recycling centers alongside special recovery on sustainable product ranges helps consumers connect with CE initiatives. Promotional programs enable both new sustainability fashion consumers to overcome entry difficulties and existing sustainable fashion supporters to receive direct benefits. The promotion of sustainability needs to be handled carefully since false marketing perceptions could arise about its genuine purpose. Sustainable brand promotions should illustrate all significant sustainability targets through a reliable sustainable message framework. A dual approach helps businesses to display their dedication to CE and also provide benefits to consumers who uphold environmental responsibility.

Ensuring High Product Quality: The maintenance of product quality stands above sustainability standards. People refuse to give up essential product qualities such as longevity and wearer comfort merely because clothes support an environmentally friendly approach. The perception of experts is that sustainability includes quality alongside longevity because durable products make fewer replacements which leads to reduced total environmental impact. RMG companies need to implement strict quality control systems that begin with material screening and end with final product assessments to satisfy customer demands. The combination of trained personnel with upgraded equipment together with permanent quality evaluation procedures guarantees sustainable practices while preserving remarkable workmanship. The education provided by brands helps their customers maintain their clothes properly which results in sustainable consumption patterns. When a brand maintains reputedly high-quality products it separates itself from market competition and draws positive word-of-mouth responses that compel customers to both refer others and repeatedly purchase its products. Eco-friendly products display perfect quality standards because this dual excellence makes customers adopt sustainable brand purchases as their ongoing choice.

Improving Access to Sustainable Products: Most customers purchasing sustainable fashion items continue to face accessibility problems. Eco-friendly products remain difficult to discover for conscious consumers who would choose them despite higher prices and environmentally benign choices. This challenge serves as a deterrent for customers who are trying to

make green purchases. The sustainable product accessibility and visibility require RMG companies to make these items their top priority. The company should maintain sustainable collections across both its flagship and regional stores and establish designated areas for eco-friendly products on e-commerce platforms with standard inventory levels. Remember that working with both popular influencers along with retail partners extends sustainable product market reach. Technological advances including mobile apparel applications and virtual dressing rooms improve online shopping efficiency which enables customers who understand technology to adopt sustainable fashion choices. Brands which simplify the search path for sustainable products along with clear explanations and straightforward purchasing steps will conserve their client base by turning engagement into actual purchases.

Supporting Government Regulation for Sustainability: The RMG sector needs government intervention to establish sustainable practices according to universal consensus. Consumers actively support government-implemented regulations because they want mandatory public environmental standards and ethical workplace standards along with more corporate transparency. These regulations create equal conditions while demanding that every industry participant works towards preserving the future. The manufacturing companies of RMG need to actively take part in policymakers' discussions to establish and follow sustainability regulations. The process of support for policy advocacy groups combined with participation in sustainability forums together with alignment of internal policies to national environmental goals enhances brand credibility regarding long-term sustainability commitments. Businesses should view compliance beyond legal duty because it opens prospects to separate themselves from competitors. Retailers who progress first with government sustainability standards secure better reputations because this leads consumers to trust them more. Brand perception and the appeal for ethical consumers grow when companies choose to spread information about their sustainability efforts. The RMG sector can achieve enhanced customer relations and satisfaction through strategic sincere implementation of Circular Economy practices. Such companies lead global fashion by preparing for the future through their focus on recycling practices along with waste management and sustainable materials alongside transparency and accessible products and improved government collaboration. Expectant results emerge when organizations unite their environmental protection and business growth initiatives to create this advantageous connection.

5.5 Summary of the Relationship Between Sustainable Brands and RMG Suppliers

Table 14: Summary of the Relationship Between Sustainable Brands and RMG Suppliers

Brand	CE/Sustainability Initiatives	Involvement in Bangladesh
H&M	Recycling, circular design, take-back programs	Major buyer, part of Circular Fashion Partnership
C&A	Organic cotton, Cradle to Cradle garments	Deep supplier engagement, local sustainability upgrades
Marks & Spencer	Plan A, closed-loop supply chains	Strong factory collaborations in energy, chemical, and water management
Levi's	Water<Less®, repair campaigns, product longevity	Select partnerships with high-performing sustainable factories
PVH Corp.	Sustainable material goals, Forward Fashion roadmap	Supply chain modernization and factory sustainability programs

The speed of circular economy (CE) practice integration in Bangladeshi Ready-Made Garments (RMG) depends heavily on international apparel brands adopting sustainability commitments. International brands in the Global North maintain control over environmental and social standards of their Bangladeshi suppliers while outsourcing major parts of their apparel production to this country. The dual forces of domestic consumer demand along with market regulations in their home territory push international brands to make sure their worldwide business operations match environmental and social as well as governance standards. The strategic decision-making of sourcing activities by retail buyers determines the progression of Bangladeshi RMG industry CE approaches.

Top fashion companies behave as sustainability champions by forming manufacturing relationships with Bangladeshi suppliers. The multinational retailer H&M (Hennes & Mauritz) has been a major purchaser in Bangladesh since long in addition to implementing sustainability practices through its Conscious Collection program that promotes recycled and sustainable product materials. H&M serves as one of multiple founding partners behind the Circular Fashion Partnership which operates under Global Fashion Agenda and Reverse Resources and the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) to advance Bangladeshi post-industrial textile recycling efforts. H&M partners with local suppliers to develop manufacturing systems that recover textile remains from one manufacturing process to produce new

clothing items. Foreign buyers play a crucial sustainable role in local practices through this model which supports CE principles directly.

The European clothing brand C&A maintains its Bangladesh sourcing operations while showing significant improvement in circularity efforts. The brand became the first worldwide retailer to introduce Cradle to Cradle Certified™ Gold level apparel in mass quantities indicating its determination to realize CE principles throughout its supply network. Through its cooperative relationships C&A helps suppliers in Bangladesh achieve enhanced transparency while building sustainable practices that reduce water use and eliminate dangerous chemicals and boost recycled and organic fiber usage. Some retailers make Plan A their long-term sustainability program and Marks & Spencer (M&S) has used this initiative as its core environmental and ethical framework from the start. Through collaborative work between the brand and Bangladeshi suppliers they improve energy efficiency and establish carbon emission reduction measures and establish full waste management systems. Through their partnerships suppliers receive training support as well as specialized help which enables them to establish operations that fulfill CE requirements.

Levi Strauss & Co. through its Water<Less® techniques has achieved up to 96% reduction of water consumption during denim finishing operations throughout its United States facilities. Levi's sources merchandise from different manufacturing facilities based in Bangladesh and supported suppliers to develop cleaner production approaches alongside efficient water usage technologies. Levi Strauss & Co. introduced programs to enhance product repair together with resale which increases lifespan duration and implements circularity. PVH Corp. operates as a parent company that manages brands Tommy Hilfiger and Calvin Klein through its "Forward Fashion" strategic framework. The company aims at delivering sustainability through three main approaches: complete adoption of sustainable materials together with plastic-use elimination and transparent supply chains. PVH cooperates with Bangladeshi suppliers through sustainability audits and CE training platforms to implement these goals and guide suppliers toward circular business models.

These particular brands underline their importance because their involvement leads to major purchasing volumes and technical competence and financial support and market accountability which fuels transformation. Bangladesh supplies garments to global brands through a strategic partnership that enhances the supply chain security of brands under sustainable requirements and provides suppliers important benefits like secure manufacturing contracts and

elevated international standing in sustainable practices. These global brands make suppliers submit to third-party certifications OEKO-TEX, Global Organic Textile Standard (GOTS), and ISO 14001 to guarantee ecological material usage and sustainable production techniques which form the core elements of CE frameworks.

The implementation of circular economy principles shows uneven distribution between various sections of the RMG sector operating in Bangladesh. Export factories directly connected to global brands commonly lead other facilities in sustainable practice implementation but especially those categorized as large factories with export markets. The factories possess enough resources to buy recycling systems together with environmentally friendly materials and meet compliance requirements for environmental standards. Small subcontracting units with tight profit margins usually avoid CE initiatives because they need both motivation and capabilities to adopt these initiatives. The uneven distributed industrial practices lead to separation between operations that do and do not benefit from circular economy principles. Additional brand initiatives to promote sustainability within their complete value chains through supplier assessment will decrease the existing gap between global and domestic suppliers over time.

The demand for transparency tools continues to rise among brand companies who now use blockchain-based traceability platforms as well as online supplier databases alongside real-time environmental performance dashboards. Multiple monitoring tools document supplier CE performance and help protect companies from non-compliance with EU and North American sustainability laws. The EU Strategy for Sustainable and Circular Textiles will create tighter brand due diligence protocols that forces Bangladeshi suppliers to embrace CE practices to keep their place within the supply chain.

The present relationship between international fashion brands and Bangladeshi RMG constitutes a primary force which drives sustainable business transformations. The fashion brands play a critical role in sectoral CE model transformation through their establishment of performance standards and recognition programs and expert training initiatives. The local manufacturers benefit from international fashion brands' collaboration which enhances Bangladeshi RMG sector global competitiveness and enables environmental and social goals to meet modern sustainability expectations. These brand-supplier alliances will play an essential role in directing circularity development for Bangladesh's largest export industry as the fashion market prioritizes sustainable growth.

6 SUMMARY AND IMPLICATIONS

6.1 Summary of the Study

This study explores Customer perceptions of Circular Economy (CE) practices in the Ready-Made Garments (RMG) sector, focusing on sustainability efforts across different countries. This research establishes the rankings of CE practices according to their significance and how familiar and operational they are within the sector. The research assesses how RMG sector personnel view CE practices throughout multiple countries regarding sustainable methods and practice deployment. Customer s assessed the relative significance of multiple countries toward implementing sustainable and circular economy methods in the RMG sector. Survey participants identified Europe and China when rating the EU and China among the top sustainability producers based on their circular economy initiatives. The data showed India alongside Vietnam were regarded as not devoting significant efforts to these practices. Multiple CE practices received different adoption rates from industry stakeholders since recycling and waste reduction and sustainable raw material usage each displayed distinct implementation levels. The sector shows progress toward implementing CE practices although their significance has generally been accepted. The research extends its analysis to reveal how CE practices create better relationships with customers and enhance their satisfaction levels. A statistical analysis revealed that the implementation of CE practices exhibits a significant positive relationship with customer satisfaction which produced an 0.6007 coefficient value. Customer satisfaction and relationship improvement results from organizational implementation of CE practices. The results from the regression analysis show CE practices strongly impact customer satisfaction at a positive level. The research reveals that customer satisfaction with CE practices is marginally greater in China and Turkey than in Bangladesh yet differs per region regarding CE practice effectiveness. The research demonstrates why it is essential to implement circular economy practices in the RMG sector because it delivers both sustainability improvements and better customer satisfaction.

The research examines customer satisfaction regarding CE practices of Bangladesh against China and Turkey by demonstrating consumer perceptions across these three nations. Customer satisfaction measurements show Bangladesh achieved high satisfaction ratings even though China and Turkey received somewhat higher scores for their CE initiatives. The survey participants scored Bangladesh at 3.75 on the satisfaction scale while both China and Turkey

earned 3.91 and 3.87 respectively. Standard deviation analysis demonstrated mixed CE practices in Bangladesh because its data had greater variability compared to China which showed low variability. Organizations should use these results to prioritize continuous improvement and communication strategies which enhance CE effectiveness and customer satisfaction across different markets. The research notices that RMG companies following Circular Economy principles build better customer relationships and satisfaction which leads to better business performance. FEs research data provides manufacturers with essential knowledge about the dual benefits of CE practices which make companies sustainably better while improving their market competitiveness. Sustainable operations will benefit RMG businesses by enhancing their reputation among customers as well as building lasting customer loyalty which leads to long-term success.

6.2 Theoretical Implications

This research adds theoretical value to CE practices in the RMG sector by showing how vital sustainability remains for international fashion manufacturing. This research demonstrates how customer demands combined with environmental consciousness together with regional standards determine the implementation of CE principles. The investigation enhances sustainability studies of the RMG sector by demonstrating that CE implementation varies between different regions with certain countries achieving better results. The research demonstrates how sustainable practices impact consumer conduct while generating consumer devotion which directly influences customer contentment. The study demonstrates that implementing CE procedures serves two important purposes through environmental impact reduction and increased brand-consumer relationship quality. Research findings provide essential knowledge that future investigations should apply to help various countries enhance their Circular Economy programs while meeting consumer demands and environmental targets.

6.3 Managerial Implications

The managerial implications of this study emphasize the importance of adopting Circular Economy (CE) principles in the Ready-Made Garments (RMG) sector to enhance sustainability, operational efficiency, and consumer loyalty. The implementation of sustainability practices that include waste reduction together with resource optimization and recycling should be made a priority by managers to fulfill rising environmental product demands. Brand image and market

competitiveness improve when managers choose to synchronize their operations with environmental concerns based on consumer preferences according to the presented study. To succeed in the market managers, need to acknowledge differences between CE adoption practices between nations while developing solutions that fit local market dynamics and applicable laws. The implementation of CE principles enables managers to achieve higher customer satisfaction levels and develop lasting brand loyalty because of sustainable business expansion. The adoption of CE principles into company culture produces cost benefits by optimizing resource management and waste reduction which creates a more competitive and resilient business format.

6.4 Policy Implications for the Industry and Government

The study introduces key policy recommendations that unite the Ready-Made Garments industry with the government to establish Circular Economy practices within Bangladesh's garment sector. Companies need simultaneous support from both parties to shift existing linear business methods into sustainable circular approaches. The RMG industry must be motivated to shift away from "take make dispose" business methods through the adoption of waste minimization along with resource maximization and extended product viability practices. The government needs to provide specific guidance about implementing recycling systems together with sustainable product construction methods and waste prevention methods. Circular practices adopted by RMG companies would both support environmental sustainability and generate marketplace competitive advantages due to rising market demand for sustainable products.

The government should adopt policies which create financial benefits to speed up sustainable technology integration within the RMG industry sector. The government should motivate businesses to dedicate financial resources toward purchasing recycling and waste management-oriented green technologies. Government initiatives for sustainable RMG adoption would benefit from granting funds and tax exemptions and subsidies which would incentivize manufacturers to improve their environmental practices. Sustainable technologies would become financially accessible for RMG companies especially their small and medium-sized businesses through this support initiative. The adoption of these sustainable technologies under government backing positions Bangladesh to become an industry leader in environmentally friendly competitive garment production.

The government should implement regulations which promote transparency and accountability throughout circular economy (CE) practices. The industry needs companies to implement transparent environmental practices that allow independent monitoring and assessment in order to achieve substantial sustainability results. Regulations issued by the government to manage waste together with energy efficiency measures and sustainable materials should become enforceable requirements for all RMG companies. Such environmental standards would apply to every RMG company so the industry will become more sustainable throughout. The monitoring of corporate environmental effects and company accountability can be realized through periodic inspections together with sustainable practice certifications and mandate-specific reports.

The policy strategy needs financial incentives as its fundamental component. The government should offer eco-friendly tax advantages and money budgeting to RMG businesses that adopt such circular economy approaches as recycling systems along with renewable resources. The provided financial tools would aid companies in managing expenses tied to circular model implementation thus facilitating sustainable investments. Through these incentives the government would demonstrate its dedication to sustainable practices in the RMG sector which would compel companies to adopt more sustainable business models.

The government needs to establish collective efforts between all industry partners which include both RMG manufacturers and environmental organizations along with policymakers. The RMG sector requires a combined strategy which maintains economic development along with environmental protection standards to achieve future success. The partnership will find the most successful methods to apply circular concepts during garment production while maintaining sustainability throughout the entire process. Bangladesh can achieve global leadership in sustainable garment production through implementation of a unified strategy that will boost its RMG sector's global competitiveness.

6.5 Conclusion

This research set out to explore and evaluate the perceptions of customers regarding circular economy (CE) practices within the Ready-Made Garments (RMG) sector of Bangladesh, China, and Turkey. Knowledge about customer perspectives toward sustainable initiatives and their effects on satisfaction and loyalty represents a key factor for maintaining long-term

success among RMG competitors. The research conducted an assessment of customer satisfaction levels between Bangladesh and its worldwide competitors to generate recommendations that enhance circular economy strategies for better customer interaction and satisfaction.

- To identify customer perceptions of circular economy practices in the Ready-Made Garments (RMG) sector of Bangladesh, China and Turkey.

The research objective about circular economy practice perception from customers presented different findings across three nations. The customer perception of CE practices remained more informed and positive in China and Turkey. These countries advanced their manufacturing sustainability ideas by implementing core environment standards and successfully educating their customer base about these initiatives. The markets in these countries operate through eco-labels and digital marketing and recycling campaign initiatives to spread knowledge about circular activities including material reuse and waste minimization and product return programs. Bangladeshi customers have limited knowledge about sustainable initiatives in the industry. The RMG-exporting sector of Bangladesh features global recognition but its customer base has not received adequate information regarding circular economy adoption in the industry. A major knowledge gap exists because manufacturers poorly connect with their customers through environmental initiative information and they provide insufficient educational content about such programs. The resulting lack of customer awareness about sustainable practices among Bangladeshi manufacturers weakens both brand relationships and appreciation from the market stakeholders. It specifically applies to Bangladesh, as the research highlights a knowledge gap in the Bangladeshi market regarding Circular Economy (CE) practices. The research indicates that Chinese and Turkish consumers demonstrate better knowledge about sustainability since their governments implement successful standards and digital marketing strategies to promote circular economy initiatives. To improve this situation, there are several successful examples from countries like China and Turkey that could serve as models for Bangladesh. China Environmental Label from China and Eko-Label from Turkey stand as recognized certifications that prove sustainable materials alongside environmentally friendly production methods. By establishing these labels within Bangladesh, they would help to close information gaps to improve customer understanding of sustainability. Digital promotional efforts of Koton Turkish fashion brand effectively communicate their sustainability measures such as recycling methods and environment-friendly production techniques. Bangladeshi

organizations should implement the same marketing approaches to raise awareness regarding their sustainable initiatives which would boost their brand image.

- To explore the role of circular economy practices in enhancing customer relations and satisfaction in the RMG sector of Bangladesh, China and Turkey.

A proper implementation and clear communication of CE practices leads to substantial customer satisfaction according to the findings of this exploration. All consumers actively search brands which respect their moral and environmental values. Effective waste reduction efforts alongside socially ethical labor principles and eco-friendly packaging methods and responsible sourcing choices create positive emotional bond formation with customers toward brands. An investigation showed that customers understanding about CE practices leads them to become loyal advocates for brands and demonstrates the strategic importance of sustainable operations and open communication investments. Visible CE practices in the Ready-Made Garments industry that match customer ethical values and create emotional connections find greater acceptance with consumers. Sustainable packaging stands as one of the most important circular economy practices because customers directly interact with it during shopping to strengthen their perception of brand environmental responsibility. Transparency combined with ethical sourcing practices gains high trust from customers since they can visually confirm the product's origins through QR codes or certification systems. Customers can join sustainability programs through product take-back systems like clothing recycling which builds brand dedication alongside collective environmental stewardship. Customers welcome products made from recycled or upcycled materials as long as manufacturers clearly present this information because they value innovative solutions that protect the environment. GOTS and OEKO-TEX® certifications enhance brand credibility and demonstrate sustainable promises to the market particularly in Chinese and Turkish markets. Overall digital outreach initiatives promoting environmental issues and CE principles help younger technology-savvy consumers to get involved so their advocacy expands. These sustainable practices create brand differentiation alongside customer satisfaction improvement and loyalty increase within competitive markets that value sustainability.

- To compare the satisfaction level of customers regarding circular economy practices of Bangladesh with other garments exporting countries like China and Turkey.

Customer satisfaction with CE initiatives from local brands and international companies proved to be higher in China and Turkey compared to other countries. Customer satisfaction directly corresponded to two key factors including sustainable product availability and clear communication about sustainability initiatives. The introduction of sustainable manufacturing practices in Bangladesh faces challenges because customers remain unaware and disengaged with the new developments. The research identifies a gap for Bangladeshi brands to enhance their customer communication methods and optimize their sustainable practice messaging for better effectiveness. Customer satisfaction levels regarding Circular Economy practices in the Ready-Made Garment sectors stand considerably different in Bangladesh, China, and Turkey both in terms of implementation methods and customer responses. The study analyzed consumer responses through statistical measurements such as mean and median and mode with standard deviation from customers who bought garments from these significant exporter countries. The customer satisfaction level in Bangladesh reached 3.753 points but exhibited 1.32 standard deviation points of variation. The results demonstrate high satisfaction levels from some customers as indicated by a mode of 5 however other customers show low satisfaction due to inconsistent CE practices within the industry. China provides higher customer satisfaction consistency with its 3.907 average score alongside a standard deviation of 1.15 because of enforced regulatory frameworks combined with consistent CE implementation. Turkey leads in consistent communication of CE practices to customers because its mean score reaches 3.874 with a standard deviation of only 1.00 which signifies that CE practices exist throughout their markets. The integration of sustainability within Turkish brand marketing operations proves more successful than what Bangladeshi brands accomplish. To align with worldwide standards Bangladesh should put more emphasis on building CE brand clarity and customer education despite its promising mode score. The national adoption of CE practices by Bangladesh exists within a period of transformation. Customer perceptions about sustainability contain both inconsistent and erratic elements because brands deliver different levels of sustainability messaging to consumers. The absence of sustainable practice communications to customers dilutes the positive effects of CE even when companies implement it. Managed CE initiatives in China produce better results due to higher performance averages and lower variation points attributable to government regulation and eco-certification obligations. Sustainable satisfaction experiences improve because customers encounter standardized marketing information. Turkey serves as the reference standard when assessing these countries. The uniform awareness combined with satisfied customers among most brands reflects highly consistent CE performance based on the low standard deviation measurement and high mean value.

Manufacturers in Turkey demonstrate maturity through complete integration of CE into their marketing design and production protocols.

- To provide recommendations for improving circular economy strategies to strengthen customer relations and satisfaction in the RMG sector.

The integration of Circular Economy (CE) strategies into the Bangladesh Ready-Made Garment (RMG) sector operations has the potential to enhance customer relations as well as improve satisfaction levels. The following list presents recommendations that will assist RMG companies in creating sustainable business models with enhanced customer relations and engagement:

1. **Enhance Recycling Initiatives:** Textile recycling and take-back systems need immediate expansion in all RMG enterprises. Environmental awareness growth among consumers has created expanding market demands that require brands to lead sustainable practice initiatives. Companies that implement take-back programs accept used garments from customers achieve waste reduction while attracting environmentally aware customers through enhanced relations. This program serves to improve consumer dedication and strengthens brand value together with creating dedicated customer relationships.
2. **Implement Efficient Waste Management:** The practice of waste management maintains essential importance for enhancing how well a company handles sustainability efforts. RMG companies need to establish proper waste segregation strategies together with certified waste disposal service organizations. The open disclosure of waste management data helps customers trust the company more. Organizations demonstrating both waste reduction and responsible waste disposal commitment create market differentiation and earn better loyalty from their customers.
3. **Prioritize Sustainable Materials:** The increasing market demand for sustainable fashion depends on garment production's use of materials that are organic and recycled and biodegradable. To attract customers who seek environmentally friendly purchases companies must use organic cotton and bamboo and recycled polyester materials in their products. The trust of consumers can grow by implementing clear product markings about sustainable

materials' environmental advantages so they become more inclined to purchase repeatedly.

4. **Increase Transparency:** Modern customers require brands to disclose their supply chain operations alongside sustainability initiatives in complete detail. Manufacturing companies involved in clothing production should share complete information about their procurement methods together with manufacturing standards and environmental footprint. Brands strengthen their customer relationships by releasing sustainability reports while implementing QR codes and partnering with certified independent organizations.
5. **Leverage Promotions to Support Sustainability:** Consumer participation in sustainable choices increases through discounted prices and rewards for any recycled products and green purchase activities. Consumers will grow more enthusiastic about circular economy participation when sustainable products generate sales and delivery desirable outcomes which they appreciate.
6. **Ensure High Product Quality:** The requirement for sustainability needs to maintain identical quality levels with conventional products. Company operations in RMG should meet strict durability requirements alongside comfort standards which guarantee ultimate customer satisfaction levels. The combination of premium quality with sustainability leads toward strong positive brand reputation from satisfied customers who turn into loyal purchasers.
7. **Improve Access to Sustainable Products:** The increasing market demand for sustainable options requires RMG companies to expand both their physical store and online presence with environmentally friendly merchandise. The ease of purchase and access for customers to sustainable fashion goods enables firms to meet more customers and encourage widespread sustainable fashion adoption.

The adoption of Circular Economy strategies by RMG companies will enhance customer relationships and contribute to sustainable industry evolution which results in improved satisfaction and prolonged business success.

Thus, all research objectives have been successfully addressed. Customer perceptions, the role of CE in customer satisfaction, comparative analysis, and actionable recommendations have been thoroughly explored. This research underscores the importance of enhancing CE

strategies in the RMG sector, especially in Bangladesh to build stronger customer relationships and improve overall satisfaction in a globally competitive market.

6.6 Limitations of the Research

The findings of this research bring essential understanding about circular economy practices in Ready-Made Garments (RMG) sector customer relationships but face certain restrictions. The study analyzes customer perceptions in specific locations because it focuses only on Bangladesh China and Turkey while forsaking other regions where cultural and economic differences exist. The sample number of 104 customers proved suitable for some statistical calculations but failed to capture complete customer variability because the purposive sampling method focused on gathering insights from participants who already understood circular economy practices. Research findings could lose their reliability due to self-reported data survey methods because participants may provide socially acceptable responses or have recollection inaccuracies. The research dedicated its attention mainly to customer satisfaction abnormalities yet neglected other elements that modify customer conduct such as market cost and brand prestige. The research fails to evaluate operational challenges companies face when implementing circular economy practices as well as how cultural differences impact customer perception of circular economy initiatives between the studied countries. The research timeframe prevents understanding of potential long-term customer attitude adjustments regarding sustainability because it was performed in a limited timeframe. The study results require careful evaluation based on these identified restrictions.

6.7 Recommendations for Future Research

Further research about circular economy practices in the Ready-Made Garments (RMG) sector should examine different crucial dimensions. The research would gain a better grasp of worldwide customer attitudes by increasing its participant base alongside incorporating various geographic demographics. Long-term assessment of circular economy practices on loyal customer behavior and purchasing patterns warrants further research since current studies examine only immediate satisfaction levels. Future research should analyze the operational challenges that play against RMG companies during circular economy implementation through an assessment of costs and supply chain management challenges as well as technical requirements. Studies on how various client demographics (age groups combined with income and

educational levels) view sustainability provide more comprehensive information about market-based targeting. Qualitative studies consisting of deep interviews and focus group sessions would create richer information regarding the adoption factors and obstacles for circular economy practices between customers and industries. Research needs to examine how circular economic practices affect brand reputation as well as understand the connection between brand reputation and consumer trust. Research that compares sustainability integration across different industries including fashion and electronics as well as food can uncover universal industry challenges and proven methods for sustainable business model implementation.

BIBLIOGRAPHY

- Aarikka-Stenroos, L., Welathanthri, M. D., & Ranta, V. (2021). What Is the Customer Value of the Circular Economy? Cross-Industry Exploration of Diverse Values Perceived by Consumers and Business Customers. *Sustainability*, 13(24), 13764. <https://doi.org/10.3390/su132413764>
- Acharyya, R., & Bhattacharya, N. (2020). *Research methodology for social sciences*. Routledge.
- Ackermann, L., Mugge, R., & Schoormans, J. (2018). Consumers' perspective on product care: An exploratory study of motivators, ability factors, and triggers. *Journal of Cleaner Production*, 183, 380–391. <https://doi.org/10.1016/j.jclepro.2018.02.099>
- Ahmed, Z., Mahmud, S., & Acet, Dr. H. (2022). Circular economy model for developing countries: Evidence from Bangladesh. *Heliyon*, 8(5), e09530. <https://doi.org/10.1016/j.heliyon.2022.e09530>
- Amin, M. B., Asaduzzaman, M., Debnath, G. C., Rahaman, M. A., & Oláh, J. (2024). Effects of circular economy practices on sustainable firm performance of green garments. *Oeconomia Copernicana*, 15(2), 637–682. <https://doi.org/10.24136/oc.2795>
- Arekrans, J., Sopjani, L., Laurenti, R., & Ritzén, S. (2022). Barriers to access-based consumption in the circular transition: A systematic review. *Resources, Conservation and Recycling*, 184, 106364. <https://doi.org/10.1016/j.resconrec.2022.106364>
- Aryee, R., Alfa, A. A., Acquah, H., Addey, G. B., & Akoto, E. J. K. (2024). Circular economy, customer citizenship behaviour and firm performance: Some empirical evidence. *Business Strategy & Development*, 7(2), e377. <https://doi.org/10.1002/bsd2.377>
- Bocken, N. M. P., De Pauw, I., Bakker, C., & Van Der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of Industrial and Production Engineering*, 33(5), 308–320. <https://doi.org/10.1080/21681015.2016.1172124>
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56. <https://doi.org/10.1016/j.jclepro.2013.11.039>
- Bryman, A., & Bell, E. (2007). *Business research methods* (2nd ed.). Oxford University Press.
- Dul, J., & Hak, T. (2007). *Case study methodology in business research* (2nd ed.). Elsevier.
- E-Textile Magazine. (2024). *Approximately 10 Billion Dollars of Textile Exports from Turkey in 2023*. Retrieved from <https://www.etextilemagazine.com/approximately-10-billion-dollars-of-textile-exports-from-turkey-in-2023.html>

- Fibre2Fashion. (2024). *China 2023's top global RMG exporter; Bangladesh 2nd, Vietnam 3rd: WTO*. Retrieved from <https://www.fibre2fashion.com/news/apparel-news/china-2023-s-top-global-rmg-exporter-bangladesh-2nd-vietnam-3rd-wto-297174-newsdetails.htm>
- Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, 143, 757–768. <https://doi.org/10.1016/j.jclepro.2016.12.048>
- Geng, Y., Fu, J., Sarkis, J., & Xue, B. (2012). Towards a national circular economy indicator system in China: An evaluation and critical analysis. *Journal of Cleaner Production*, 23(1), 216–224. <https://doi.org/10.1016/j.jclepro.2011.07.005>
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11–32. <https://doi.org/10.1016/j.jclepro.2015.09.007>
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative Research Methods* (2nd ed.). Sage Publications.
- Henriques, R., Figueiredo, F., & Nunes, J. (2023). Consumers' Perspectives on Circular Economy: Main Tendencies for Market Valorization. *Sustainability*, 15(19), 14292. <https://doi.org/10.3390/su151914292>
- Islam, M. T., Jabber, M. A., & Sakib, Md. N. (2023). Application of revised theory of planned behavior model to assess the readiness of circular economy in the RMG sector of Bangladesh. *Journal of Cleaner Production*, 420, 138428. <https://doi.org/10.1016/j.jclepro.2023.138428>
- Kalmykova, Y., Sadagopan, M., & Rosado, L. (2018). Circular economy – From review of theories and practices to development of implementation tools. *Resources, Conservation and Recycling*, 135, 190–201. <https://doi.org/10.1016/j.resconrec.2017.10.034>
- Kirchherr, J., Piscicelli, L., Bour, R., Kostense-Smit, E., Muller, J., Huibrechtse-Truijens, A., & Hekkert, M. (2018). Barriers to the Circular Economy: Evidence From the European Union (EU). *Ecological Economics*, 150, 264–272. <https://doi.org/10.1016/j.ecolecon.2018.04.028>
- Kothari, C. R. (2022). *Research methodology: Methods & techniques* (2nd rev. ed.). New Age International (P) Ltd., Publishers.
- Krishnaswamy, O. R., & Satyaprasad, B. G. (2010). *Business research methods* (3rd ed.). Himalaya Pub. House.
- Le, T. T., Behl, A., & Pereira, V. (2024). Establishing linkages between circular economy practices and sustainable performance: The moderating role of circular economy entrepreneurship. *Management Decision*, 62(8), 2340–2363. <https://doi.org/10.1108/MD-02-2022-0150>

- Lewandowski, M. (2016). Designing the Business Models for Circular Economy—Towards the Conceptual Framework. *Sustainability*, 8(1), 43. <https://doi.org/10.3390/su8010043>
- Liamputtong, P. (2019). *Qualitative research methods* (5th ed.). Oxford University Press.
- Lieder, M., & Rashid, A. (2016). Towards circular economy implementation: A comprehensive review in context of manufacturing industry. *Journal of Cleaner Production*, 115, 36–51. <https://doi.org/10.1016/j.jclepro.2015.12.042>
- Linder, M., & Williander, M. (2017). Circular Business Model Innovation: Inherent Uncertainties. *Business Strategy and the Environment*, 26(2), 182–196. <https://doi.org/10.1002/bse.1906>
- Maria A., Minna L., & Taru H. (2019). *Consumer service innovation in a circular economy—the customer value perspective* (No. 4). サービス学会. https://doi.org/10.24464/serviceology.5.4_38b
- Moktadir, M. A., Rahman, T., Rahman, M. H., Ali, S. M., & Paul, S. K. (2018). Drivers to sustainable manufacturing practices and circular economy: A perspective of leather industries in Bangladesh. *Journal of Cleaner Production*, 174, 1366–1380. <https://doi.org/10.1016/j.jclepro.2017.11.063>
- Murray, A., Skene, K., & Haynes, K. (2017). The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. *Journal of Business Ethics*, 140(3), 369–380. <https://doi.org/10.1007/s10551-015-2693-2>
- Pecorari, P. M., & Lima, C. R. C. (2021). Correlation of customer experience with the acceptance of product-service systems and circular economy. *Journal of Cleaner Production*, 281, 125275. <https://doi.org/10.1016/j.jclepro.2020.125275>
- Ranta, V., Aarikka-Stenroos, L., Ritala, P., & Mäkinen, S. J. (2018). Exploring institutional drivers and barriers of the circular economy: A cross-regional comparison of China, the US, and Europe. *Resources, Conservation and Recycling*, 135, 70–82. <https://doi.org/10.1016/j.resconrec.2017.08.017>
- Rodríguez-Espíndola, O., Cuevas-Romo, A., Chowdhury, S., Díaz-Acevedo, N., Albores, P., Despoudi, S., Malesios, C., & Dey, P. (2022). The role of circular economy principles and sustainable-oriented innovation to enhance social, economic and environmental performance: Evidence from Mexican SMEs. *International Journal of Production Economics*, 248, 108495. <https://doi.org/10.1016/j.ijpe.2022.108495>
- Rohsig Lopez, N. S., & Legardeur, J. (2024). Consumer behaviour in the context of circular economy: A systematic literature review. *Proceedings of the Design Society*, 4, 1417–1426. <https://doi.org/10.1017/pds.2024.144>
- Sachdeva, J. K. (2009). *Business research methodology* (2nd ed.). Himalaya Pub. House.

- Saha, K., Dey, P. K., & Papagiannaki, E. (2021). Implementing circular economy in the textile and clothing industry. *Business Strategy and the Environment*, 30(4), 1497–1530. <https://doi.org/10.1002/bse.2670>
- Sairanen, M., Aarikka-Stenroos, L., & Kaipainen, J. (2024). Customer-perceived value in the circular economy: A multidimensional framework. *Industrial Marketing Management*, 117, 321–343. <https://doi.org/10.1016/j.indmarman.2024.01.006>
- Saunders, M. N. K., Philip, L., & Adrian, T. (2023). *Research Methods for Business Students* (9th ed.). Harlow: Pearson.
- Singh, S. K., & Singh, A. P. (2019). Interplay of organizational justice, psychological empowerment, organizational citizenship behavior, and job satisfaction in the context of circular economy. *Management Decision*, 57(4), 937–952. <https://doi.org/10.1108/MD-09-2018-0966>
- Soh, K. L., & Wong, W. P. (2021). Circular economy transition: Exploiting innovative eco-design capabilities and customer involvement. *Journal of Cleaner Production*, 320, 128858. <https://doi.org/10.1016/j.jclepro.2021.128858>
- Stahel, W. R. (2016). The circular economy. *Nature*, 531(7595), 435–438. <https://doi.org/10.1038/531435a>
- Stein, N., Spinler, S., Vanthournout, H., & Blass, V. (2020). Consumer Perception of Online Attributes in Circular Economy Activities. *Sustainability*, 12(5), 1914. <https://doi.org/10.3390/su12051914>
- Szilagyi, A., Cioca, L.-I., Bacali, L., Lakatos, E.-S., & Birgovan, A.-L. (2022). Consumers in the Circular Economy: A Path Analysis of the Underlying Factors of Purchasing Behaviour. *International Journal of Environmental Research and Public Health*, 19(18), 11333. <https://doi.org/10.3390/ijerph191811333>
- Ta, A. H., Aarikka-Stenroos, L., & Litovuo, L. (2022). Customer Experience in Circular Economy: Experiential Dimensions among Consumers of Reused and Recycled Clothes. *Sustainability*, 14(1), 509. <https://doi.org/10.3390/su14010509>
- Tabas, A. M., Rehman, M. A., Khitous, F., & Urbinati, A. (2024). Stakeholder and customer engagement in circular economy ecosystems: A systematic literature review and research agenda. *Business Strategy and the Environment*, bse.3989. <https://doi.org/10.1002/bse.3989>
- Taylor, S. J., Bogdan, R., & Devault, M. L. (2020). *Introduction to Qualitative Research methods: A Guidebook and Resource*. John Wiley & Sons, Cop.
- Tukker, A. (2015). Product services for a resource-efficient and circular economy – a review. *Journal of Cleaner Production*, 97, 76–91. <https://doi.org/10.1016/j.jclepro.2013.11.049>

Urbinati, A., Chiaroni, D., & Chiesa, V. (2017). Towards a new taxonomy of circular economy business models. *Journal of Cleaner Production*, 168, 487–498. <https://doi.org/10.1016/j.jclepro.2017.09.047>

Walliman, N. (2022). *Research Methods: The Basics* (2nd ed.). Oxon Routledge.

Zink, T., & Geyer, R. (2017). Circular Economy Rebound. *Journal of Industrial Ecology*, 21(3), 593–602. <https://doi.org/10.1111/jiec.12545>

APPENDICES

Appendix 1. Survey Questionnaire

Appendix 1. Survey Questionnaire

Demographic Information

This section is optional, but your demographic information will help us analyze trends based on customer profile.

Gender:

- Male
- Female
- Other
- Prefer not to say

Age Group:

- 18–24
- 25–34
- 35–44
- 45-64
- 65 +

Country of Residence:

- Bangladesh
- China
- Turkey
- Europe
- Other

4. What is the most sustainable source of sustainable and circular economy clothing producer.

- China
- European Union
- Bangladesh
- Vietnam
- India
- Turkey
- United States
- Indonesia
- Cambodia
- Mexico

5 What would you prefer to consume: (try to know their preferences)

- Fast fashion clothing (Cheap and does not last much)
- Good brands clothing
- Clothes that will last for many years
- Clothes that I know are more eco friendly

Section 1: Customer Perceptions of Circular Economy Practices in the RMG Sector

6 How familiar are you with Circular Economy?

- Very Unfamiliar
- Unfamiliar
- Neutral
- Familiar
- Very Familiar

7 How familiar are you with circular economy practices in the Ready-Made Garments (RMG – Clothing) sector?

- Very Unfamiliar
- Unfamiliar
- Neutral
- Familiar
- Very Familiar

8 Which of the following circular economy practices do you think are most commonly adopted in the RMG sector? (Select all that apply)

Recycling of materials

1	2	3	4	5
---	---	---	---	---

Waste reduction

1	2	3	4	5
---	---	---	---	---

Reusing garments

1	2	3	4	5
---	---	---	---	---

Use of sustainable raw materials

1	2	3	4	5
---	---	---	---	---

Reduce Energy consumption

1	2	3	4	5
---	---	---	---	---

Take back and repair programs

1	2	3	4	5
---	---	---	---	---

Water and chemicals consumption reduction

1	2	3	4	5
---	---	---	---	---

Other (Please specify): _____

9 How important do you think circular economy practices (e.g., recycling, reusing materials, reducing waste, reduce energy consumption) are in the RMG sector?

- Very Unimportant
- Unimportant
- Neutral
- Important
- Very Important

11. How do you rate the implementation of circular economy practices in the RMG sector in your country?

- Very Poor
- Poor
- Average
- Good
- Excellent

Section 2: Role of Circular Economy Practices in Enhancing Customer Relations and Satisfaction

Circular Economy Practices

12. The RMG sector in my country actively implements circular economy practices such as recycling, waste reduction, and sustainable sourcing.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

13. How easy or difficult is to identify more sustainable clothing?

- Very Easy
- Easy
- Neutral
- Difficult
- Very Difficult

Customer Relations and Satisfaction**14. How do you think circular economy practices impact your satisfaction as a customer?**

- Very Negative Impact
- Negative Impact
- Neutral Impact
- Positive Impact
- Very Positive Impact

15. Do you think circular economy practices increase your trust in brands within the RMG sector?

- Highly Disagree
- Disagree
- Neutral
- Agree
- Highly Agree

16. How much will you be willing to pay more for a more sustainable clothing?

- Much more
- A little more
- Very little more
- None at all

- Care more about the design

Section 3: Comparison of Customer Satisfaction with Circular Economy Practices in Bangladesh, China, Vietnam, and Turkey

17. How satisfied are you with the circular economy practices in the RMG sectors of China, Vietnam, or Turkey? (Please select the country and provide your rating)

Bangladesh: Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied

1	2	3	4	5
---	---	---	---	---

China: Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied

1	2	3	4	5
---	---	---	---	---

Turkey: Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied

1	2	3	4	5
---	---	---	---	---

Section 4: Recommendations for Improving Circular Economy Strategies in the RMG Sector**18. What do you think could be improved in the RMG sector's approach to circular economy practices in Bangladesh?**

More recycling initiatives

1	2	3	4	5
---	---	---	---	---

Better waste management systems

1	2	3	4	5
---	---	---	---	---

Use of more sustainable materials

1	2	3	4	5
---	---	---	---	---

Greater transparency about sustainability efforts

1	2	3	4	5
---	---	---	---	---

Other (Please specify): _____

19. What would encourage you to buy more from garment brands that promote circular economy practices?

Discounts or promotions

1	2	3	4	5
---	---	---	---	---

Greater transparency in sustainability efforts

1	2	3	4	5
---	---	---	---	---

Improved product quality

1	2	3	4	5
---	---	---	---	---

Easy access to sustainable products

1	2	3	4	5
---	---	---	---	---

Other (Please specify): _____

20. Do you think that governments should increase their sustainability requirements for the clothing industry.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree