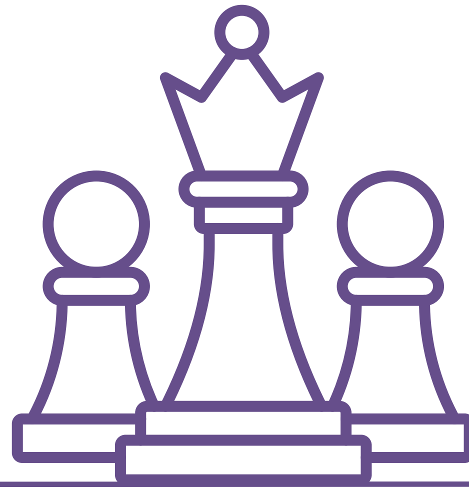
Volume 1, Issue 1
June 2025
ISSN: 3107-7463 (Print)

WeSchool MANAGEMENT REVIEW



A National, Peer Reviewed (Bi-Annual) Research Journal

S.P MANDALI'S
weschool
Welingkar Education

Welingkar Institute of Management Development & Research, Bengaluru Campus

S.P MANDALI'S
weschool
Welingkar Education

Vision

- To Nurture through Leaders and practitioners through inventive education.

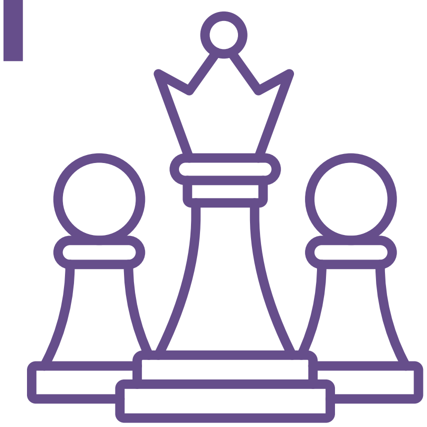
Mission

- Focus on inventive education by offering practical, innovative and technology driven programs.
- Provide managerial talent with risk managing ability, passion for learning and creative thinking and values in rapidly evolving economic and social environment.
- Contribute significantly to Indian corporate world by preparing management graduates and social environment.
- Build intellectual capital through faculty development, research, consultancy and publications.
- Develop alumni network of mutual benefit and keep alumni updated through continuous learning and meeting.

Prin. L. N. Welingkar Institute of Management Development & Research

102/103, Hosur Rd, next to BSNL Telephone Exchange, Electronics City Phase 1
Electronic City, Bengaluru, Karnataka- 560100
we.blrjournal@welingkar.org
www.welingkar.org

WeSchool MANAGEMENT REVIEW



A National, Peer Reviewed (Bi-Annual)

Research Journal

Vol. 1, Issue 1
June 2025

S.P MANDALI'S
weschool
Welingkar Education

Prin. L. N. Welingkar Institute of Management Development & Research, Bengaluru Campus

Title: WeSchool Management Review (WMR) Vol. 1, Issue 1, June 2025

Editor-in-Chief: Prof. (Dr.) Uday Salunkhe,
Executive Editors: Prof. (Dr.) Madhavi Lokhande,
Prof. (Dr.) D.N. Murthy

ISSN: 3107-7463 (Print)

Year of Publication: June-2025

Frequency of the Publication: Bi-Annual

Format of Publication: Print Journal

Subject: Management

Language: English

Scope: A National Journal

Publisher Website Link: https://www.welingkar.org/we-research-bengaluru

DISCLAIMER

Authors are solely responsible for the contents of the papers/abstracts compiled in this volume. The publisher or editors do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are requested to communicate such errors to the editors or publisher to avoid discrepancies in future.

Publishing Consultancy
EXCEL INDIA PUBLISHERS
91-A, Pratik Market, Munirka, New Delhi–110067
Cell: 9899127755, 9999609755, 8130607755
E-mail: publishing@groupexcelindia.com
Web: www.groupexcelindia.com

Designed & Printed by
Excel Printing Universe, New Delhi–110 067
E-mail: printing@groupexcelindia.com

WeSchool Management Review (WMR)
(A National, Peer Reviewed (Bi-Annual) Research Journal)

Vol. 1, Issue 1
June 2025

A Refereed Research Journal with an eminent board comprising eminent international academicians as members. WeSchool Management Review is a biannual journal.

S.P. Mandali's
Prin. L. N. Welingkar Institute of Management Development and Research
WeSchool Management Review (WMR)

The *WeSchool Management Review (WMR)* is a national, peer reviewed (Bi-Annual) research journal published by S.P. Mandali's Prin. L.N. Welingkar Institute of Management Development & Research. It uses a double-blind review process for evaluation and selection of all submitted material. It Publishes biannually in June and December, WMR cover an extensive range of topics, drawing insights from various academic disciplines, research methodologies and theoretical frameworks.

The Aims of WMR are to:

- Discover and share original theoretical and applied research in management and related fields.
- Provide a platform for publishing high-quality research and case studies from academicians, industry professionals and researchers.
- Bridge the gap between academia and industry by promoting the publication of innovative, relevant and practical research.

Scope of the Journal

The WMR Journal Research invites submissions in the following areas of management:

- Business Strategy
- Finance
- Marketing
- Human resources
- Operations

Aims and Objectives

Aims

The *WeSchool Management Review* is dedicated to publishing high-impact research that significantly contributes to the advancement of the management field. The journal fosters innovative ideas and fresh perspectives on existing research, promoting scholarly discussions that shape the future of management studies. The journal provides a platform for scholars, researchers and industry professionals to share insights, foster innovation and address emerging challenges in the dynamic business environment.

Objectives

Objectives

WMR is a comprehensive journal committed to publishing top-tier articles in the field of management. Accepted articles should offer a meaningful contribution to the management discipline, inspire further research and uphold exceptional standards of academic excellence. The journal encourages innovative ideas and fresh perspectives on existing research, fostering scholarly discussions that shape the future of management studies. It seeks to publish cutting-edge studies that provide new insights into diverse management topics, while supporting interdisciplinary approaches across areas such as business strategy, finance, marketing, human resources, and operations. The journal also aims to provide a platform for thought-provoking research that challenges existing paradigms, linking theoretical frameworks with real-world business practices and sustainability.

Submission Guidelines for
WeSchool Management Review (WMR) Journal

The *WeSchool Management Review (WMR)* Journal is a national, peer reviewed (Bi-Annual) research journal published by, S.P. Mandali's Prin. L.N. Welingkar Institute of Management Development & Research, Bengaluru, India. It is published twice a year, with editions released in June and December. The journal follows a double-blind review process for the evaluation and selection of all submitted materials.

WMR welcomes original research contributions in the field of management and allied areas, publishing conceptual and empirical research papers and case studies. Authors wishing to submit their manuscripts must ensure that their papers, case studies are not simultaneously submitted for evaluation to any other journal or publication. Once a manuscript is submitted to WMR authors are expected to refrain from submitting it to any other outlet until they receive a final decision from the Editorial Team regarding its acceptance or rejection.

Manuscript Formatting and Submission Guidelines

All manuscripts submitted to *WeSchool Management Review (WMR)* Journal must adhere to the following guidelines:

1. **Cover Page**

   Each manuscript should include a cover page containing the article title, names and affiliations of all authors, along with their full postal addresses, cell phone numbers, and email addresses. The details of the authors' names and affiliations should not appear anywhere else in the manuscript to maintain the double-blind review process. In the case of multiple authors, the cover page should clearly indicate the corresponding author.

2. **Abstract and Keywords**

   A separate sheet must be provided, containing the manuscript title, an abstract of approximately 150-250 words, and up to six key words (in alphabetical order).

Manuscript Content

The manuscript itself should contain the title, abstract and content, including all text, tables, figures and references, but without any identifying information about the authors. To submit, authors should attach three separate files: one for the cover page, one for the abstract and one for the manuscript content.

The files should be sent to: **we.blrjournal@welingkar.org**

3. **Word Limit**

   The recommended length for manuscripts is between 7,000-8,000 words, inclusive of tables, figures, and references, for both research papers and case studies.

4. **Formatting**

   The manuscript text must be in Times New Roman font, size 12, with one-and-a-half line spacing and 1-inch margins on all sides. Page numbers should be centered at the bottom of each page in Times New Roman font, size 10. All tables and figures must be numbered serially, and each should include explanatory notes or legends. The source of each table or figure should be clearly indicated. All abbreviations should be expanded upon first use, and all exhibits should be in black and white only.

5. **Reference Formatting**

   References must follow the 7th Edition guidelines of the American Psychological Association (APA 7). Authors must acknowledge all original sources used in their work, citing or quoting them as appropriate. All references listed at the end of the manuscript must be cited within the content.

6. **Copyright Assignment**

   Once a manuscript is selected for publication, authors must assign the copyright to the journal using the Copyright Assignment Form (CAF). Authors are responsible for obtaining permissions for any original material from other copyrighted sources used directly or indirectly in their manuscript and must provide written evidence of these permissions to the journal before publication.

7. **Copyright Transfer**

   Once the copyright is assigned, it rests solely with *WeSchool Management Review* for the material submitted, and for its subsequent use or dissemination in any form, whether print, audio, video, electronic, or otherwise. Unless authorized in writing, no part of the material may be reproduced, photocopied, stored in a retrieval system, or used for commercial purposes.

Review Process for Submitted Manuscripts

The review process for manuscripts submitted *WeSchool Management Review (WMR)* is outlined as follows:

1. Upon submission, the Editorial Team first screens the manuscript to assess (a) its relevance for publication in the journal and (b) its originality by checking the degree of similarity with published content using plagiarism detection software.
2. Manuscripts that pass the initial screening will undergo a double-blind review process conducted by two independent reviewers. Authors may be asked to revise their manuscripts based on the feedback provided by the reviewers, and the revised version must be submitted within the specified time frame.
3. The Editorial Team will then review the revisions to ensure they align with the reviewers' suggestions and meet the publication standards of *WeSchool Management Review.* Please note that the Editorial Team's decision regarding the manuscript's suitability for publication is final and no disputes will be entertained at this stage.
4. If the manuscript is accepted for publication, the authors must assign the copyright for their work to *WeSchool Management Review* by completing the Copyright Assignment Form (CAF). This is required for the publication of the research paper and case study ensuring compliance with internationally recognized publication ethics.

All manuscript submissions and correspondence should be directed to:

Editor-in-Chief

WeSchool Management Review (**WMR**)

S.P. Mandali's Prin. L.N. Welingkar Institute of Management Development & Research

Address: 102/103, Hosur Rd, next to BSNL Telephone Exchange, Electronics City Phase 1, Electronic City, Bengaluru, Karnataka 560100

Email: we.blrjournal@welingkar.org

WeSchool Management Review (WMR)
(A National, Peer Reviewed (Bi-Annual) Research Journal)
Vol. 1, Issue 1
June 2025

Editorial

Group Director

Dear Readers,

In today's rapidly evolving global landscape, the words "innovation" and "sustainability" have become buzzwords in contemporary management discourse. Organizations, institutions, and governments internationally are increasingly exploring and emphasizing questions of innovation and sustainability. It is acknowledged that to address the challenges that the current economic model has created for society and the environment, and to maintain the basis for the future development of the kind of society that is advanced, exposed to rapid political, social, economic, technological, and environmental changes, clear-cut visions and strategies for innovation and sustainability, have gained prominence in the management agenda.

As the business world transitions from a VUCA (Volatile, Uncertain, Complex, and Ambiguous) environment to a BANI (Brittle, Anxious, Non-linear, and Incomprehensible) framework, innovation and sustainability have taken center stage in management discussions. In alignment with this shift, this inaugural edition of the *WeSchool Management Review (WMR)* presents a diverse collection of studies addressing key challenges in the banking, retail, tourism, and hospitality industries. Each paper offers valuable insights into contemporary issues, providing fresh perspectives and practical solutions for businesses and policymakers alike.

One of the highlights of this edition is the exploration of circular economy principles in the food value chain, emphasizing the urgent need for sustainable business practices. Equally significant is the study on green marketing and its influence on consumer behavior, a crucial topic in today's eco-conscious marketplace. We also delve into service recovery mechanisms in banking, shedding light on how financial institutions can rebuild trust and enhance customer satisfaction. Additionally, the intriguing concept of dark tourism is examined, providing a fresh outlook on its implications for the tourism industry. Finally, the case study on Haier showcases a dynamic approach to business transformation, reinforcing the importance of adaptability and strategic innovation.

At WeSchool, Bengaluru, we are committed to foster research that not only advances academic knowledge but also offers solution to the real-world problem. As we navigate to an era of digital disruption, it is imperative that we equip future leaders with the practical knowledge to drive innovation and sustainable business practices. We hope this edition of our journal serves as an inspiration researchers, industry experts, and students to engage in meaningful discussions and advancements in sustainable and innovative business practices.

With best regards,

Dr. Uday Salunkhe
Group Director
Welingkar Institute of Management Development and Research.

WeSchool Management Review (WMR)
(A National, Peer Reviewed (Bi-Annual) Research Journal)
Vol. 1, Issue 1
June 2025

Editorial
Director

Dear Readers,

It is with immense pleasure and a profound sense of anticipation that we present to you the inaugural edition of the Welingkar Institute of Management Development and Research, Bengaluru's research journal *WeSchool Management Review (WMR)*. This moment marks a significant milestone in our institution's commitment to fostering a culture of intellectual curiosity, rigorous scholarship, and impactful knowledge dissemination.

The launch of this journal signifies our dedication to creating a vibrant platform for the exchange of ideas, the exploration of emerging trends, and the advancement of management theory and practice. We believe that research is not merely an academic exercise, but a powerful catalyst for innovation, informed decision-making, and societal progress.

In this first edition, you will find a collection of insightful and thought-provoking articles that reflect the diverse research interests and expertise of our faculty, students, and collaborators. We are particularly proud of the rigorous peer-review process that each article has undergone. This meticulous evaluation ensures the quality and credibility of the research published, upholding the highest standards of academic integrity. We extend our sincere gratitude to the esteemed reviewers who generously contributed their time and expertise to this endeavour.

This journal is envisioned as a dynamic space where researchers, practitioners, and policymakers can engage in meaningful dialogue and contribute to the ongoing evolution of management knowledge. We encourage submissions that are not only academically sound but also relevant to the challenges and opportunities facing today's organizations.

We extend our heartfelt thanks to everyone who has contributed to the realization of this inaugural edition, including the authors, reviewers, editorial board members, and the dedicated team at WeSchool, Bengaluru. We are confident that this journal will become a beacon of scholarly excellence and a testament to the power of research to shape the future.

We invite you to delve into the pages of this edition and join us in this exciting journey of scholarly inquiry.

With best regards,

Dr. Madhavi Lokhande
Director – Bengaluru Campus

Contents

Designing a Customer-Centric Value Proposition: A Case Study of Haier's Bottom Mounted Refrigerators

WeSchool
Management Review
A National, Peer Reviewed
(Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)

Vol. 1, Issue 1, June 2025
pp. 1–7

Prof. [1](Dr). Uday Salunkhe and [2]Dr. D.N. Murthy

KEYWORDS

ABSTRACT

The case provides an overview of a critical marketing situation and lends a discussion of localisation strategies of multinational companies in India. It also provides an insight into the challenges multinational corporations face in penetrating the intense competition and influencing consumer perceptions in destination markets. The case analyses the issue in two major steps, i.e., systematic steps adopted in designing an innovative value proposition based on actual consumer needs and secondly, how the value proposition was effectively implemented through an integrated 360-degree marketing approach utilising the available media mix to achieve the marketing and business objectives. Eventually, this case helps to analyse Haier's strategic approach to generating consumer interest and acceptance by challenging the category codes set by competitors for their award-winning Bottom Mounted Refrigerators (BMRs) in the Indian market. The case finally concludes with an analysis of the success of their marketing strategies with some insights on their future course of strategic direction.

INTRODUCTION TO HAIER INDIA

Haier Group Corporation is one of the biggest manufacturers of consumer electronics and home appliances, headquartered in Qingdao, Shandong Province, China. The company is well known for manufacturing best in class innovative home solutions that solve the needs of modern contemporary families across the world. Recognised as the world's number 1 brand for 10 consecutive years by Euromonitor International, the company offers a wide range of products in categories such as air conditioners, refrigerators, televisions, washing machines, microwave ovens, deep freezers, water heaters and other personal technology products.

As a global expansion strategy, Haier entered India as Haier Appliances (India) P. Ltd, a 100% subsidiary of Haier Group, and initiated its commercial operations in January 2004. Headquartered in New Delhi, the company has pan India operations and a vast distribution network across the country along with a manufacturing facility in Pune, Maharashtra, where it manufactures a wide range of consumer appliances including refrigerators, air conditioners, LED televisions, washing machines and water heaters. Strengthening its commitment to the central government's Make in India initiative and focus more on catering to the domestic needs of the market, Haier India signed an MoU with the Government of

[1]Group Director, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.
[2]Dean-Marketing and Research, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.

Uttar Pradesh in 2018 to set up its second industrial park in the country in Greater Noida (U.P.) with an investment of Rs 3600 crore.

In this case study, the focus is on the refrigerator market in India, and how the company successfully established the market for Bottom Mounted Refrigerator (BMR) segment by carefully understanding customers' needs and adapting to the local market conditions. It acts as one of the best examples for understanding the concept of consumer value and value propositions and how the consumer-based approach, which acted as the company's biggest strength, helps in reaching out to the market.

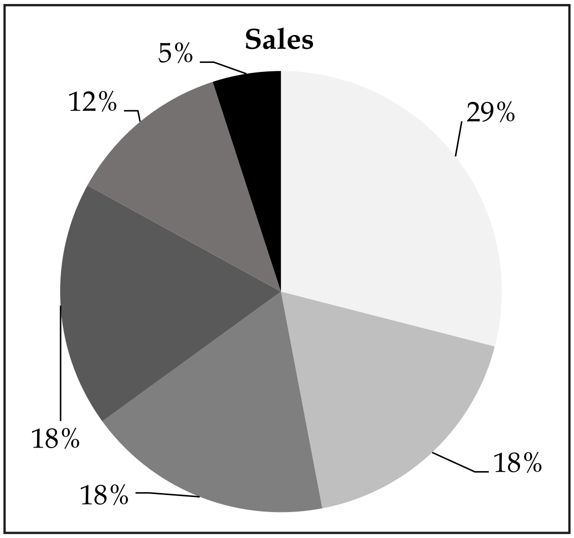


Fig. 1

CHALLENGES IN INDIAN MARKET

Despite being one of the biggest sellers of major appliances in the world, Haier had to address some major challenges to set its feet on the Indian market. Its global presence gave it credibility to offer more sophisticated products that warrant a premium price, but Indian consumers were yet to develop the willingness to embrace its China-made, high-priced products. Haier India, however, put into use its competitive advantage of continuous innovation and customer-centric approach to address the competitive market, strong consumer perceptions and brand reservations. The company faced tough competition from various market leaders like Samsung, LG, and Whirlpool.

The Indian refrigerator industry is an aggressive and cluttered space with heavy competition from some of the major players, which include LG, whirlpool, Samsung, Godrej and Voltas.

Key Players in the Industry

- LG – 29%
- Samsung – 18%
- Videocon – 18%
- Godrej – 18%
- Whirlpool – 12%
- Others – 5%

Others brands include Electrolux, Hitachi, Haier, Siemens, Sharp, Bosch, Toshiba, and Voltas.

Besides competition intensity, the price sensitivity of Indian consumers continues to be a major market characteristic that they had to address. With the presence of Korean behemoths and local brands that have been present in the market for a much longer period of time and have built strong positioning along with customer loyalty through years of investment in the brand, Haier India was a nascent player. They exploited the best of the strategic think tank for gaining a foothold so that they can further steer their growth from there. Seven years into its Indian business endeavours, sales remained sluggish and market share minimal. The company then implemented a swift change in pricing strategies, overhauled its marketing infrastructure and innovatively designed the value proposition to drive its market share. The strategic initiatives instigated by the company are explained in the following section.

CUSTOMER-CENTRIC VALUE DESIGN: A SYSTEMATIC, FACT-BASED APPROACH

When companies pursue to drive business growth as well as improve margins, one of the strategic approaches which can be implemented and by which the companies would be able to simultaneously achieve both objectives, is customer-centric value (CCV) design.

CCV is an integrated approach to product development that considers multiple perspectives, which include the following:

- What do customers want?
- What do competitors offer?
- What does it cost to manufacture and distribute an end product?

By undertaking a systematic exercise to identify CCV in the refrigerator segment, the company identified the most valued product features that consumers consider, as well as those features that generate a low market interest. With this knowledge, they redesigned their refrigerators, adding features that offered actual benefits to customers while eliminating unnecessary attributes that only served to drive costs. CCV also helped the company optimise efficiency in product design and manufacturing by highlighting the areas for improvement.

In the CCV process adopted by Haier, all product development decisions were based on facts – hard data derived from consumer research and competitive intelligence driven by objectivity. The approach allowed the company to improve upon key aspects of product development by focusing on the following activities:

- Getting a strong and deep understanding of value drivers and quantifying them – in other words, determining what would consumers pay for specific product features
- Carryout "teardowns" by dismantling the key products next to those of competitors to understand and document technical and functional differences between them, and also to identify strategies for reducing costs or optimising features
- Clean sheet working that involves determining the detailed "ideal cost" for each product and explore strategies to reduce expenses. This may be achieved either by redesigning products or processes or by negotiating differently with suppliers
- Compiling and prioritising a list of specific and pragmatic ideas that companies can implement to increase customer value while reducing product costs

Haier adopted this CCV approach which helped them to lower the production cost and improve the margins. CCV has helped Haier to stimulate growth, improve customer satisfaction and optimise brand positioning by keeping the focus on product features that customers value. This resulted in impressive financial benefits – on average, Haier was able to achieve an increase in gross margin, and a reduction in product and supply chain cost. CCV also helped products reach consumers faster by reducing design complexity and time to market. The most important aspect was the "improved positioning," which typically helped them gain good market share as well.

The best example of this product value proposition is Bottom-Mounted Refrigerator (BMR), which is very innovative in India as it is shifting the traditional refrigerator pattern, with added value in it. Through intensive customer research, an insight was derived that Indian consumers do not use the freezer section a lot in a refrigerator and most of the time, the refrigerator section is used for day-to-day purpose. With traditional refrigerators, where the freezer is mounted at the top and refrigerator section at the bottom, users have to bend down repeatedly to access the food stored inside. Haier changed the design of the refrigerator, by mounting the less used freezer section at the bottom and hence, bringing the more used refrigerator section at eye level for better accessibility and ease of use. The BMR design reduces bending by 90% for users and also provides double the space for vegetable storage than normal frost free refrigerator.

Haier used its CCV approach and understood that the consumers would prefer to have a refrigerator which reduced their bending to access food stored in a refrigerator several times in a day. This resulted in Haier BMR being recognised as an award-winning innovation (Product of the Year 2015)

Fig. 2

Fig. 3

Haier BMR-Designed Value Proposition: How "Communication" Matters

The only way to successfully reach the hearts and minds of consumers is through designing an appropriate communication which can create a good impact and which can have a good recalling capacity. Haier, though had a very good innovative product designed, it is their communication which mattered most in creating successful positive impressions. Though Haier had the customer value-based product itself as its unique selling proposition (USP), what it communicated to the market, how it designed its communication strategy to reach out to its customers and their outcomes are interesting to understand.

The brand was all set to challenge the conventions in the refrigerator category and move Indian consumers to purchase a relatively new entrant, offering a differentiated proposition - the Haier's Bottom Mounted Refrigerator (BMR) technology. The task was also to introduce the marketing campaign in a creative way with a vision to resonate with the masses. In a category which is very functional and feature led, Haier was poised to challenge the conventions and disrupt the category.

TV Commercial in 2012 with Ad Campaign "*Jhukna Mat*"

Haier India launched its ad campaign "Jhukna Mat" for its BMR Series in 2012. The refrigerator is in line with the global brand theme of EcoLife, offering EcoFresh lifestyle to consumers. The ad campaign featuring John Abraham, the brand ambassador of Haier India, promoted the product with the campaign "Jhukna Mat", which meant "no need to bend". The campaign was created by Cresta Communication Private Limited and was produced by John Abraham Entertainment Private limited.

The TV commercial (TVC) featured John Abraham, in a shopping mall assisting a pregnant lady and an aged woman while they bend down to reach the lower shelves in a grocery store. The TVC went on with the tag line "Jhukna Mat", highlighting the health benefits of not bending. The ad ended with the features of BMR, with OptiCool technology that retains the nutritional and freshness value of fruits and vegetables 5 times longer than a normal refrigerator.

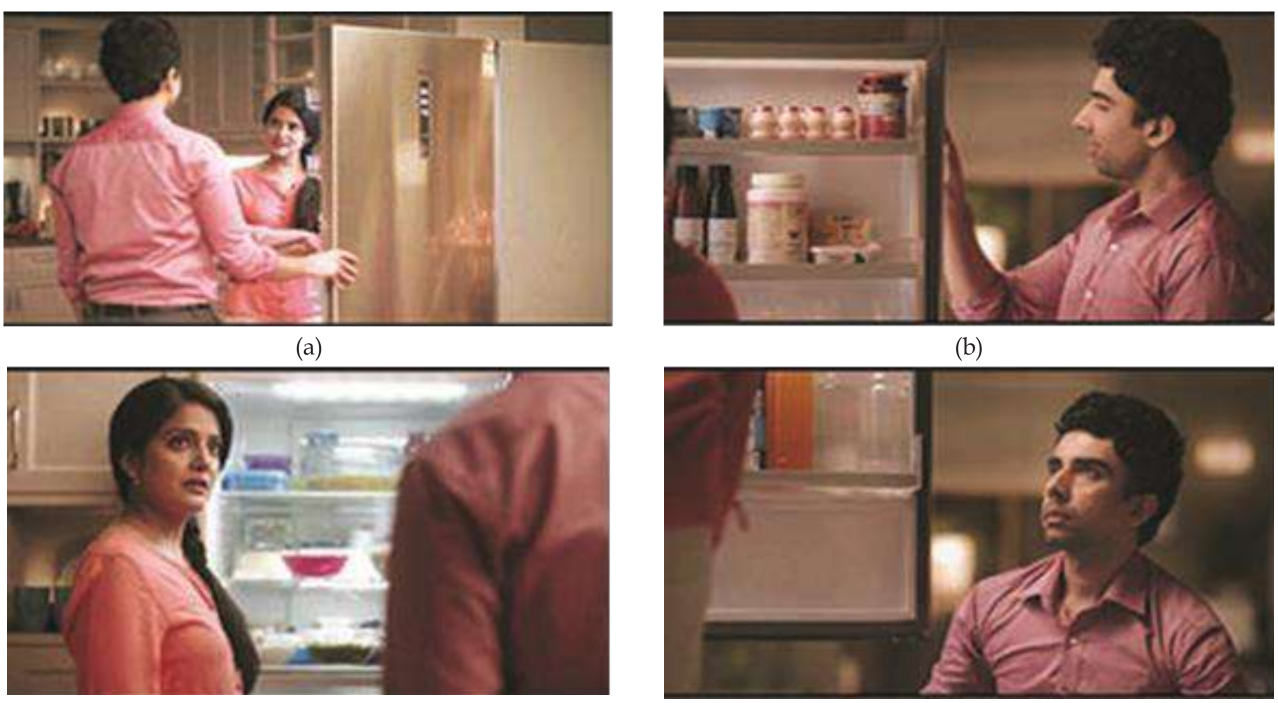
BMRs are one of the innovations Haier introduced in India. "Jhukna Mat" has been the tag line for Haier BMRs from the beginning that highlighted the health issues related to back with too much of bending. Keeping in line with the brand promise of "Inspired Living", Haier continues to bring consumer-oriented products, making consumers' life better, enjoyable and joyous.

Haier, which is a unique brand inspired by customer needs in designing its products, with its innovative BMR is a perfect example of this philosophy. The ad portrayed the functional benefits of not having to frequently bend to access fruits and vegetables as in conventional refrigerators – through an emotional response evoked by caring for the lady of the house.

TV Commercial in 2016 with Ad Campaign "*Ulte ko Seedha*"

While the first campaign, "Jhukna Mat" was introduced to educate the consumers and spread awareness about the benefits of using a BMR, it was required for the brand to invest more in the category to generate interest, build a steady recall and help customers make a well-informed purchase decision. The company decided to work on a 360° marketing approach for its next BMR campaign that was launched in 2016 where the narrative revolved around "Ulte Ko Seedha", meaning making small inconvenient things in life convenient, which was very well received by the consumers.

Haier cautiously designed the value-based theme of BMR with value-based ad proposition with the objective of delivering a utilitarian message in a fun way. The advertisement said that with BMR consumers would get the benefit of having the refrigerator part on top and the freezer placed at the bottom, which further reduces the need for users to repeatedly bend while accessing commonly used items stored in the refrigerator. It also laid emphasis on the notion of convenience, accessibility and visibility, where convenience stands for minimising the need for users to bend by 90%, accessibility for easy reach to all the sections of the refrigerator and lastly, visibility for appropriate brightness in all divisions of the refrigerator to increase visibility even in the least-used sections of the refrigerator. Further, taking into consideration the spurt of excitement amongst consumers, Haier also announced its festive campaign for the year which revolved around the AAA concept, where the three A's stand for assurance, assistance and attractive. "Assurance" denotes a comprehensive warranty for all Haier products, "assistance" means offering lucrative



(a) (b)

(b) (d)

Fig. 4

consumer finance schemes and "attractive" stands for providing luring offers along with the purchase of all Haier products in the form of assured prices and gifts.

The idea behind the TVC was to promote the award-winning product of Haier, the BMR – a technology pioneered by Haier in the year 2006. Since then, the brand has constantly innovated and strived towards familiarising the concept of BMRs amongst Indian consumers and providing them with increased convenience. The essence of the campaign was to generate "top-of-the-mind recall" with consumers, who considered upgrading or purchasing a new home appliance that is high on utility. The aim of the new ad campaign was to reiterate the benefits of using a BMR and to convey how using a BMR makes the lives of consumers much easier and hassle free.

The tag line "Ulte Ko Seedha" essentially targeted the contemporary modern, urban households and families, especially the females between the age of 25 and 45 years.

The ad agency was briefed to highlight the convenience and ease of using a Haier BMR. Keeping the same in mind, the film was created by the advertising agency, Famous Innovations and music created by Code Red Films, which revolved around a common everyday struggle between a husband and a wife, and further demonstrated that refrigerators have now got their priorities right, while husbands continue to stay the same.

The commercial premiered from the first week of October across all metro cities and was telecasted on 39 channels in five languages – Hindi, Tamil, Bengali, Kannada and Marathi. Started in the month of October, it continued for one month and was aired on all major national and vernacular TV channels and news channels.

TV COMMERCIAL IN 2018 WITH AD CAMPAIGN "INDIA, AB SEEDHE KI AADAT DAAL LO"

Raising the notch higher, Haier India continued to excite the customers as a follow up the the previous campaign of 2016 by introducing an integrated high impact campaign in 2018. Conceptualised around the theme of **'India, Ab Seedhe Ki Aadat Daal Lo',** the campaign sought to challenge the status quo of the refrigerator market in India. The communication was devised on the consumer insight that, we normalize wrong habits by excusing them as conventions of the society. The brand took a humorous tone around cultural and societal conventions that people have adopted and become used to while finding 'short-cuts' in their day to day lives, denoting *'ulti aadat'*.

Using these conventional incidents, the top line message was to highlight Haier BMR's unique design and how it solves a real life problem that most Indian households face today with their traditional refrigerators. The approach undertaken was to go against the category codes set by market leaders of showcasing only product features of the refrigerators and hence, the company chose to speak like its consumers instead.

Following a 360 degree approach, Haier ran the BMR – *'India Ab Seedhe ki Aadat Daal Lo'* campaign for 8 weeks via various mediums including Electronic, Print, Digital, in-store branding, etc. April – June quarter is the peak season for refrigerator sales in India and with IPL (Indian Premier League) 2018 falling within this period, the platform was optimised for the TVC to drive maximum mileage. The campaign execution was designed to drive maximum impact across 8 weeks with IPL at the core to target family audience.

The TVC was aired across national GEC, Movies, News and sports TV channels with regional channels in Tamil Nadu, Andhra Pradesh, Karnataka, Punjab, Kerala & West Bengal to generate a sustained share of voice and presence across regions. The print ad campaign amplified the buzz around the TVC campaign to increase its effectiveness. Print promotions were carried across top national dailies PAN India with planned exposures during the period of April to June 2018.

In-shop promotions also ran during the campaign duration with live demos being conducted on the shop floor to highlight the real-life benefits of using a Haier BMR.

The campaign was highly successful in terms of generating consumer interest and driving sales for the brand.

CAMPAIGN RESULTS

The 2018 campaign, India, Ab Seedhe Ki Aadat Daal Lo, resulted in tremendous success for Haier India in strengthening its brand positioning, establishing Haier's leadership in the BMR category and driving business growth.

- The campaign managed to drive business growth for Haier in the BMR category with 102% growth in value & 158% growth in volume over last year in the campaign duration timeframe
- The campaign also enabled an overall growth of Haier refrigerator category with 72% increase in value and 90% increase in volume over last year in the campaign duration timeframe
- The percentage reach for the brand increased to 82% from 66% over the last year, achieving 24% YOY growth.
- Share of voice for the brand increased to 32% from 21%, achieving 52% growth. Haier became the 3rd most promoted brand across HD associate sponsors.

Marketing for a Sustainable Future

WeSchool
Management Review
A National, Peer Reviewed
(Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)

Vol. 1, Issue 1, June 2025
pp. 8–19

[1]Archita Jain, [2]Dixita Shah, [3]Jigyanshu Tiwari, and [4]Dr. Madhavi Lokhande

K E Y W O R D S

Sustainability, Sustainable Marketing, Green Marketing, Consumer Behavior.

A B S T R A C T

Sustainable marketing has emerged as a critical approach for businesses aiming to align profitability with environmental and social responsibility. This research explores the significance of sustainable marketing in today's competitive landscape, examining its contribution to long-term brand value, customer loyalty, and corporate reputation.

Sustainability is defined as "development that meets the needs of present generations without compromising the needs of future generations" (World Council on Economic Development - WCED). Sustainable marketing is a purpose-driven practice that orients businesses, brands, and society toward a sustainable future, influencing awareness, aspiration, adoption, and action across economic and sociocultural systems while taking accountability for its impacts and opportunities.

The United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, held in Rio de Janeiro in 1992, saw 154 states sign a treaty to combat climate change and stabilize greenhouse gas concentrations. In 2015, the United Nations (UN) adopted 17 Sustainable Development Goals (SDGs) aimed at ending poverty and protecting the planet. Many nations, including India, have pledged to abide by these goals.

Previous research has examined the dynamics of sustainable marketing practices and their influence on consumer behavior and societal well-being (Aqsa Khalid, Kanpur Institute of Management Studies, 2023). Additional studies have explored auxiliary, reformative, and transformative sustainability marketing as frameworks for interpretation and implementation (Joya A. Kemper & Paul Ballantine, University of Canterbury, 2019).

This research takes a two-dimensional approach, focusing on both marketers' and consumers' perspectives. The study examines the relevance of sustainability and sustainable marketing among Indian consumers. While sustainability and sustainable marketing have gained momentum, their implications and acceptance remain uncertain. This research investigates the actual acceptance of sustainability practices by producers and consumers and whether this acceptance is unbiased or influenced by comfort and convenience.

The data for this research was collected through a questionnaire survey. Two distinct surveys were conducted: one targeting consumers and the other targeting producers. For consumers, a simple random sampling technique was employed, with a sample size of approximately 172 participants. For producers (corporate marketers), a convenience and judgment sampling technique was used, with a sample size of around 7 participants. The collected data was analyzed using SPSS Software.

[1,2,3]Research Scholar and Student (PGDM 2024-26),
Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.
[4]Director – Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru Campus

INTRODUCTION

In today's rapidly evolving world, the pressing need for sustainable practices has highlighted the role of marketing in shaping an environmentally friendly, innovative, and socially responsible society. As Philip Kotler defines it, marketing is "the science and art of exploring, creating, and delivering value to satisfy the needs of a target market at a profit. Marketing identifies unfulfilled needs and desires, defines, measures, and quantifies the size of the identified market and the profit potential. It pinpoints which segments the company is capable of serving best and designs and promotes the appropriate products and services." Similarly, Peter Drucker states, "Marketing is not only much broader than selling; it is not a specialized activity at all. It encompasses the entire business. It is the whole business seen from the point of view of the final result, that is, from the customer's point of view. Concern and responsibility for marketing must therefore permeate all areas of the enterprise."

To meet the needs of the target market, businesses must create value that captures consumer interest while incorporating social responsibility. Sustainability can serve as the key to achieving this balance. One of the most authoritative definitions of sustainability, as outlined by the World Council on Economic Development (WCED), describes it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Additionally, Grant (2010) defines sustainability as "the ability to make responsible decisions in using and allocating resources to economic and non-economic activities in an effort to achieve desired social, economic, and environmental outcomes."

Sustainable marketing is a purpose-driven practice that orients businesses, brands, and society toward a sustainable future by influencing awareness, aspiration, adoption, and action across economic and sociocultural systems. It takes accountability for its impacts and opportunities, ultimately serving long-term well-being for all. The United Nations Brundtland Commission (1987) reinforces this by stating, "Meeting the needs of the present without compromising the ability of future generations to meet their own needs." Sustainability is a forward-thinking approach that ensures resources are utilized efficiently while leaving adequate provisions for future generations.

For consumers, sustainable marketing can be defined as the art or science of exploring, creating, and delivering value with the added benefit of sustainability, while also achieving profitability. For producers, sustainable marketing not only enhances product value but also optimizes costs, thereby maximizing long-term profitability and preserving resources for future marketing initiatives.

As society moves towards a greener and more sustainable future, this research aims to analyze market adaptability and readiness to accept sustainable products. Additionally, it explores organizations' strategies for adopting sustainable products and the challenges they face in communicating their sustainability commitments to society. Sustainability serves as a differentiator in crowded markets, positioning companies as industry leaders and attracting consumers seeking ethical and eco-friendly options.

Sustainable marketing promotes the adoption of environmentally responsible practices, such as reducing carbon footprints, conserving resources, and minimizing waste. As climate change becomes an increasing global concern, businesses bear the responsibility of reducing their environmental impact. Furthermore, sustainable marketing aligns with the United Nations' Sustainable Development Goals (SDGs), allowing companies to contribute positively to global environmental and social challenges. Beyond ethical considerations, sustainability resonates with an increasingly conscious consumer base.

Sustainability can also drive innovation. Companies that invest in sustainable practices often discover new technologies, product designs, and business models that unlock untapped markets. Whether through eco-friendly packaging or circular economy models, sustainable marketing provides businesses with opportunities to diversify and thrive.

This research seeks to evaluate market adaptability and readiness for sustainable products while examining organizations' strategies for adopting sustainability and the challenges they encounter in conveying their values to society. As consumers demand increasingly innovative and improved products, rapid growth and mass production continue to strain the environment, prompting a shift toward sustainability. However, this shift has primarily occurred within luxury markets, with limited research conducted on the adaptability of sustainable products in the broader mass market and consumer goods sector.

The primary objective of this research is to assess consumers' readiness to transition to a sustainable market and analyze how pricing influences this adaptability. Additionally, the study explores how industries plan to adjust to this changing demand—if such demand exists—and how they intend to communicate these changes to consumers. This paper seeks to examine the actual levels of acceptance towards the concepts "sustainability" and "sustainable marketing practices" among both consumers and producers. It would further explore if the adaptability towards sustainability and sustainable marketing practices is consistent or varies as per the convenience and comfort for producers and consumers.

LITERATURE REVIEW: MARKETING FOR A SUSTAINABLE FUTURE

The global focus on sustainability is changing the marketing landscape, urging businesses to embed environmental, social, and economic values into their core strategies. This evolution stems from emerging consumer consciousness and the pursuit of sustainable competitive advantages. As sustainability moves from a niche initiative to a central business priority, marketing research plays a critical role in examining how sustainable practices influence consumer behavior and shape market dynamics. This literature review delves into the evolving domain of sustainable marketing, highlighting its impact on consumer choices, brand loyalty, and corporate social responsibility. By synthesizing existing research and identifying unexplored areas, this review seeks to pave the way for innovative marketing approaches that align with a more sustainable and inclusive future.

The Marketing Ecosystem: An Expanded Framework

The Concept of Marketing Ecosystem, as presented by Zhang and Watson, focuses on an "outside-in" perspective, motivating firms to recognize and adapt to interconnected macro forces influencing consumer behavior and business strategies. The five primary forces identified are:

- **Marketplace Trends:** It focuses on rapid changes in Business Model and market dynamism focusing at the pace at which markets operate leaving businesses to adopt to agility and innovation.
- **Technological Trends:** Using Consumer data respectfully, taking care of the privacy and the security upgradation of technology, that are crucial in fostering consumers' trust and loyalty.
- **Socioeconomic Trends:** Increasing Purchasing Power Parity(PPP) amongst consumers, necessitates businesses to adopt towards socially responsible practices.
- **Geopolitical Trends:** Nationalism and Protectionism amongst Consumers are emerging globally, influencing, cross-border marketing strategies and supply chains adopted by brands universally.
- **Environmental Trends:** The Rise of Ecoconsciousness and Sustainability among consumers is propelling brands to re-define their value propositions and positioning amongst consumers.

Industries could use this research data to integrate strategic thinking and leverage advanced data analytics and unstructured data sources like social media and Internet of Things (IoT) to predict and respond to consumer preferences. This approach fosters collaboration with diverse stakeholders, ensuring a comprehensive response to dynamic market conditions.

Green Marketing Innovations and Practices

Over the decades, Green Marketing has transformed drastically, from a niche business practice to a core principle for brands. Businesses leverage green marketing as a business strategy, to drive or to increase sales, driven by incessant demand by consumers towards sustainable products and regulatory pressures by organizations like the United Nations (UN) and Government bodies urging businesses to adopt sustainable business practices. Major Green Marketing Practices include:

- **Eco-friendly Product Development:** Brands try creating environmentally friendly products by utilizing sustainable raw materials, processes and designs and minimizing waste to reduce the environmental impact
- **Recycling and Circular Economy Model:** Businesses are encouraged to adopt to circular economy model, to recycle and reuse raw material to reduce carbon footprint and conserve resources.
- **Sustainable Packaging:** the packaging industry has witnessed profitable innovations in the field of sustainability. The use of biodegradable material and eco-friendly packaging techniques enables businesses to address consumer needs of reduced waste generation.

Although businesses have started adopting sustainable practices, they still have a long path ahead. Brands continue to face allegations of greenwashing, skepticism over the authenticity of sustainability claims, and cost implications of adopting to sustainable practices.

Sustainability Framework in Marketing

The sustainable market has grown, developed, implemented, and interpreted over time giving rise to 3 major conceptualizations of sustainable marketing (Joya A. Kemper and Paul W. Ballantine).

Three core concepts of Sustainable Marketing:

- **Auxiliary Sustainable Marketing:** It focuses on incorporating sustainability in existing marketing practises while incorporating environmental and social considerations. Some of these practices include using eco-friendly raw material and packaging products to products environmental friendly products and reduce carbon footprint.
- **Reformative Sustainable Marketing:** This principal focuses on promoting sustainable lifestyle by demarketing unsustainable and environmentally harmful products.
- **Transformative Sustainable Marketing:** It focuses on addressing the unsustainable practices from the roots This principal focuses on promoting sustainable production and consumption by challenging the capitalist paradigm of unsustainable practices.

Built upon the frameworks of ecological and green marketing practices, sustainable marketing provides a holistic approach of by emphasizing on ethical business practices, consumer education and systematic change while addressing the social, economical and environmental dimensions of sustainability.

Consumer Behavior Sustainable Marketing

The emergence of Sustainable marketing has brought about both challenges and opportunities in the realm of Consumer Behavior, Understanding how consumers react toward sustainable marketing practices was the central focus of this study. Research identifies various critical psychological factors that influence consumers' behavior, encapsulated in frameworks, like SHIFT:

- **Social Influence:** Social factors play an essential role in influencing Consumer's buying decisions. Peer Pressure and societal norms significantly impact consumer choices.
- **Habit Formation:** Marketers are trying to inculcate sustainable habits among consumers through consistent messaging and offering incentives.
- **Individual Self-Concept:** Marketers are trying to align sustainable products with consumer values and identity. They are

creating a sense of responsibility among consumers towards sustainability.

- **Feeling and Cognition:** Marketers want to create an emotional appeal and rational arguments to enhance consumer engagement towards sustainable market practices by advertising sustainable products in a way that connects with consumers' core value of saving resources and the environment.
- **Tangibility:** Highlights the visible and immediate benefits of sustainable choices, making consumers and marketers believe that sustainability is the concrete solution for optimum utilization of resources.

The digital transformation of marketing, accelerated by the COVID-19 pandemic, presents new opportunities and challenges. Online platforms enable firms to engage consumers through carbon-neutral shipping, eco-friendly packaging, and virtual experiences. Offline settings, such as in-store recycling initiatives and educational campaigns, remain crucial for fostering direct consumer interactions and reinforcing sustainable practices.

Challenges and Opportunities in Sustainable Marketing

The concept of Sustainable Marketing is growing globally, many industries are moving towards sustainable practices and consumers are also preferring sustainable products over normal consumer goods. Despite its growing prominence, Sustainable Marketing faces several challenges, such as:

- **Greenwashing:** It involves making an unsubstantiated to deceive consumers into believing that a company's products are environmentally friendly. It strikes the need for transparency and authenticity to combat consumer skepticism.
- **Balancing Profitability and Sustainability:** The tag of Sustainability comes with a monetary value, despite being extremely popular in the market, sustainability still is a niche concept for both marketers and consumers. Thus, Developing innovative solutions that align financial goals with environmental responsibility.
- **Interdisciplinary Collaboration:** With the emergence of Sustainable Marketing Practices, there is an increasing demand for industries to collaborate and work towards achieving cumulative Sustainable goals. Encouraging partnerships across industries, academia, and government to address multifaceted sustainability issues.

Conversely, opportunities abound. Leveraging emerging technologies such as Artificial Intelligence (AI), blockchain, and Internet of Things (IoT) can enhance transparency and efficiency in supply chains. Circular economy models and consumer education campaigns further enable businesses to align their strategies with sustainability objectives, building brand loyalty and differentiation.

This transition to Sustainable Marketing is not just a response to consumer demand, but a strategic imperative for long-term competitiveness and societal impact. By integrating marketing ecosystems, adopting innovative practices, leveraging sustainability frameworks, and understanding evolving consumer behavior, businesses can align profitability with purpose. The future of marketing lies in its ability to drive systemic change, foster collaboration, and create value for all stakeholders, ensuring a sustainable future for generations to come.

GAP ANALYSIS

A lot of work is being done in the field of sustainability and sustainable marketing focusing on the definitions, importance, and evolution of sustainable marketing practices yet there are several crucial research gaps identified in this field. Although there has been significant theoretical development, little empirical evidence has been found concerning how businesses translate macro-level factors such as technological change, socio-economic disparities, geopolitical trends, and environmental changes into action. Further, the inter-industry comparison would be very helpful in deligating sector-specific adjustments and digging deeper into these factors at the micro level, especially concerning how they affect consumers' behavior. Challenges in green marketing, including greenwashing and high implementation costs, are not well-researched, especially for small and medium-sized enterprises. Consumer education in promoting sustainable consumption is also not adequately explored. While the TBL framework is the heart of sustainable marketing, it is often applied without considering regional and cultural differences. Longitudinal studies on TBL strategies are very scarce, and practical tools for businesses to transition toward more transformative sustainability efforts are needed. Research into consumer behavior focuses too narrowly on psychological drivers and ignores the role of socioeconomic factors, cultural norms, and digital transformation. Furthermore, the lack of interdisciplinary engagement, such as with behavioral economics and data analytics, also reduces regional perspectives about the difficulties experienced by developing economies. Last, actionable frameworks for policy incentives, effective measurement for sustainability programs, and the provision of full metrics to ensure successful implementation remain poorly developed. Studies focusing on consumer opinions and acceptance towards sustainability and sustainable marketing are very scarce.

Based on the above discussion this study will test the following hypotheses in particular:

Hypothesis 1: The belief in the impact of an individual's practices on sustainability positively correlates with the likelihood of adopting sustainable behaviors.

Hypothesis 2: The implementation of Sustainable Marketing Practices does not influence how consumers perceive a brand.

Hypothesis 3: The accessibility of greener products does not play a significant role in shaping consumers' purchase decisions.

METHODOLOGY

The data for this study was collected from 2 different perspectives: consumers' and producer's perspectives. A quantitative survey using a simple random sampling technique with a sample size of around 172 participants was adopted for a consumer survey with a self-developed scale. The target population of this study were individuals residing in India distinguished by various demographic parameters- age, gender, occupation, and location of the individual with the majority of the sample size being students and individuals in the age bracket of 18-24 years of age. The survey was a 16-question questionnaire aimed to measure the various parameters- consumers' awareness about sustainability, adoption of sustainability and sustainable practices, and whether the adoption was unbiased or conditional to convenience and comfort of the consumers. The data received from the survey was nominal in nature and was analyzed using SPSS software

The qualitative survey for producers' perspectives was conducted through the means of telephonic interviews. Various industry experts across various industries were approached and used convenience and judgemental sampling techniques with a sample size of around 6 producers across various industries: Pharmaceuticals, Import-export, manufacturing, Home decor, architecture, and interior design. A 16-question questionnaire adopted from the Sustainable marketing orientation scale was implemented to carry out this study. The target population of this study consists of companies producing goods for consumers and for other industries. The questionnaire measured three various parameters of the organizations: strategic integration, societal engagement, and ethical capabilities.

RESULTS

Findings and Analysis:

Producer's Data

To analyze the Producer's take on Sustainable Market Practices, qualitative data was collected from producers across various industries through the medium of telephonic interviews using Sustainable Marketing Orientation (SMO) scale as a parameter to evaluate their perspectives on sustainable marketing practices. The data collected from industries provides valuable insights into sustainable marketing practices, highlighting both advantages and challenges across diverse sectors. Below is a synthesized analysis categorized into key themes:

- **Strategic Integration:** The interviews reveal a strong commitment to integrating financial, environmental, and social indicators into operational strategies. Organic farming demonstrates this through the HEAL framework (Health, Environment, Agriculture, and Lifestyle) and for Ayurvedic pharmaceuticals supports organic farming for ingredient sourcing and integrates traditional knowledge systems with modern manufacturing, while the grain import-export industry balances profitability with community and environmental responsibilities. In contrast, industries like toughened glass and home décor show inconsistent adoption, often lacking environmental monitoring. This highlights the need for standardized frameworks to help industries uniformly improve sustainability efforts.
- **Monitoring and Accountability:** Most industries monitor community impacts, with organic farming excelling in reducing harm from chemical fertilizers. However, sectors like toughened glass and home décor lack effective mechanisms to track environmental outcomes, highlighting the need for better tools to assess ecological and community contributions.
- **Societal Engagement:** Stakeholder engagement is key, with industries like home décor supporting rural artisans and cultural heritage for socioeconomic sustainability. Organic farming involves women and tribal communities to promote balanced growth. While in Ayurvedic pharmaceuticals, Societal engagement involves empowering rural farmers communities by providing fair trade opportunities and training in sustainable farming practices. In contrast, toughened glass shows limited community involvement, highlighting an opportunity to align business practices with societal needs through better engagement models.
- **Ethical Practices:** Ethics are important in sustainable marketing, including transparent pricing, honest communication, and long-term partnerships. Organic farming establishes trust through consumer education on nutritional benefits, while the home décor industry increases transparency with QR codes for traceability of products. For Pharmaceutical companies, ethical practices include clear communication about product benefits and ensuring that production adheres to stringent safety and environmental standards. However, some industries, such as toughened glass, fail to take responsibility for their environmental impact.
- **Challenges in Sustainable Practices:** Challenges remain despite progress, such as the use of non-eco-friendly materials like plastics in the toughened glass sector, revealing supply chain limitations and lack of education about ayurvedic medicines Moreover, the absence of robust metrics for tracking sustainability efforts hampers progress evaluation, emphasizing the need for research into scalable solutions.

Opportunities for Improvement

- **Standardized Framework:** Developing industry-centric guidelines for monitoring and improving sustainability practices can bridge the gap.
- **Enhanced Stakeholder collaboration:** Industries should adopt collaborative models involving diverse stakeholders to communicate societal and environmental needs.
- **Technological Integrations:** Leveraging tools like AI(Artificial Intelligence), IoT(Internet of Things), and blockchain, could boost transparency in the supply chain and could foster customer trust.

- **Consumer Education:** Educating consumers about the benefits of sustainable practices can increase adoption rates and drive demand for ethical practices.

The interview data underscores the progress industries have made in integrating sustainability into their marketing strategies while revealing critical areas for improvement. Bridging these gaps requires industry collaboration, technological innovation, and robust frameworks for monitoring and accountability. By addressing these challenges, industries can align their operations with the principles of sustainable marketing, paving the way for a more equitable and environmentally conscious future. This analysis serves as a foundation for exploring actionable strategies to enhance sustainable marketing practices across sectors.

Consumer's Data

Around 172 individuals participated in the research with 55.8% participants being males, and 43.6% females and the rest chose to not disclose their gender. Maximum of these participants were residing in urban areas 81.4%, 15.1% living in suburban areas and 3.5% residing in ruler areas. Majority of these participants were individuals between the ages 18-24 (70.9%) and students (70.3%). 58.7% of participants were aware about the concept of sustainability along with 61.6% consumers being aware of the sustainable marketing practices adopted by brands. Participants assessed sustainability based on various parameters, 143 participants felt it meant reducing waste, 133 voted for recycling, 62 for ethical labour practices and 119 towards energy efficiency. Only 20.3% of the population very often came across sustainable products, 70.9% sometimes and 12.2% of the population rarely came across sustainable products. Majority of the sample size (66.3) were somewhat confident in identifying sustainable products among greenwashed products, 37% of the population did not feel confident in identifying sustainable products from greenwashed products and only 14.5% of the population felt very confident in identifying sustainable products from greenwashed products. 62.8% of the population thought it was moderately important to sustainably produce products, 9.9% thought it was not important and 27.3% felt it is extremely important to keep sustainability in mind while purchasing products.

Further, the findings of analysis includes hypothesis testing using SPSS software. It addresses the hypothesis as follows:

The first hypothesis is tested using the 'One Way T-Test'

Outcome from One-Way T-Test

The t-test results show that the relationship between belief in individual impact and sustainable behaviors adoption was statistically significant ($p > 0.05$). A strong perception that an individual's efforts mattered in bringing about change indicated that these individuals are likely to follow more sustainable behaviors.

Further Breakdown

- Those that hold a sense of belief that they make a difference reported increased adoption rates, including recycling, reducing waste, and selecting environmentally friendly products.
- Out of the respondents, 73% agreed or strongly agreed with the notion that their actions would make a difference in global sustainability efforts. The overwhelming nature of this response indicates an increasing awareness about personal responsibility to act in countering climate change.
- The engagement of the age group 18-35 years was highest, which indicates that there is a generational shift toward eco-conscious behaviors.
- Qualitative feedback also highlighted the fact that observable outcomes, such as lower energy bills and a cleaner local environment, further enhance the commitment to sustainable behaviors.

Table 1: One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
VAR00001	172	4.08	.783	.060

Table 2: One-Sample Test

	Test Value = 4					
	t	*df*	*Sig. (2-tailed)*	*Mean Difference*	*95% Confidence Interval of the Difference*	
					Lower	*Upper*
VAR00001	1.363	171	.175	.081	.04	.20

Table 3: One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Ans 16	172	3.8314	.78028	.05950

Table 4: One-Sample Test

	Test Value = 4					
	t	*df*	*Sig. (2-tailed)*	*Mean Difference*	*95% Confidence Interval of the Difference*	
					Lower	*Upper*
Qns 16	.2.834	171	.005	-.16860	-.2860	-.0512

The Second hypothesis is Tested using the 'One Way T-Test'

Outcomes from One-Way T-Test

There was no significant difference in the perception of the brand as a result of sustainable marketing practices, here ($p < 0.05$).

Further Breakdown

- Although statistical significance was not present, the qualitative responses indicated mixed opinions about sustainable marketing practices. About 45% of the respondents held a positive opinion of such practices but expressed skepticism regarding their authenticity.
- Common themes that emerged from the survey include skepticism about "greenwashing," or companies over- or understating sustainability claims to create an appeal to environmentally conscious consumers.
- Barring statistical significance, brands that boasted measurable impacts from sustainable practice regarding, for example, a decrease in carbon footprint or use of renewable energy received higher trust ratings from respondents.
- Regional differences were seen, with more awareness and openness of urban consumers toward sustainable marketing than rural consumers.

The Third hypothesis is Tested using the 'One Way Anova'

Outcomes from One Way Anova

ANOVA analysis showed no significant impact of greener product availability on purchase decisions, $F = 0.139$, $p = 0.937$.

Further Analysis

- Accessibility was not a determinative factor alone, as affordability and perceived quality have superseded it as the primary factors in buying decisions.
- About 58 percent of respondents reported that they would be willing to turn to greener products if prices were at par with similar conventional ones. Still, only 32 percent sought out sustainable options.
- Consumers mentioned the limited availability of greener products in local markets and higher prices as the main obstacles to adopting these products.

Table 5: ANOVA

How often have you wanted to buy greener products but haven't found to be readily available?					
	Sum of Squares	**df**	**Mean Square**	**F**	
Between Groups	68157861833	3	22719287278	.139	.937
Wihin Groups	2.624E+13	160	1.640E+11		
Total	2.630E+13	163			

- Responses were also lacking knowledge of greener alternative products, making it clear marketing and visibility play a role as well.

Oneway

[Data Set 1]

Opportunities For Improvement

Consumer Education Enhancement: Raise awareness among the consumers regarding tangible sustainability benefits and connect awareness to action.

- **Authenticity Focus:** Sustainably market in ways that can be coupled with actual actions and honest communications in order to achieve credibility.
- **Promote Sustainable Behaviors:** Provide discount incentives or rewards for loyalty as ways of promoting sustainable consumption.
- **Improve Accessibility with No Premium Pricing:** Allay affordability concerns and still place sustainability into mainstream product lines with little to no cost implications.

This study draws attention to the dynamic interaction between awareness, behavior, and external influences that determine the attitude of consumers toward sustainability. Despite consumer readiness to embrace sustainability, several strong barriers such as perceived cost and convenience hinder their transition into more meaningful behavior. Brands should be authentic in their sustainability messages and ensure alignment with consumer values for increased acceptance and engagement.

DISCUSSION

How Do the Findings Bridge the Gap

The study on consumer and producer perspectives provides actionable insights to address critical gaps in sustainable marketing research. By integrating these perspectives, several key gaps can be bridged, advancing the development of sustainable marketing strategies:

Operationalizing Macro Factors: The literature has shown that there is a dearth of empirical evidence on how sustainable marketing practices are integrated with macro-level factors, such as technological advancement and socioeconomic disparities. Findings of the study related to industry-specific challenges, including the use of non-eco-friendly materials and lack of monitoring mechanisms, offer a practical lens through which to operationalize these macro factors. For instance, the producers' focus on affordability and resource constraints underscores the importance of technological innovations and policy incentives to support sustainable practices across industries.

Practical Strategies to Overcome Barriers: The existing pieces of literature lacks an in-depth investigation of the terms like Greenwashing and Implementation cost barriers. It reveals that consumer cost sensitivity and distrust are major critical barriers. Direct recommendations for improvement in transparency via certifications and eco-labels would address these gaps, thereby serving as a blueprint for overcoming the greenwashing barrier and building consumer trust. Moreover, the feedback from producers on the demand for accessible training and infrastructure reflects areas where subsidies and industry-specific toolkits can reduce implementation costs for small and medium enterprises.

Contextual Application of the Triple Bottom Line (TBL): TBL, is not just confined towards a particular industry, the analysis shows different types of integration across various sectors- in a similar sense, The holistic approach through HEAL in organic farming and the low-level of monitoring toughened glass. Such analysis points at the readiness of a tailored region-specific strategy that relates regional markets to TBL principles for better implementation.

Consumer Behavior and Psychological Drivers: Current research does not fully capture the interaction between external trends and consumer behavior. This study identifies environmental concerns, health benefits, and social responsibility as key motivators, while cost perception and skepticism act as barriers. By educating consumers on long-term benefits and leveraging emotional appeals, businesses can better align marketing strategies with these psychological drivers, fostering sustainable consumption habits.

Interdisciplinary and Regional Insights: Interindustry and regional gaps highlighted by the study also underpin the significance of cross-industry interdisciplinary cooperation and region-specific research. For instance, incorporating behavioral economics in marketing practice could design more efficient campaigns, whereas removing infrastructural limitations in developing economies can ensure more widespread acceptance of sustainable practices. This study aligns the findings with existing gaps to provide a foundation for advancing sustainable marketing research and practice. It underlines the importance of actionable frameworks, consumer education, and innovative technologies in creating a marketing ecosystem that aligns with long-term sustainability goals.

CONCLUSION

In Today's rapidly evolving world, Sustainability and sustainable marketing are becoming extremely crucial. Businesses are aiming to address this pressing need for environmental and societal challenges while maintaining profitability for the businesses. This study adopted a dual dimension of studying sustainability and sustainable marketing practices from producers' as well as consumers' perspectives spreading light on its adaptability and barriers to widespread acceptance. This research was built on prior research that emphasized the role of sustainability in shaping consumer behavior and business practices.

A mixed-method approach was adopted consisting of a 'Review of Literature', 'Interview', and 'Questionnaire', the questionnaire was focused on demographics and awareness, and the Interviews gazed at the adoption of Sustainable practices by producers across various industries.

It was discovered that consumers showed moderate awareness of sustainability, with convenience being a significant barrier. The generational shift toward acceptance of conscious consumerism with younger consumers advocating for sustainability. Producers showcased varied levels of engagement with acceptance of sustainable practices. Hypothesis testing revealed that although there is significant relationship between individual's belief and sustainable behaviors, sustainable marketing did not necessarily consistently enhance brand perception.

This Research underscores the potential of Sustainable marketing to drive systematic changes aligning profitability with purpose and paving the way for a sustainable future. By addressing identified gaps, like lack of availability, industries and policy makers could thrive to create an inclusive and environmentally conscious marketplace.

REFERENCES

1. **MLBM.** (n.d.). Adapting to evolution: How shifts in consumer behavior reshape brand strategy. MLBM Blog.
2. **Field, A.** (2023, November 30). Conscious consumer spending could be at a tipping point. Forbes.
3. **Kantar.** (n.d.). Are marketers ready to lead the charge towards a sustainable future? Kantar.
4. **Sheth, J.N., & Parvatiyar, A.** (2021). Sustainable marketing: Market-driving, not market-driven. Journal of Macromarketing, 41(1), 150–165.
5. **Chandy, R.K., Johar, G.V., Moorman, C., & Roberts, J. H.** (2019). Better marketing for a better world. Journal of Marketing, 83(1), 1–15.
6. **Retail Wire.** (2022, July 13). H&M case shows how greenwashing breaks brand promise. Forbes.
7. **Network for Business Sustainability.** (n.d.). What is sustainable marketing? Network for Business Sustainability.
8. **McKinsey & Company.** (2020). Consumers are, in fact, buying sustainable goods: Highlights from new research. McKinsey & Company.
9. **United Nations. (n.d.).** A new blueprint for international action on the environment. United Nations.

10. **Khalid, A. (2023).** Sustainable marketing and its impact on society: A study of marketing strategies and opportunities promoting an eco-friendly lifestyle. SSRN.

11. **Belz, F.M., & Peattie, K.** (2019). What do we mean by sustainability marketing? ResearchGate.

12. **International Institute for Sustainable Development.** (n.d.). Mission and goals: Sustainable development. International Institute for Sustainable Development.

13. **University of Cambridge Institute for Sustainability Leadership.** (n.d.). What is sustainable marketing? University of Cambridge Institute for Sustainability Leadership.

14. **United Nations Development Programme.** (n.d.). Sustainable Development Goals. United Nations Development Programme.

15. **India Briefing.** (2023). ESG reporting in India: New disclosure requirements for sustainability. India Briefing.

16. **Government of India.** (2018). Sustainable development and climate change: Economic survey 2018-19 (Volume 2). Ministry of Finance, Department of Economic Affairs, Economic Division.

17. **Harvard Business Review.** (2023, September). Research: Consumers' sustainability demands are rising. Harvard Business Review.

18. **Sustainable Business Toolkit.** (n.d.). What is sustainable marketing? Sustainable Business Toolkit.

19. **Kumar, V., Rahman, Z., Kazmi, A.A., & Goyal, P.** (2012). Evolution of sustainability as a marketing strategy: Beginning of a new era. Procedia - Social and Behavioral Sciences, 37, 482–489.

20. **Townsend, S.** (2024, February 11). Sustainability marketing just got tricky—and better. Forbes.

21. **Abbas, Q. (2024).** Sustainable marketing in the age of environmental consciousness. Journal of Emerging Technologies and Innovative Research, 11(1), 1–10.

22. **Varadarajan, R., & Kaul, R.** (2020). Marketing research on environmental sustainability. Review of Marketing Research, 17, 37–60.

23. **Grubor, A., & Milovanov, O.** (2017). Sustainable marketing: A new era in responsible marketing development. ResearchGate.

24. **Scammon, D.L., & Mish, J.** (2012). From green marketing to marketing for environmental sustainability. Oxford Handbook of Marketing.

25. **Jain, V., & Jain, P. (2022).** Sustainable marketing strategies as an essential tool of business. ResearchGate.

26. **Melovic, B., Mitrovic, S., Rondovic, B., & Alpackaya, I.** (2017). Green (ecological) marketing in terms of sustainable development and building a healthy environment. Advances in Intelligent Systems and Computing, 692.

27. **Lievano Pulido, Y.P., & Ramon-Jeronimo, M. A.** (2023). Green marketing: A bibliographic perspective. Sustainability, 15(24), 16674.

28. **Diallo, M.F., Djelassi, S., & Kumar, V.** (2021). Marketing and globalization: Relevance, trends, and future research. International Journal of Market Research, 36(3), 20515707211027326.

29. **Kumar, R., & Kumar, M.** (2021). Green marketing: A door to sustainable development. ResearchGate.

30. Prieto-Sandoval, V., Torres-Guevara, L. E., & García-Díaz, C. (2022). Green marketing innovation: Opportunities from an environmental education analysis in young consumers. Journal of Cleaner Production, 363, 132509.

31. **Buil, I., Fraj Andrés, E., & Matute Vallejo, J.** (2009). The influence of the environmental factor on marketing strategy. SSRN Electronic Journal.

32. **Zhang, J.Z., & Watson, G.F. IV.** (2020). Marketing ecosystem: An outside-in view for sustainable advantage. Industrial Marketing Management, 88, 287–304.

33. **Kemper, J.A., & Ballantine, P.** (2019). What do we mean by sustainability marketing? Journal of Marketing Management, 35(10), 1–33.

34. **Geng, Y., & Maimaituerxun, M.** (2022). Research progress of green marketing in sustainable consumption based on CiteSpace analysis. SAGE Open, 12(3), 21582440221119835.

35. **Camilleri, M.A.** (2017). The marketing environment. Springer.

36. **Puma-Flores, M., & Rosa-Díaz, I.M.** (2024). Promoting sustainable agri-food systems through sustainability and responsible marketing. Journal of Cleaner Production, 448, 141568.

37. **Biswas, M., Mazumder, Q.H., & Bhattacharyya, R.** (2021). Organisational sustainability scale. Global Business Review.

38. **Hojnik, J., Ruzzier, M., & Fabjan, D.** (2019). A multiple-item scale for measuring sustainable consumption behaviour. Sustainability, 11(6), 1463.

39. **White, K., Habib, R., & Hardisty, D.J.** (2020). How to SHIFT consumer behaviors to be more sustainable. Journal of Business Research, 122, 287–304.

40. **Ramesh, M., & Ramesh, V.** (2023). A study on consumer preference for sustainable marketing strategies. International Journal of Research and Analytical Reviews, 10(3), 54–65.

The Effects of Perceived Service Recovery Efforts on Consumer Behavioral Intentions

WeSchool
Management Review
A National, Peer Reviewed
(Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)
Vol. 1, Issue 1, June 2025
pp. 20–27

Dr. Madhan Kumar P.

K E Y W O R D S

Service failure, Service Recovery and Customer Satisfaction and Loyalty.

A B S T R A C T

Service failure is inevitable in any business. Service failure and recovery remain critical issues for business practitioners. Considering this background, this study attempts to explore the effect of customer satisfaction and trust as a mediator between perceived service recovery and customer loyalty. This research has used descriptive research in the form of cross-sectional design and the data has been collected using convenience sampling. Around 604 respondents participated in this research and a questionnaire survey was used to collect responses. The results suggest formulation of effective service recovery is positively related to customer loyalty. This study implies that bank top management should come forward to formulate effective service recovery strategies. Finally, this research concludes with recommendations for banking institutes and future research in the domain of service recovery.

INTRODUCTION

The Indian banking industry has undergone a tremendous transformation in its operation after digitalization. The emergence of tech-driven initiatives makes our financial transactions easier than before but also made customers more demanding. In today's competitive environment, each and every bank is trying to provide consistent and error-free service delivery. However, service failures are unavoidable in banking due to high level of interaction between staff and clients (Zeithaml, Bitner, & Gremler, 2009). Service failure (**SeF**) occurs when the customers perception of service delivery does not match their expectation (Ennew and Schoefer, 2003). When a service fails to meet customer expectations, service failure occurs (Michel, 2001). This negative disconfirmation of expectations is likely to result in customer dissatisfaction and customer doubt in the service firm's commitment to service excellence (Cranage, 2004). Although it is highly unlikely that banks can eliminate service failures, they can learn to deal with these failures effectively (through service recovery) as an attempt to deal with and evan enhance customer satisfaction (Miller, Craighead & Karwan 2000: 387). SeF not only influence negatively on customer loyalty but it also causes detrimental outcomes like switching brands, customer dissatisfaction and negative word of mouth, which can have a serious repercussions. So, it is necessary for banks to identify the root cause of the SeF and formulate service recovery strategies to avoid them in future (Chandani and Gupta (2014).

Assistant Professor-Research, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.

Over the years, the researchers have suggested various recovery efforts such as acknowledgment of the problem, informing reasons for their SeF, perceived service recovery, empowerment of staff to resolve problems instantaneously, providing compensation and being polite during the recovery process (Davidow M., 2000). Empirical studies suggested that service recovery actions are not always successful while handling SeF because it is situation specific (Yi, Y., & Lee, J., 2005). In the customer perspective, every service encounter is considered as important and perceived differently depending on characteristics of customers (Mattila AS, Cranage D, 2005). This dissimilarity in perceptions would have a major impact on Service recovery satisfaction (SRS), loyalty and trust (Hart *et al.*, 1990). Therefore, when SeFs happen, it is important to manage customers' perceptions of service encounter. Service recovery research is not a new concept, many researchers have undertaken various studies on SeFs & recovery and collected significant amounts of information on purchaser perceptions of SR attributes. Earlier researchers have also tested the mediating relationship between Perceived SR efforts and customer loyalty through satisfaction and trust. However, to the researcher's knowledge, there has been no research study tested so far, on the serial mediation effect between service recovery (SR) on customer loyalty through satisfaction and trust. Based on the above information, the aim of this research is to identify the perceived SR efforts and its subsequent effect on recovery satisfaction, trust and loyalty of the customer in the banking context. This study also extended its scope by examining the serial mediation effect of SRS and customer trust in the association between Perceived SR and customer loyalty. Researcher believe that this work will be helpful for the banks to develop differentiation strategies to retain customers' after a SeF.

LITERATURE REVIEW

Research studies exploring customer's evaluation of service recovery efforts have used the social exchange theory and the equity theory (Blodgett *et al.*, 1993; Kelley & Davis, 1994). These two theories emphasize that the exchange relationship should be balanced. The social exchange theory is based on the view of equal partners in an exchange (Oliver, 1997). In purchasing and consumption situations, a consumer's sense of injustice results from perceived unfairness compared with either one's expectations or other comparison standards (Oliver, 1997). Service failures can be seen as customer economic loss (e.g. time, money,) and social loss (e.g., status, esteem) in an exchange (Smith *et al.*, 1999). Consequently, customers consider the failure situation as a negative inequity and will attempt to balance equity with post-purchase behavior (Lapidus & Pinkerton, 1995). Further, Equity has been acknowledged as important to attaining customer satisfaction because people want to be treated fairly (Walster, E, Walster, & Berscheid, 1978), and services marketing research has indicated a positive correlation between inequity and customer dissatisfaction (Mowen & Grove, 1983). Individuals who sense injustice or inequity attempt to restore justice. Folger's (1987) employee satisfaction research supports that individuals who cannot imagine a better distributive outcome will not perceive inequity.

Goodwin and Ross (1992) analyzed the impact of procedural and interactional justice perceptions on consumer responses to service failures. It was found that voice and apology along with favorable outcomes enhance the perceptions of satisfaction and fairness.

Bendapudi and Berry (1997) presented a model that explores the antecedents and consequences of dedication based and constraint based relationship maintenance from consumers' perspective. It was suggested that when a customer feels dependent on the other party to achieve relational outcomes, he/she will feel constrained to the relationship maintenance. It was anticipated that the customers dependence on the partner will be more when the environment is more dynamic and complex. The partners and customers relationship-specific investments are stronger/higher when the service requires greater frequency of contacts. It was found that it is more desirable to build relationships with customers that are dedication based rather than constraints based. But developing a close relationship with clients can be double- edged swords for firms as clients who are more involved with the firm are more critical of failure and reports greater dissatisfaction than clients who are less involved with the service.

In the research work of Boshoff (1999) he identified fifteen determinants for successful service recovery. Time, refers to the speed by which customers' complaint was resolved through the recovery. It was often discussed in the research that the speed of recovery is a crucial factor for success (Patterson, 2000). Specifically, successful service recovery may not rest when the provider becomes aware of the problem but how quickly the provider responds post aware of the problem (Miller *et al.*, 2000). Atonement is value- added compensation. That means, not only the failure is resolved, but "something more is added to compensate for the customer's trouble". Boshoff (1999) suggests that clients do not necessarily expect to receive atonement, but when it is offered, it has a significant influence on satisfaction. The need for apology seems obvious and is stressed in most of the service recovery studies. Apology is a first recovery step, and it is also sign of admitting the customer's inconvenience caused by service failure.

Communication style is the manner in which an employee encounter responds to a customer complaint. Boshoff identifies two types of communication styles that are convergence and maintenance. By the first style, the customer is showed signals of helpfulness, understanding, similarity and openness by verbal and nonverbal signs. Maintenance is style where encounter employee does not show understanding of customer's situation when the customer perceives negligence and lack of sincere initiation and helpfulness. Fair fix is an offer of correct service the second time. Empathy is caring individualized attention to customer provided by the provider (Zeithaml *et al.*1990, p. 26). It involves careful understanding of the problem, fixing it and apprehending the situation the way the customer perceives it. Accepted responsibility is also acceptance of the blame. The locus, controllability, and stability are concepts describing how customers attribute the blame and causal attributions. Service providers should bear in mind that customers will only perceive them reliable if the recovery actions that were promised will also be provided and the customer should not be misled. The perception of firm's commitment to provide satisfactory recovery is customer's perception of how engaged are service employees to provide the customer with initiatives that restore satisfaction.

Empowerment means that employees have authority to exercise judgment and access resources needed to provide recovery after failure. The aim is to give contact employees power to act in the way they think fits the given recovery situation. Explanation is an act of clarifying the causes of failure in concise manner. The explanation itself does not involve apology or acceptance of responsibility. The explanation is potential factor influencing the customer's causal attribution judgment. Staff attitude refers to frontline employees that should act friendly and with consideration when dealing with customers and service recovery. The frontline employees are expected to be pleasant, helpful, concerning for the customer, act quickly and flexibly. Accessibility means whether customer has convenient opportunity to lodge the complaint by physical approachability and communicative approachability, e.g. employees are not discouraging the complaints. Tangibles are physical surroundings of the place where the complaint is lodged and the physical appearance of encounter employees. Having analyzed these factors, Boshoff (1999) then developed a tool, RECOVSAT, to measure service recovery satisfaction.

Zeithaml, Bitner and Gremler (2006) proposed eight conceivable service recovery initiatives namely treating customers fairly, providing adequate and justifiable explanation for possible failure, to act promptly, to encourage and track complaints, make the service failure - proof, learn from customers' experience, learn from recovery experience and nurture relationships with customers. De Ruyter and Wetzels (2000), Yim *et al.* (2003), Wirtz and Mattila (2004), Mattila and Cranage (2005), Hocutt *et al.* (2006) have identified apology and compensation as two key factors in service recovery. The most common and often utilized recovery strategies are apology, compensation or assistance, or a combination of these three recovery strategies (Bitner *et al.*, 1990; Hart *et al.*, 1990; Hoffman *et al.*, 1995; Smith *et al.*,1999). There is also a lot of suggestions. Some have suggested: Apology, Empathy, Urgent reinstatement, Symbolic atonement and Follow-up (Zemke and Bell, 1990). Others have recommended that service recovery should include Apology, Explanation, Acknowledgment, and Compensation (Bitner *et al.*, 1990).

Prior research found Incremental satisfaction with bank services over time leads to customer loyalty (Oliver, 1999), and customers choose to remain with a service provider where they expect the benefit of staying to surpass the cost of exiting. Customer complaints are signals of customer dissatisfaction with the bank offerings (Zeithaml *et al.*, 1996) Customer loyalty may be generated if customers are pleased with the handling of their complaints (Fornell *et al.*, 1996) through service recovery (Kumunda & Osarenkhoe, 2012). Today there is a growing body of empirical evidence that confirms that satisfactory service recovery does contribute to customer loyalty, customer retention, commitment and other beneficial outcomes, such as positive word-of-mouth, communication, and trust, (Bearden and Teal, 1983; Tax *et al.*, 1998; Smith and Bolton, 1998; Zemke and Bell, 1990; Kelley and Davis, 1994). Based on the above argument's researcher proposed perceived service recovery will positively influence customer loyalty through customer satisfaction and trust.

H1: Perceived service recovery will positively influence customer loyalty through customer satisfaction and trust,

METHODOLOGY

Sample and Procedure

This research study has used survey method and seven hundred questionnaires were circulated, out of which six hundred and Twenty-nine questionnaires were received. In that, twenty questionnaires had incomplete information. A total of six hundred and four questionnaires which had complete responses were used in this study. From the 604 respondents, 300 (49.7 %) were male and (304) 50.3% are female. In terms of age group 37.1% are in the age group of 21 to 30 years, 30.1% are in the age group of 31 to 40 years, 18.7% customers between the age group of 41 to 50 years and 14.1% are above the age of 51years. The sample consists of employees with Diploma (2.2%), Schooling (19.7%), Graduates (24.3%) and Postgraduates (53.8%).

Data Collection and Samples

Established and validated questionnaires were used to collect data for measuring the variables pertaining to the present study. Perceived SR was measured by combining scales adapted from McCullough *et al.* (2000:127) and Lin *et al.* (2011:522-523) SRS factor was measured using items from Maxham and Netemeyer, (2002). Trust was measured using the scale developmed by Morgan & Hunt (1994). Customer loyalty was measured by the four-item scale developed by Allred, & Addams, (2000). All these indicators were measured on a 5-point Likert scale.

Data Analysis

Confirmatory factor analysis (CFA) was used to test the quality and adequacy of the measurement model. The four-factor model indicated good fit suggested by Hair *et al*. (2010). All the model fit indices, gone beyond the general approval grades and showed a good fit with the data collected. To test the above stated hypothesis, we used Serial Mediation Analysis. It is a statistical technique applied to measure the model with two mediators operating in serial. The model with two serial mediators was tested using "PROCESS" macro provided by Hayes, (2013). It allows to estimates direct and indirect effects in the proposed model. The PROCESS specification model=6 macro was used to test the serial mediators' model (Preacher, Rucker & Hayes, 2007).

Service Recovery Model

Serial multiple mediation analyses were tested using perceived SR as the independent variable, satisfaction with service recovery as the first mediator, trust as the second mediator and loyalty as the dependent variable. The first pathway of this model (a1), which reflects the link between Perceived SR and customer service recovery satisfaction (M1), was found to be significant (β = .77, t(292) = 21.66, p < .00). Path a2 from perceived service recovery to trust (M2) was not found to be significant (β = -.04, p = n.s). The pathway (a3) from customer satisfaction (M1) to Trust (M2) was found to be significant (β= 1.05, t (292) = 11.82, p < .00). This finding suggest that customer satisfaction directly influences the customer trust. The pathway (b1) Customer satisfaction (M1) to Loyalty was found to be significant (β = 1.08, t (292) = 13.49, p < .00). That is, if customers feel satisfied after a service recovery, they become loyal towards the banks. The pathway (b2) Trust (M2) to Loyalty was found to be significant (β = .109, t (292) = 2.52, p < .05). This finding suggests that Trust directly influences the customer loyalty. The indirect effect which is the product of a1 = .7686 and b1 = 1.082 or .8318 was found to be significant with a 95% CI of .7001 to .9856. The findings suggest that the perceived SR offered by the bank employees increases satisfaction which in turn in positively influences customer loyalty. The next indirect effect flows from perceived service recovery to trust and then loyalty, bypassing customer SRS. The second indirect effect, which is the product of a2 = -.0415 and b2 = .1092 or -.0045, was not found to be significant at the 95% CI of -.0321 to .0142 included zero. The findings suggest that perceived service recovery did not predict loyalty via trust. The last indirect effect was perceived service recovery on loyalty via both mediators (customer satisfaction (M1)and trust (M2)), estimated as the product of a1 , a3 = 1.057 and b2, or .0887 with a 95% bootstrap confidence interval of .0130 to .1742. Finally, direct effect of perceived service recovery on loyalty without mediating variables was (c′) = -.0564, p = .38, which indicates the presence of serial mediation. The results lend support for the hypothesis H1.

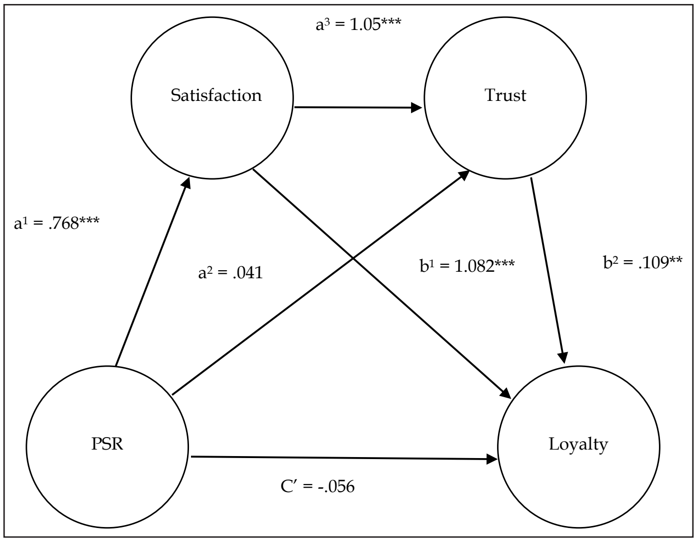


Fig. 1: Model Coefficients for Each of the Indirect Effects and Direct Effect for the Perceived Service Recovery to Loyalty Model.

Table 1: Regression Coefficients and Model Summary Information for Perceived SR to Loyalty Model.

	M1 (Satisfaction)			**M2 (Trust)**			**Y (Loyalty)**		
Antecedent	***coeff.***	***SE***	***P***	***coeff.***	***SE***	***P***	***coeff***	***SE***	***P***
X (PSR)	$a^1 \rightarrow .768$	0.35	.00	$a^2 \rightarrow .041$	0.87	.63	$c^1 \rightarrow .056$	0.64	.38
M1 (Satisfaction)				$a^3 \rightarrow .1.057$	0.89	.00	$b^1 \rightarrow 1.082$	0.80	.00
M2 (Trust)	$m \rightarrow 2.466$	.270	.00	$im \rightarrow 2.757$	.467	.00	$im \rightarrow 4.511$	.445	.00
Constant	$R^2 = .618$			$R^3 = .543$			$R^2 = .736$		
	F(1, 290) = 469.32			F(2,289) = 171.74			F(3,288) = 267.90		

CONCLUSION AND MANAGERIAL IMPLICATIONS

This research study makes vital contributions to the emerging body of research on SeF and recovery. First, it confirms the effect that perceived SR has on customer loyalty. It also takes into consideration mediating role of satisfaction and trust. Secondly, results of serial mediation analysis indicated that the specific indirect effect of perceived SR on customer loyalty through customer satisfaction and trust in operating sequence were significant. The results suggest that good SR may lead to increase in customer satisfaction, which in turn, may lead to increased trust, bringing about increased behavioral intentions.

The significant effects of the mediating variables, customer satisfaction and trust suggest that companies should consider the role of the mediating variables. In order to have an effect on behavioral intentions, service recovery is less effective without customer satisfaction and trust. Since service recovery is important to create customer satisfaction, focus should be on service recovery dimensions. For service providers, it is important not only to consider service recovery in order to acquire favorable behavioral intentions, but also to provide customer satisfaction and trust. In addition, service recovery and customer satisfaction are commonly related to building competitive organization advantage. Improving service recovery and customer satisfaction will also assist banking industries to gain competitive advantage. This implies that service providers must deliver service as a package along with quality and satisfaction. The findings regarding the serial meditational impact corroborate with the views as conceptualized by Ikponmwen, E. (2011). The significant effects of the mediating variables, customer satisfaction and trust suggest that companies should consider the role of the mediating variables. In order to have an effect on customer loyalty, SR is less effective without customer satisfaction and trust. If the service provider acknowledges customer complaints, apologizes, and responds quickly and empathically to SeF, the company can gain customer trust and satisfaction. It enables an organization to achieve the required competitive advantage.

LIMITATIONS

Even though this study provides significant contribution to the society, there are several limitations that need to be considered. In this study, scope was limited to Chennai focusing on banking sector. These sampling issues can limit the generalized power of the results. Therefore, it is suggested that future research should be conducted in other geographic locations and different sectors. Secondly, this is a cross-sectional study based on opinions expressed by customers; the findings might be affected by the respondent's memory bias. It would be interesting to carry out a longitudinal analysis of the objective assessment of service recovery process and final outcomes. Thirdly, this research concentrated on selected dimensions of service recovery. There is lot of other service recovery dimensions also available for research study. Such dimensions can be considered for the future research. Fourthly, future research should focus on discovering other potential service recovery components viz severity type and magnitude of failure that may be important for customers when evaluating recovery process of service provider. Beyond the acknowledged areas of research limitations, this research made an important contribution to service marketing theory.

REFERENCES

1. Allred, A.T., & Lon Addams, H. (2000). Service quality at banks and credit unions: what do their customers say?. Managing Service Quality: An International Journal, 10(1), 52-60.
2. Bendapudi, N., & Berry, L.L. (1997). Customers' motivations for maintaining relationships with service providers. Journal of retailing, 73(1), 15-37.
3. Bitner, M.J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. Journal of marketing, 54(2), 69-82.
4. Bitner, M.J., Zeithaml, V.A., & Gremler, D.D. (2010). Technology's impact on the gaps model of service quality. Handbook of service science, 197-218.
5. Blodgett, J.G., Granbois, D.H., & Walters, R.G. (1993). The effects of perceived justice on complainants' negative word-of-mouth behavior and repatronage intentions. Journal of retailing, 69(4), 399-428.
6. Chandani, P., & Gupta, C. (2014). A survey on effective defect prevention-3T approach. International Journal of Information Engineering and Electronic Business, 1, 32-41.

7. Cranage, D. (2004). Plan to do it right: and plan for recovery. International Journal of Contemporary Hospitality Management, 16(4), 210-219.
8. Davidow, M. (2000). The bottom line impact of organizational responses to customer complaints. Journal of hospitality & tourism research, 24(4), 473-490.
9. De Ruyter, K., & Wetzels, M. (2000). Customer equity considerations in service recovery: a cross industry perspective. International Journal of Service Industry Management, 11(1), 91-108.
10. Ennew, C., & Schoefer, K. (2003). SeF and service recovery in tourism: A review.
11. Ennew, C., & Schoefer, K. (2003). Service failure and service recovery in tourism: A review (pp. 1-15). Nottingham: Christel DeHaan Tourism and Travel Research Institute, Nottingham University Business School.
12. Folger, R. (1987). Distributive and procedural justice in the workplace. Social Justice Research, 1, 143-159.
13. Fornell, C., Johnson, M.D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. Journal of marketing, 60(4), 7-18.
14. Goodwin, C., & Ross, I. (1992). Consumer responses to service failures: Influence of procedural and interactional fairness perceptions. Journal of Business research, 25(2), 149-163.
15. Grove, S.J., & Fisk, R.P. (1997). The impact of other customers on service experiences: a critical incident examination of “getting along”. Journal of retailing, 73(1), 63-85.
16. Hair, J.F., Anderson, R.E., Babin, B.J., & Black, W.C. (2010). Multivariate data analysis: A global perspective (Vol. 7).
17. Hair, J.F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. Brazilian Journal of Marketing, 13(2).
18. Hart, C.W., Heskett, J.L., & Sasser Jr, W.E. (1990). The profitable art of service recovery. Harvard business review, 68(4), 148-156.
19. Hayes, A.F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter?. Psychological science, 24(10), 1918-1927.
20. Hayes, A.F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: does method really matter?. Psychological science, 24(10), 1918-1927.
21. Hocutt, M.A., Bowers, M.R., & Todd Donavan, D. (2006). The art of service recovery: fact or fiction?. Journal of Services Marketing, 20(3), 199-207.
22. Hoffman, K.D., & Kelley, S.W. (2000). Perceived justice needs and recovery evaluation: a contingency approach. European Journal of marketing, 34(3/4), 418-433.
23. Ikponmwen, E. (2011). The effects of service recovery satisfaction on consumers’ behavioral intentions: An application in North Cyprus five-star hotels (Doctoral dissertation, Eastern Mediterranean University (EMU)).
24. Kelley, S.W., & Davis, M.A. (1994). Antecedents to customer expectations for service recovery. Journal of the academy of Marketing Science, 22(1), 52-61.
25. Kim, C.M., Kim, J.Y., Yi, Y.H., Lee, M.J., rim Cho, M., Shah, D.H., ... & Chae, J. S. (2005). Detection of Bartonella species from ticks, mites and small mammals in Korea. Journal of Veterinary Science, 6(4), 327-334
26. Kumunda, M., & Osarenkhwe, A. (2012). Remedy or Cure for Service Failure? Effects of Service Recovery on Customer Satisfaction and Loyalty. Business Process Management Journal, 18(1), 82-103.
27. Lapidus, R.S., & Pinkerton, L. (1995). Customer complaint situations: An equity theory perspective. Psychology & Marketing, 12(2), 105-122.
28. Mattila, A. S., & Cranage, D. (2005). The impact of choice on fairness in the context of service recovery. Journal of Services Marketing, 19(5), 271-279.
29. Maxham III, J.G., & Netemeyer, R.G. (2002). A longitudinal study of complaining customers’ evaluations of multiple service failures and recovery efforts. Journal of marketing, 66(4), 57-71.
30. McCullough, B.D., & Wilson, B. (2002). On the accuracy of statistical procedures in Microsoft Excel 2000 and Excel XP. Computational Statistics & Data Analysis, 40(4), 713-721.
31. MCCULLOUGH, M.A., BERRY, L.L. & YADAV, M.S. 2000. An empirical investigation of customer satisfaction after service failure and recovery. Journal of Service Research, 3(2):121-137.
32. Michel, S. (2001). Analyzing service failures and recoveries: a process approach. International journal of service industry management, 12(1), 20-33.
33. Miller, J.L., Craighead, C.W., & Karwan, K.R. (2000). Service recovery: a framework and empirical investigation. Journal of operations Management, 18(4), 387-400.
34. Morgan, R.M. (1994). The commitment-trust theory of relationship marketing. Journal of Marketing.
35. Morgan, R.M., & Hunt, S.D. (1994). The commitment-trust theory of relationship marketing. Journal of marketing, 58(3), 20-38.
36. Oliver, R.L. (1999). Whence consumer loyalty?. Journal of marketing, 63(4_suppl1), 33-44.

37. Oliver, R.L., Rust, R.T., & Varki, S. (1997). Customer delight: foundations, findings, and managerial insight. Journal of retailing, 73(3), 311-336.

38. Patterson, P.G., Cowley, E., & Prasongsukarn, K. (2006). Service failure recovery: The moderating impact of individual-level cultural value orientation on perceptions of justice. International Journal of Research in Marketing, 23(3), 263-277.

39. Preacher, K.J., Rucker, D.D., & Hayes, A.F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. Multivariate behavioral research, 42(1), 185-227.

40. Smith, A.K., Bolton, R.N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. Journal of marketing research, 36(3), 356-372.

41. Wallin Andreassen, T. (2000). Antecedents to satisfaction with service recovery. European journal of marketing, 34(1/2), 156-175.

42. Wirtz, J., & Mattila, A.S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. International Journal of service industry management, 15(2), 150-166.

43. Yim, C.K., Chan, K.W., & Lam, S.S. (2012). Do customers and employees enjoy service participation? Synergistic effects of self-and other-efficacy. Journal of marketing, 76(6), 121-140.

44. Zeithaml, B., & Bitner, M.J. (2009). Gremler. Marketing de Servicios. Editorial Mc Graw Hill.

The Influence of Service Quality on Generation Z's Impulsive Buying Tendency in Quick Commerce: A Dual Mediation Model of E-Trust and Customer Satisfaction

WeSchool
Management Review
A National, Peer Reviewed
(Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)

Vol. 1, Issue 1, June 2025
pp. 28–40

[1]Shaksham Agarwal, [2]Aditi Daftari, [3]Atul Makhariya, [4]Amanuddin Ansari,
[5]Sanya Gupta, [6]Sanket Akkalkote, and [7]Dr. S. Manoharan

KEYWORDS

E-Service Quality, Impulsive Buying Behaviour, Customer Satisfaction, E-Trust, Quick Commerce, Generation Z Consumers

ABSTRACT

This study examines how E-Service Quality (E-SQ) influences impulsive buying behaviour (IBB) among Generation Z in the quick commerce sector by focusing on the mediating roles of two variables - Customer Satisfaction (CS) and E-Trust. Using a quantitative research approach the survey data was collected from 121 Generation Z respondents which would provide a concrete foundation for the analysis. The results shows that E-SQ has a significant influence on IBB through the mediating effects of CS and E-Trust.

Customer satisfaction is the most influential mediator because impulsive behaviour is mostly driven by emotional responses. E-Trust is a weaker mediator but is cognitive in nature by providing consumer confidence in the reliability, security and transparency of the platform which drives impulsive buying. The dual mediation model indicates the complementary interplay between emotional satisfaction and cognitive trust, thus amplifying the overall impact of service quality on impulsive purchases.

The findings of the study are actionable advice for Quick-commerce platforms: personalization, gamification of the shopping interface and safety of the digital space. Besides that, it emphasizes the requirement of ethical marketing, particularly in marketing so that the psychological triggers like urgency and exclusivity to be used so as not to violate consumer trust but to keep consumers engaged. This study provides a framework that helps to better understand the webbed relationships between service quality, trust, satisfaction and impulsive buying, which positions businesses to be better equipped to respond to dynamic consumption preferences in Generation Z while pursuing sustainable growth in long run.

INTRODUCTION

Quick commerce has revolutionized retail practices and emerged as a concrete solution to the increased demand for convenience and instant delivery. Quick commerce is characterized by ultra-fast delivery and user-friendly digital interface. It has become quite popular among GenZ, who are digitally fluent group. They are characterized as being digitally affluent and highly expecting in terms of interface and expectations of frictionless experiences. Genz tends to have an inclination towards personalized interaction through customization. This shift in commerce emphasizes swiftness, accuracy and customized interactions – all factors well within the

[1,2,3,4,5,6]Research Scholar and Student, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.
[7]Associate Professor, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.

scope of GenZ's demand. But in turn, it presents the significant relevance of service quality in determining the buying behaviour and particularly impulsive purchasing with the mediating roles of e-trust and customer satisfaction.

Service quality in Quick-commerce transcends the traditional the conventional aspects of efficiency and reliability by including real-time updates regarding delivery and offers frictionless digital transactions and accurate order fulfilment with personalization through AI. All these aspects determine how a customer perceives the platform and lays down the foundation for trust which is important for engagement and loyalty. For Generation Z service quality is the foundation of their choice-making process and determines the extent to which they trust the platform and if they are satisfied with the general experience and finally if they are indulging in impulsive buying as a way of instant gratification on Quick-commerce platforms. Service quality has become instrumental in the promotion of an environment conducive to these decisions. Genz's impulsive buying is increased by quick commerce' interface that uses advanced technology and strategic tools to engage its customers. Product recommendation using AI, gamified shopping experiences and promotions which are time sensitive are ways in which they create a sense of urgency and excitement. Social media further escalate such behaviour with the utilization of influencer advertisements and marketing strategies personalized to drive prompt purchasing decisions. Unlike purchases that are planned in advance impulsive buying relies mostly on psychological triggers and emotions-driven responses both of which are inflated by the features offered by quick commerce platforms. E-trust and customer satisfaction's mediating roles are crucial to understand the relationship between service quality and impulsive buying behaviour. E-trust refers to customers confidence in platform's reliability, transparency and security. It is very important to foster trust that will in return prompt the customer to buy. Trust eliminates doubt since it gives credence to the website and allows the consumer to access without fear of scam or being frustrated. Satisfaction from the client results from the experience altogether, including the interface usability, delivery speed, and precision. Satisfaction is a strong factor that influences loyalty and continuous purchases thus influences impulsive buying by associating positive emotions with the platform.

The existing studies has underexplored the mediator role of customer satisfaction and e-trust in Quick commerce in driving impulsive buying due to service quality. As for instance, Bressolles *et al*. (2007) study states that customer satisfaction is the major mediator that binds service quality with impulsive buying through positive experiences for consumers. Similarly, Tran *et al*. (2019) also highlights this aspect of e-trust and claims it as a precursor to satisfaction and maintains that trust forms the basis of creating long-term engagement and loyalty. These findings indicate that the relationship between service quality and impulsive buying behaviour is not direct but is instead mediated by the association of trust and satisfaction. Quick commerce platforms that use advanced technologies provides features like real time tracking, personalized suggestions that are driven by AI and gamified shopping

experiences which enhance service quality while simultaneously promoting e-trust and customer satisfaction. Thus, quick commerce is an ideal context to examine such relationships. These elements create a feedback loop where trust enhances satisfaction which in turn encourages impulsive purchases and positive experiences enhance trust. For Gen Z, this seamless integration of technology and service quality aligns with the want for convenience, personalization and engagement thus making them more likely to buy on impulse. However, the use of psychological triggers like time-bound notifications, gamified interactions and AI-generated personalized notifications raises ethical concerns. The use of psychological triggers must be balanced with the transparency of practices by the platforms and customer trust to maintain customer trust in long term.

This paper attempts to analyze the mediating roles of e-trust and customer satisfaction in the relationship between service quality and impulsive buying tendencies among Gen Z consumers in quick commerce. The research will thus add to the advancement of knowledge regarding how service quality, trust, and satisfaction affect impulsive buying behaviours which can assist business operations to keep up with the evolving needs of Gen Z and attain sustainable growth in a competitive marketplace in long run.

LITERATURE REVIEW

Quick commerce has significantly changed consumer behaviour dramatically especially for Gen Z. The unique consumption patterns of this generation highlight the importance of service quality and trust in leading to impulsive buying behaviour. This literature review integrates the available literature and focuses on the role of two mediating variable i.e. e-trust and customer satisfaction in the context of quick commerce in influencing impulsive buying behaviours.

Service Quality and Trust in Quick Commerce

Consistently service quality has played an important role in enhancing customer satisfaction and loyalty across various e-commerce platforms. Sharma and Lijuan (2015) states that the service quality factors such as website usability, intuitive design, and responsive customer service are the ones that majorly influence the perception of customers toward quality. Tran *et al*. (2019) also asserts that trust is a crucial mediator that links the service quality to behaviours through dimensions such as reliability and assurance. In the context of quick commerce, service quality encompasses rapid delivery, order accuracy and seamless digital transactions. Ashiq and Hussain (2024) find that trust mediates service quality and satisfaction by highlighting importance of transparent communication with real-time updates. Further studies also endorse that integrating features such as real-time tracking along with AI-driven customer support will significantly enhance consumer trust and satisfaction. Research from Gulfraz *et al*. (2022) examines the factors of regional variability in digital infrastructure in shaping consumers' perception regarding the reliability of quick commerce. Chen *et al*. (2022) again emphasize that impulsive buying is also increased by innovative marketing strategies in livestreaming e-commerce.

Impulsive Buying Behaviour among Gen Z

Generation Z- the generation for whom technology holds a lot of importance show a strong inclination towards impulsive buying in online purchases as an outcome of delightful and tailored online experiences. Research by Rali (2024) and Lalitha (2021) reveals that pretty interfaces, click-and-play and dynamic advertising messages are strong influencers of impulse-buying. Lina *et al*. (2022) states that impulsive buying behaviour is implied through social media, where various influencers and 'social proofing' mechanisms engage people. Quick commerce platforms use elements like AI-driven product recommendations, gamification elements and loyalty programs to create urgency and engagement. Jois *et al*. (2024) asserts that time-sensitive promotions and personalized suggestions are more likely to increase impulsive purchases especially among Generation Z. Li *et al*. (2022) states that live streaming e-commerce triggers impulsive purchases by providing vivid and immersive consumer experiences.

Psychological and Emotional Factors

Major drivers of impulsive buying behaviours are psychological and emotional states. According to Wang *et al*. (2022), there is elation and fulfillment among some of the emotions that generally increase impulse purchasing decisions substantially. Emotional advertisements and gamification, as shown in Hananto *et al*. (2021), create a sense of depth and immersion while shopping. Ahmad *et al*. (2021) conclude that positive mood and perceived enjoyment significantly mediate the relationship between promotional cues and impulse buying behaviour.

Mediating Roles of E-Trust and Customer Satisfaction

The interaction between e-trust and customer satisfaction is important for understanding the connection between service quality and impulsive buying behaviour. Bressolles *et al*. (2007) states that the influence of service quality on impulsive buying is mediated by customer satisfaction which further emphasizes the importance of positive experiences. Tran *et al*. (2019) extended this framework by showing that trust is a source of building satisfaction which widens the nexus between service quality and purchase-related behaviours. For Quick Commerce the factors that affect impulsive buying are, customer trust in the security, reliability, and responsiveness of the platform facilitates satisfaction. On basis of their study, Kim & Yum (2024) and Wang *et al*. (2022) assert that transparent practices in the process and effective customers support mechanisms are essential for enhancing the above dual mediation process. In this regard, Jois *et al*. (2024) suggest a feedback mechanism for both trust and satisfaction.

Technological and Contextual Influences

Technological innovations are significantly changing quick commerce. Personalization with use of AI, gamified shopping experiences and predictive analytics are essential tools for engaging consumers and promoting impulsive buying behaviour. Kim & Yum (2024) assert that such technologies create frictionless shopping experiences tailored to Generation Z. Mechanisms of social proof such as user-generated reviews and ratings would further reinforce trust and impulsive buying tendencies. Contextual factors which include cultural and regional differences impact how consumers engage with quick commerce platforms. According to Ashiq and Hussain, (2024), there is a need for localized strategies that pertain to unique preferences and trust dynamics across markets. As Narimanfar *et al*., (2022) asserts, the degree of digital literacy will influence adoption and trust in quick commerce platforms across areas. Memon *et al*. have further discussed about the social media marketing strategy and its implications on impulsive behaviour in various cultural markets.

Impact of Social Proof and Gamification

Social proof and gamification elements have severely impacted consumer behaviour in quick commerce. Social proof that also entails peer reviews and ratings that makes the trust of the consumer stronger and amplifies purchasing decisions according to Susanti and Sihombing (2020). Gamification elements like point-based rewards and leaderboards will make the interface competitive and give an engaging environment that would tempt repeated purchases. Tu & Binh (2020) states that it would further impact the effectiveness of gamification in grabbing the attention of Generation Z especially through interactive rewards systems.

Gap Analysis

Despite the significant improvements there is still much to be understood in the context of quick commerce. Existing studies are more focused on traditional e-commerce and do not capture the specific aspect of ultra-fast delivery in quick commerce and its psychological impacts on impulsive buying. In addition, the integration of emerging technologies such as blockchain for enhanced transparency and augmented reality for immersive shopping experiences should be further studied upon. Future studies should explore more on dual mediation model of e-trust and customer satisfaction within diverse cultural and demographic settings especially in emerging economies where quick commerce is being adopted rapidly. Longitudinal designs are required to investigate the influence of long-run impulsive buying behaviour on loyalty and long-run profitability. Ethics of the usage of psychological triggers in quick commerce should be established in a balance between consumer well-being and business goals.

METHODOLOGY

Research Design

This study adopts a descriptive research design in form of cross-sectional survey to analyze the influence of service quality on Generation Z's impulsive buying tendencies in quick commerce. This research explores the dual mediating roles of e-trust and customer satisfaction, highlighting the intricate relationship between these variables. This design integrates the knowledge of earlier literature to study how critical dimensions of service quality—such as speed of delivery, usability of a platform, real-time updates, and AI-driven personalization—build trust and satisfaction and subsequently lead to impulsive buying. This design will resonate with Generation Z's distinct consumption pattern. A group that is known for their high digital literacy and preference for frictionless, easy and swift shopping.

Sample and Sampling Technique

The quantitative research was conducted through online google form where 121 respondents participated, from Gen Z aged 18-28 who are the relevant demographic since they are most engaged with quick commerce platforms. Convenience sampling was utilized to recognise participants with prior experience of using quick commerce platforms. This approach ensured that the respondents were familiar with service quality factors and could provide informed and relevant responses. The eligibility criteria of being a respondent was that they have completed at least one transaction on quick commerce platform to ensure data reliability and relevance to the research objectives.

Data Collection

Data were collected through a structured online survey using Google Forms to measure key variables related to the study. The Google form included the following items:

i. **E-Service Quality (E-SQ):** The questions of this item assessed the aspects such as-platform's ease of usage, order accuracy and personalization through AI. Scales were derived from the article "Continuous Usage Intention in E-Commerce Marketplace Platforms: The Effects of Service Quality, Customer Satisfaction, and Trust". There were 3 questions to measure this item.

ii. **Customer Satisfaction (CS):** In questions of this item participants evaluated their overall satisfaction with the service experiences provided by quick commerce platforms. Scales were derived from the article "Continuous Usage Intention in E-Commerce Marketplace

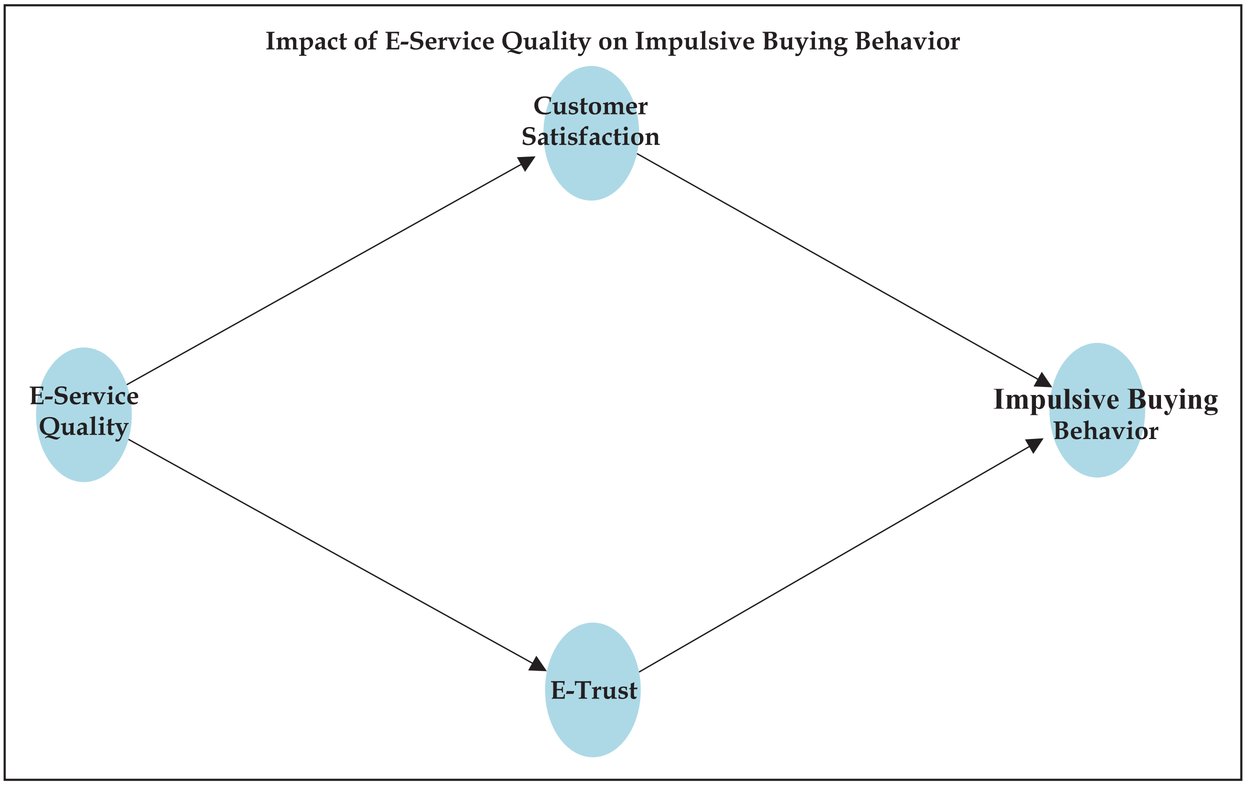


Fig. 1: Impact of E-Service Quality on IBB

Platforms: The Effects of Service Quality, Customer Satisfaction, and Trust". There were 3 questions to measure this item.

iii. **E-Trust:** In questions of this items the confidence in the platform's reliability, prompt resolution, transparency and security was measured to capture the importance of trust. Scales were derived from the article "Continuous Usage Intention in E-Commerce Marketplace Platforms: The Effects of Service Quality, Customer Satisfaction, and Trust". There were 4 questions to measure this item.

iv. **Impulsive Buying Behaviour (IBB):** In questions of this item, effect of unplanned and spontaneous purchasing behaviours influenced by features like time-sensitive offers, gamification, and personalized recommendations on participants was captured. Scales were derived from the article "The Determinants of Impulsive Buying Behavior in Electronic Commerce". There were 2 questions to measure this item.

Each variable was evaluated on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The survey utilized validated scales from pre-existing literature to ensure high reliance and validity of the measures.

Analytical Approach

To address the research objectives, three analytical approaches were employed:

i. **Correlation Analysis:** Correlation Analysis was used to explore the relationships between E-SQ, CS, E-Trust, and IBB, setting the base for understanding variable relationships.

ii. **Regression Analysis:** Regression Analysis was used to assess the direct effects of E-SQ on IBB and the individual contributions of CS and E-Trust.

iii. **Mediation Analysis:** A dual mediation model was used to evaluate the indirect effects of E-SQ on IBB through mediation of CS and E-Trust. Bootstrapping techniques were applied to ensure concrete and precise estimation was derived for mediation effects which would enhance the validity of the findings.

Hypotheses

The following hypotheses were formulated to draw inferences in the research:

i. **H1:** E-Service Quality positively impacts Generation Z's impulsive buying behaviour in quick commerce.

ii. **H2:** E-Service Quality positively impacts customer satisfaction in quick commerce.

iii. **H3:** E-Service Quality positively impacts e-trust in quick commerce.

iv. **H4:** Customer satisfaction acts as a mediating variable between E-Service Quality and impulsive buying behaviour.

v. **H5:** E-Trust acts as a mediating variable between E-Service Quality and impulsive buying behaviour.

vi. **H6:** E-Service Quality impacts impulsive buying behaviour through mediation of two variables i.e. customer satisfaction and e-trust.

Tools and Techniques

The data analysis was conducted using Jamovi (Version 2.6) and R (Version 4.4). Both of these tools facilitate advanced statistical modelling. These tools were useful in performing correlation and regression analysis and in mediation analysis as well. These tools ensured that the findings were concrete and relevant to draw inferences.

RESULTS AND ANALYSIS

Correlation Analysis

The use of a correlation analysis as a statistical technique has been designed to examine the relationship's strength and direction of the interaction between two or more variables. For the current study, this tool has been used in determining the inter-relationship between electronic service quality

Table 1: Correlation Matrix

		E-Service Quality	Customer Satisfaction	E-Trust	Impulsive Buying Behavior
E-Service Quality	Pearson’	—			
	s r				
	df	—			
	p-value	—			
Customer Satisfaction	Pearson’	0.777	—		
	s r				
	df	109	—		
	p-value		—		
E-Trust	Pearson’	0.638	0.705	—	
	s r				
	df	109	109	—	
	p-value	<.001	<.001	—	
Impulsive Buying Behavior	Pearson’	0.510	0.575	0.524	—
	s r				
	df	109	109	109	—
	p-value	<.001	<.001	<.001	—

(E-SQ), customer satisfaction (CS), electronic trust (E-Trust), and impulsive buying behaviour (IBB). This would therefore be very handy in knowing whether these variables interact and how they are related and this would hence give a fundamental base for further statistical modelling and hypothesis. testing.

Results

i. **E-SQ and E-Trust:** The correlation analysis indicates positive and strong correlation ($\rho = 0.638$, $p < 0.001$), suggesting that higher service quality would translate into more trust in the reliability, security and responsiveness of the platform.

ii. **E-SQ and CS:** The Strongest correlation was indicated between service quality and customer satisfaction among the five analyses, showing ($\rho = 0.777$, $p < 0.001$) that the improvement of service quality will be followed by much higher customer satisfaction.

iii. **E-SQ and IBB:** The Analysis demonstrates moderate positive correlation ($\rho = 0.510$, $p < 0.001$), which suggests that though service quality directly influences impulsive buying this effect is controlled by CS and E-Trust.

iv. **E-Trust and IBB:** The analysis reveals moderate positive correlation ($\rho = 0.524$, $p < 0.001$) which therefore underlines the role that trust plays in driving spontaneous purchases.

v. **CS and IBB:** The analysis shows moderate positive correlation ($\rho = 0.575$, $p < 0.001$) that infers that satisfied customers are more likely to engage in impromptu purchases.

Inference

The analysis underlines the fact that E-SQ is essential for building CS and E-Trust and both of them play a critical role in affecting impulsive buying behaviour. These relationships provide the framework for analysing the mediating roles of CS and E-Trust in subsequent analyses.

Regression Analysis

Regression analysis is an essential statistical technique that evaluates the relationship of one or more independent variables with a dependent variable. In this research to evaluate the direct effects of electronic service quality (E-SQ), customer satisfaction (CS) and electronic trust (E-Trust) on impulsive buying behaviour (IBB) regression analysis is conducted. This procedure also allows testing the expected influence of each independent variable thus giving insight into which variable has a larger effect on dependent variable.

Model Summary

i. **Model Fit:** R=0.603, R2=0.363R = 0.603, R^2 = 0.363 (36.3% of the variance in IBB is explained by the predictors).

ii. **Significant Predictors:**

   a. **CS (β = 0.588, p = 0.014):** Customer satisfaction emerged as the strongest predictor of impulsive buying behaviour.

   b. **E-Trust (β = 0.336, p = 0.056):** Trust demonstrated a marginally significant contribution to impulsive buying.

   c. **E-SQ (β = 0.190, p = 0.385):** Service quality's direct effect on IBB was insignificant when the mediators were included.

Inference

The regression results emphasize that CS is the primary driver of impulsive buying behaviour, while E-Trust plays a supportive yet essential role. The insignificance of E-SQ's direct effect underscores the necessity of the mediators, indicating that the influence of service quality operates primarily through satisfaction and trust.

Mediation Analysis

Mediation analysis is a statistical approach used to explore and quantify the indirect effects of an independent variable on a dependent variable through one or more mediating variables. In this study, mediation analysis is employed to examine how electronic service quality (E-SQ) influences impulsive buying behaviour (IBB) indirectly through customer satisfaction (CS) and electronic trust (E-Trust). This approach helps to understand the complex pathways through which E-SQ impacts IBB. Thus, highlighting the roles played by CS and E-Trust as intermediaries.

Mediation Model for Customer Satisfaction

i. **Indirect Effect (β = 0.613, p < 0.001):** CS significantly mediates the relationship between E-SQ and IBB.

ii. **Direct Effect (β = 0.275, p = 0.197):** The direct relationship between E-SQ and IBB becomes insignificant when CS is included as a mediator.

iii. **Total Effect (β = 0.888, p < 0.001):** CS explains a substantial portion of the relationship, reinforcing its critical role.

Table 2: Linear Regression

Model Fit Measures		
Model	*R*	*R^2*
1	0.603	0.363

Note: Models Estimated using Sample Size of N = 111

Model Coefficients - Impulsive Buying Behavior				
Predictor	*Estimated*	*SE*	*t*	*P*
Intercept	1.010	0.594	1.701	0.092
Customer Satisfaction	0.588	0.236	2.498	0.014
E-Trust	0.336	0.174	1.930	0.056
E-Service Quality	0.190	0.218	0.82	0.385

Table 3: Mediation using Mediator Variable as Customer Satisfaction

Mediation Estimates				
Effect	*Estimate*	*SE*	*Z*	*P*
Indirect	0.613	0.172	3.56	<.001
Direct	0.275	0.213	1.29	0.197
Total	0.888	0.142	6.24	<.001

Table 4: Mediation using Mediator Variable as E-Trust

Mediation Estimates				
Effect	*Estimate*	*SE*	*Z*	*P*
Indirect	0.372	0.120	3.09	<.002
Direct	0.516	0.176	2.92	0.003
Total	0.888	0.172	6.24	<.001

Mediation Model for E-Trust

i. **Indirect Effect ($\beta = 0.372$, $p = 0.002$):** E-Trust partially mediates the relationship between E-SQ and IBB.

ii. **Direct Effect ($\beta = 0.516$, $p = 0.003$):** E-SQ retains some direct influence on IBB when mediated by E-Trust.

iii. **Total Effect ($\beta = 0.888$, $p < 0.001$):** E-Trust contributes significantly but to a lesser extent than CS.

Inference

CS is a more significant mediator compared to E-Trust, suggesting that emotional satisfaction has a stronger impact on impulsive buying than cognitive trust. However, both mediators independently contribute, highlighting the dual pathways through which service quality influences impulsive behaviour.

Hypothesis Testing

Hypothesis testing is a fundamental statistical approach used to evaluate the validity of proposed relationships between variables in a research study. To analyse the data, hypothesis testing is conducted that would assess the relationships between electronic service quality (E-SQ), customer satisfaction (CS), electronic trust (E-Trust) and impulsive buying behaviour (IBB). This involves careful examination of the formulated hypotheses to determine whether the observed data provides sufficient evidence to accept or reject them.

i. **H1:** E-SQ positively impacts IBB: The hypothesis is not rejected. The hypothesis is supported indirectly through mediation ($\beta = 0.613$ for CS and $\beta = 0.372$ for E-Trust). This confirms that E-SQ significantly impacts IBB via mediated pathways through CS and E-Trust.

ii. **H2:** E-SQ positively affects CS: The hypothesis is not rejected. The hypothesis is supported ($\rho = 0.777$, $p < 0.001$), indicating that E-SQ directly enhances customer satisfaction, which plays a pivotal role in driving consumer behaviour.

iii. **H3:** E-SQ positively affects E-Trust: The hypothesis is not rejected. The hypothesis is supported ($\rho = 0.638$, $p < 0.001$). Improved service quality builds trust in the platform's security, reliability, and transparency, essential for impulsive purchases.

iv. **H4:** CS mediates the relationship between E-SQ and IBB: The hypothesis is not rejected. The hypothesis is supported ($\beta = 0.613$, $p < 0.001$), showing that customer satisfaction fully mediates the relationship between E-SQ and impulsive buying behaviour, making CS a crucial emotional driver.

v. **H5:** E-Trust mediates the relationship between E-SQ and IBB: The hypothesis is not rejected. The hypothesis is supported ($\beta = 0.372$, $p = 0.002$). E-Trust plays a significant role as a cognitive mediator, enabling impulsive buying by instilling confidence and reducing hesitation.

vi. **H6:** E-SQ influences IBB through the dual mediation of CS and E-Trust: The hypothesis is not rejected. The hypothesis is supported. The total effect of E-SQ on IBB ($\beta = 0.888$, $p < 0.001$) is primarily explained by the dual mediation of CS and E-Trust, reinforcing the intertwined roles of emotional and cognitive mediators in shaping impulsive behaviour.

DISCUSSIONS

Service Quality as foundation

The analysis strongly infers that the fact that E-Service Quality (E-SQ) forms the foundation for driving customer satisfaction (CS) and e-trust, in turn influencing impulsive buying behaviour (IBB). Robust correlations of E-SQ with mediators indicate the important role of quality service attributes like real-time updates, error-free transactions, and AI-driven personalization in meeting the high expectations of Generation Z while also exceeding those expectations to foster both trust and satisfaction.

Customer Satisfaction as a Key Driver

Customer Satisfaction was the most significant mediator, which proved to be a key driver in influencing impulsive buying. The results highlighted that satisfied customers are more likely to make unplanned purchases because of the positive emotional associations they have with the platform. Quick commerce platforms should realize that satisfaction is not an outcome but a dynamic factor in driving consumer behaviour. Investments to deliver seamless user experiences, speedy resolutions, and service delivery consistently enhance satisfaction and make the customers more prone to impulse buying.

E-Trust as a Cognitive Mediator

E-Trust, though a little weaker than CS as a mediator, is essential in building consumer confidence. Trust ensures the reliability, security, and transparency of the platform, thus reducing hesitation and increasing transactions. The analysis shows that trust acts as a cognitive factor, supplementing the emotional influence of satisfaction. For platforms that seek to obtain long-term loyalty and consistent engagement of customers on the platform there is a need for trust-building initiatives like secure payment gateways, transparent policies and prompt customer support.

Dual Mediation: Emotional and Cognitive Pathways:

The dual mediation model infers that both CS and E-Trust separately contribute to the relationship between E-SQ and IBB, while CS leads to impulsive buying through the help of emotional satisfaction, E-Trust uses factors like cognitive assurance to increase the chances of spontaneous purchases. This dual relation emphasizes that there is a need for balanced approach where both emotional triggers and cognitive reassurances to be taken into consideration by the platforms to enhance impulsive buying tendencies.

Implications for Generation Z

The results of the analysis highlight the unique consumption habits of Gen Z, which is influenced by high digital fluency and demand for instant gratification. GenZ's susceptibility towards impulsive purchases is increased by gamified interactions in quick commerce's interface, time-sensitive offers, and AI-driven suggestions. These factors are in line with Generation Z's expectations in terms of convenience and personalization, making this demographic an attractive target for quick commerce.

The Role of Psychological Triggers

Psychological triggers like urgency, exclusivity and personalization would drive impulsive buying behaviours and thus, quick commerce platforms take advantage of these triggers by providing real-time notifications, gamified shopping experiences and influencer endorsements. While these are effective in driving impulsive buying the ethical implications of these strategies must be carefully taken into consideration. Transparency in marketing practices of such commerce and the responsible use of psychological tools must be ensured for maintaining trust of the consumer and future sustainable growth.

RECOMMENDATIONS FOR PLATFORMS

i. **Ways to Emotional Engagement:** Strategies to improve customer experience, such as loyalty programs, personalized recommendations, and gamified shopping experiences increases emotional engagement.

ii. **Creation of Cognitive Trust:** Development of features like secure payment systems, real-time tracking and transparent policies would strengthen consumer confidence in the platform.

iii. **Utilize AI and Technology:** Apply AI for the provision of personalized shopping experiences, predictive analytics, and real-time assistance, which resonate with the tastes of Generation Z.

iv. **Ethical Marketing Practices:** Avoid overuse of psychological triggers to prevent consumer fatigue or mistrust. Platforms should adopt balanced approaches that prioritize consumer well-being while achieving business goals.

v. **Long-Term Implications:** The results establish that creating satisfaction and trust helps drive impulsive purchasing behaviour and lays a foundation for customer loyalty. Companies that manage to satisfy both the emotional and cognitive needs of their consumers are in a better position for long-term growth in an increasingly competitive marketplace. The Quick commerce business will need to expand their strategies to adopt transparency initiatives to serve diverse consumer preferences of GenZ.

CONCLUSION

The findings of this research highlight the significant role of E-Service Quality (E-SQ) in shaping impulsive buying behaviour (IBB) among Generation Z in quick commerce. By examining the mediating roles of the two mediators Customer Satisfaction (CS) and E-Trust, this study sheds light on the intricate interplay of emotional and cognitive pathways that drive consumer behaviour in this digitally-driven era.

Firstly, the study infers that service quality is the factor that forms the basis of customer interaction with quick commerce. Features such as real-time tracking and personalization using AI are crucial for the high expectations standards of Generation Z, which in turn leads to trust and satisfaction. The correlation and regression analyses conducted highlights it even further that though E-SQ directly impacts IBB but the impact is significantly increased through the mediation of CS and E-Trust.

Customer Satisfaction is the strongest factor influencing impulsive buying which indicates that the platform needs to create positive emotional associations which would in turn lead to impulsive buying. Satisfied customers are more likely to make impromptu purchases, which again indicates the need for frictionless user interface, personalization and efficient service experience. E-Trust backs this by increasing confidence in the reliability and security of the platform which would reduce hesitation and enable impulsive transactions. The dual mediation model presents a balanced relationship that is at the same time connected, in which CS triggers impulsive buying by emotional engagement while E-Trust adds a layer of cognitive assurance. This duality highlights the need to target both emotional and cognitive triggers in order to increase consumer engagement and purchase behaviour.

This provides the actionable strategy for the quick commerce platforms to target the Generation Z segment effectively. Businesses can design a holistic experience that resonates with the consumer through gamification, AI-driven personalization, secure payment systems, and ethical marketing practices by using psychological triggers like urgency and exclusivity to reach this target market's convenience, immediacy, and personalization preferences. The ethical implication of using these psychological triggers for urgency and exclusivity must be well managed so that consumer trust is maintained in the long run. The study will therefore significantly contribute to the knowledge on how service quality, trust, and satisfaction impact impulsive buying behaviours in quick commerce. As such, the unique consumption patterns of Generation Z will allow quick commerce platforms not only to push impulsive purchases but also foster customer loyalty and sustainable growth in a competitive marketplace. These findings will form a robust basis for future research and practical application, ensuring quick commerce remains an industry that continues to be dynamic and consumer-centric.

REFERENCES

4. Sharma, R., & Lijuan, W. (2015). Website usability, design, and customer loyalty. Journal of Retail and Consumer Services.
5. Tran, V.D., & Vu, Q.H. (2019). Inspecting the relationship among e-service quality, e-trust, e-customer satisfaction, and behavioral intentions. Global Business & Finance Review, 24(3), 29-42.
6. Ashiq, R., & Hussain, A. (2024). Exploring the effects of e-service quality and e-trust on consumers' e-satisfaction and e-loyalty: Insights from online shoppers in Pakistan. Journal of Electronic Business & Digital Economics, 3(2), 117-141.
7. Rali, P. (2024). Digital engagement and impulsive buying among Generation Z. E-Commerce Studies Journal.
8. Lalitha, K. (2021). Interactive platforms and impulsive buying: A study on Gen Z. Marketing Insights Quarterly.
9. Lina, J., Yum, K., & Han, Y. (2022). The role of social proof in digital commerce. Asia-Pacific Journal of E-Commerce Research.
10. Jois, S.M., Pawar, A.S., & Santhosh, M. (2024). Impulse buying behavior in e-commerce: Factors influencing spontaneous purchases. International Journal for Multidisciplinary Research, 6(4).
11. Wang, H., Chen, Y., & Li, J. (2022). Psychological triggers of impulsive buying: Evidence from digital platforms. Behavioral Economics Review.
12. Bressolles, G., Durrieu, F., & Senecal, S. (2007). The impact of e-service quality on consumer behavior. International Journal of Electronic Commerce.
13. Hananto, A.T. (2021). Emotional appeals in gamified shopping environments. Journal of Digital Marketing Strategies.
14. Kim, Y., & Yum, H. (2024). Technological enablers of customer satisfaction in quick commerce. E-Commerce Innovation Journal.
15. Narimanfar, S., & Ashtiani, P.G. (2022). Investigating the impact of website features on online impulse buying behavior. Digital Marketing Journal.
16. Susanti, E.S., & Sihombing, I. (2020). Social commerce and impulsive buying behavior on Instagram. Internet Marketing and Advertising Review.
17. Gulfraz, M.B., & Sufyan, M. (2022). Understanding the impact of online customers' shopping experience on impulsive buying. Journal of Retailing and Consumer Services.
18. Hananto, A.T., & Wiranata, A. (2021). Gamification and its influence on e-commerce buyer behavior. Journal of E-Commerce Psychology.
19. Ahmad, M.B., Ali, H.F., & Malik, M. S. (2021). Positive mood and impulsive buying behavior: An empirical study. Turkish Journal of Computer and Mathematics Education.
20. Chen, B., Wang, L., & Rasool, H. (2022). Marketing strategies and impulsive purchases in livestreaming e-commerce. Frontiers in Psychology.
21. Li, M., Wang, Q., & Cao, Y. (2022). Understanding online impulsive buying in live streaming e-commerce: A SOR framework. International Journal of Environmental Research and Public Health.
22. Memon, R.H., Kazi, A.G., & Zubedi, M.Y. (2022). Social media and impulsive buying behavior. International Journal of Entrepreneurial Research.
23. Tu, T.T., & Binh, N.T. (2020). Gamification's impact on Gen Z's online impulsive buying intentions. International Conference on Business Based on Digital Platforms.
24. The jamovi project (2024). jamovi (Version 2.6) [Computer Software]. Retrieved from https://www.jamovi.org.
25. R Core Team (2024). R: A Language and environment for statistical computing (Version 4.4) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from CRAN snapshot 2024-08-07).
26. Hananto, A.T., & Setiawan, D. (2023). Ethical implications of psychological triggers in quick commerce. Journal of Consumer Ethics.
27. Malik, R., & Sharma, P. (2023). The integration of AI in personalized shopping experiences. International Journal of Artificial Intelligence in Commerce.

28. Singh, A., & Verma, R. (2023). The interplay of social proof and gamification in e-commerce. Digital Economy Research.
29. Yadav, K., & Bose, R. (2023). Emerging trends in Generation Z's shopping behaviors: Implications for quick commerce. Journal of Digital Consumer Behavior.
30. Kumar, A., & Gupta, S. (2022). Role of perceived value in shaping online impulsive buying: An empirical investigation. Journal of Internet Marketing Research.
31. Zhang, X., & Liu, P. (2023). The impact of mobile commerce platforms on consumer trust and loyalty. Journal of Mobile Computing and Business Studies.
32. Park, H.J., & Choi, S. (2023). How gamified promotions influence impulsive buying: Evidence from e-commerce platforms. Behavioral Economics and Marketing Insights.
33. Patel, N., & Bhardwaj, A. (2023). E-service quality and its implications for Gen Z consumers in the digital marketplace. International Journal of Consumer Studies.
34. Wong, K.M., & Tan, S.L. (2023). Digital loyalty programs and their role in customer retention for quick commerce. Journal of Digital Business Strategies.
35. Rahman, S., & Khan, M. (2022). The intersection of social media influencers and impulsive buying behaviors in quick commerce. Social Media Research and Applications.

APPENDIX

Questionnaire (Items are measured on Linkert scale)

E-Service Quality

i. Overall, my purchase experience with the platform is excellent.
ii. It is easy to do what I want to do on the platform
iii. Using the platform makes me more effective at completing my task.

Customer Satisfaction

i. I enjoy using the platform.
ii. I am very satisfied with the service of the platform.
iii. I am happy with the platform.

E-Trust

i. If the platform makes a claim or promise about its service, I trust that it is truthful.
ii. I trust the platform to protect my personal information and ensure security.
iii. Based on my experience, I consider the platform to be highly reliable.

Impulsive Buying

i. I ended up spending more money than I originally set out to spend.
ii. I bought more than I had planned to buy.

Implementation of Circular Economy Principles in Food Value Chain

WeSchool
Management Review
A National, Peer Reviewed
(Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)

Vol. 1, Issue 1, June 2025
pp. 41–49

[1]Bhosale Sandesh Somnath, [2]Atin Verma, [3]Poorva Girish Hingne, [4]Nikhil, [5]Mayura Nandan M.R., [6]Gorhe Kartik Hemant, and [7]Dr. R.A. Dakshina Murthy

KEYWORDS

Sustainable supply chains, Circular economy, Food Logistics, Blockchain and IoT, Resource efficiency

ABSTRACT

The food supply chain faces significant challenges related to sustainability, including environmental degradation, resource inefficiencies, and food waste. This study investigates the integration of circular economy principles with advanced analytics and automated systems to transform food logistics. By improving resource efficiency and optimizing food waste management, these approaches enable the development of resilient, transparent, and sustainable supply chains. The research utilizes Total Interpretive Structural Modelling (TISM) to identify critical drivers and dependencies, providing practical insights into overcoming barriers such as adoption costs, regulatory challenges, and cultural resistance. The study emphasizes the importance of collaborative frameworks, stakeholder engagement, and policy interventions to scale circular practices effectively within global supply chains. By addressing gaps in existing literature, this paper outlines strategic pathways for embedding circularity and sustainability into food systems. It provides a roadmap for industry stakeholders and policymakers to achieve operational efficiency and long-term resilience through innovative resource management and systematic improvements in supply chain processes.

INTRODUCTION

Supply chain sustainability has become important mainly due to various environmental hegemonic threats as well as socio-economic issues in today's world. Prominent global challenges have been met through the integration of the economic, environmental, social objectives; predominantly within the food supply chain. The main objective of SSCM is the management of the three dimensions with regards to greenhouse gas emissions, optimisation of food waste and resource recycling. New socio-technical paradigms such as circular economy models, supported by sustainability principles present a new way of dealing with these challenges while at the same time encouraging efficiency and adaptation within the economy. Nozari & Aliahmadi, (2023) The findings indicate that it is possible for firms to achieve operational efficiency, lower transaction costs and strengthen their supply chain relationships as a way of dealing with failures in markets and supply chain networks. Kline *et al*., (2016)

Industry 4.0 solutions such as blockchain, IoT and big data have changed the entire supply chain landscape. These innovations help in enhancing the visibility of the foods, their origin and workflow thus solving some health and technology challenges including the perishability of food supply chains. Gomes *et al*., (2024) These tools are unique in solving the difficult problems of the food industry which

[1,2,3,4,5,6]Research Scholar and Student, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.
[7]Associate Dean-Operation, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.

requires preciseness and speed. However, there are still challenges including technological adoption, cost considerations, and regulation barriers that remains a hindrance to the achievement of ideal use of these technologies in sustainable supply chain-management models Quiroz-Flores *et al.*, (2024); Zou *et al.*, (2022).

Despite the well-established theoretical advantages of sustainability and Industry 4.0 practices, there is limited scholarly evidence of these concepts in urban food systems and agri-food value chains. Ada *et al.*, (2023) There is a need to understand transition mechanisms and barriers and enablers of applying circular economy models into global supply networks. Another research avenue suggests a call for a new knowledge framework that anticipate the relationship between sustainability and technological advancements of supply chain management.

This work seeks to fill these gaps by bringing together relevant findings from the current literature on sustainability, circular economy, and novel technology in food supply chains. They include a list of challenges for building more sustainable supply chain management, and ways in which such sustainable supply chain management can be encouraged to enhance sustainability objectives in the long run. The work also aims to present useful insights for the stakeholders and the policymakers working on turning the overall supply chain strategies into sound, coherent and resilient across industries.

LITERATURE REVIEW

Combined, the studies under review focus on the relations between sustainability and circular economy in multiple industries due to advancements in technologies and best-shared solutions. Madani *et al.*, (2024) One of the extensive and widely cited sources, titled in full "A Systematic Review of Sustainability" presents the analysis of sustainability indicating its contingency upon standards and regulations, cultural adoption of sustainability practices, as well as their financial viability. For this reason, this paper highlights the need to implement systemic changes in supply chains to facilitate improvement of environmental, social, and economic performances. Nozari & Aliahmadi, (2023) Further discussion is given to technology and collaboration as the enablers of circularity but impaired by the need for improved circular management to address barriers outlined in the "Refinement of Critical Success Factors Analysis". The second sub concept "Culture and Identity in a Localized Food Systems" introduces culture as an influence for localized food systems and relates the concept with urbanization patterns and consumers' habits.

Gomes *et al.*, (2024) is cantered on the regulatory and legal issues, yet once again explaining how the adherence to environmental legislations leads to the establishment of sustainable supply chain management systems. It also explains how design development procedures help in enhancing the interest of all stakeholders. Zou *et al.*, (2022) This is supported by "Designing an Urban Food System" which focuses on the management and knowledge sharing frameworks for food circularity especially in culture and more specifically as an urban issue. Quiroz-Flores *et al.*, (2024) The article "Industry 4.0 and circular Economy" reveals the four major technological advancements, which include IoT, blockchain, AI, in offering opportunities in the supply chain integration and improvement, better transparency coupled with the reduction of wastage.

Bezat-Jarzębowska *et al.*, (2024) contributes to narrowing the gap between sustainability and supply chain integration, describing how organizational cooperation among supply chain members results in effective and resilient chains. It also designates that economic solutions and technological enablers are crucial for integration to be effective. Ahmed *et al.*, (2024) focuses on the problem of knowledge sharing in order to decrease the supply chain complexity and move towards circular systems through the utilization of technologies and networks. The analysis presented in the article "Sustainability Challenges and Barriers" points at financial and cultural barriers to sustainability, noting that these can be only addressed by new systemic solutions and changes to the behaviour of both buyers and manufacturers. Finally, Rejeb & Appolloni, (2022) builds upon the other factors and concludes that Industry 4.0 is the convergence of sustainable practices, supply chain relations, and collaborative management approaches.

Table 1

Barriers	**Description**	**References**
Sustainability Barrier	However, decision makers find it difficult to transition from the traditional linear practices towards FVC sustainability because it imposes a massive alteration of processes, and involves capital intensive strategies. Excessive initial investments and relatively high risks to future-oriented effectiveness, hampering the implementation of circular measures	(Bezat-Jarzębowska *et al.*, 2024; Madani *et al.*, 2024; Pannila *et al.*, 2022; Quiroz-Flores *et al.*, 2024)
Cultural Barrier	Perception towards circular practices is determined by cultural customer and consumption practices. Clothing reluctance to accept food products that were "recycled" or "upcycled" and skepticism over new systems can reduce market for those products and discourage businesses from using circular systems. 3, 5, 9	(Kline *et al.*, 2016; Pannila *et al.*, 2022; Zou *et al.*, 2022)
Finance Barries	In some cases, circular solutions based technologies like Waste-to-Value are known to be capital-intensive. Small businesses suffer from limited access to investment and high risk; further, unpredictability of returns further dissuades a transition away from linear models, thus preventing circular take-up in FVC.	(Bezat-Jarzębowska *et al.*, 2024; Madani *et al.*, 2024; Pannila *et al.*, 2022)
Legal and Regulatory Barrier	Ambiguity in correctly regulating food safety, waste, and environmental compliance issues are the challenges that affect circular principles. Lack of professionalism, quasi stand-still or even regression in circular transitions derive from inconsistent enforcement of legislation as well as absence of supportive policy frameworks.	(Gomes *et al.*, 2024; Madani *et al.*, 2024; Pannila *et al.*, 2022)
Technology Barrier	Industry 4.0 tool (IoT, AI, blockchain) increase the traceability and resource efficiency but require the higher capital investment, technology skills and integration across the FVC. Absence and low level of digital skills prevent the achievement of circularity.	(Ahmed *et al.*, 2024; Quiroz-Flores *et al.*, 2024; Rejeb & Appolloni, 2022)
Supply Chain Integration Barrier	It means that circularity must have links between farmers, processors, retailers, and consumers in the smoothest way possible. Weak networks, lack of trust, and insufficient reverse logistics infrastructure prevent the pursuit of new material loop concepts and the scaling of circular approaches more broadly.	(Bezat-Jarzębowska *et al.*, 2024; Madani *et al.*, 2024; Rejeb & Appolloni, 2022)
Knowledge Barrier	Lack of awareness, knowledge and experience, and inadequate communication and practice sharing of circular principles hamper widespread implementation. In the transformation towards circular economy, programme stakeholders may fail to consider opportunities in identified opportunities or misuse available tools, resulting in losses in the move towards circular economy.	(Ahmed *et al.*, 2024; Pannila *et al.*, 2022; Quiroz-Flores *et al.*, 2024)
Management Barrier	Change management is an arduous process due to organisational reluctance where employees and businesses focus more on react to current issues instead of adequately planning for the future. There is often insufficient internal circularity policy and performance regulation, which results in a delay in matching circularity goals and sustainable business patterns.	(Bezat-Jarzębowska *et al.*, 2024; Quiroz-Flores *et al.*, 2024; Zou *et al.*, 2022)
Collaboration Barrier	Proper circular projects depend upon the public and private sectors as well as cross-sectoral collaboration to pull, bargain, distribute, and manage resources and raw data as well as assume hazards. This leads to the concept of limited cooperation and competition as overlapping objectives, which restrict the effectiveness of circular innovations.	(Gomes *et al.*, 2024; Madani *et al.*, 2024; Rejeb & Appolloni, 2022)

In conclusion, the files offer a comprehensive and coherent system of how sustainability is viewed and managed where legal and regulatory requirements contribute to the top ecological culture change, economic means define the constructiveness of the task, and cultural factors define how innovative the task is. This shows that technology especially, Industry 4.0 is the driver of knowledge sharing, collaboration and supply chain integration, whereas management and stakeholder engagement ownership of objectives achieved the appropriate alignment. The synthesis also underlines coordinated management of these factors for solving global sustainability issues. Ruben & Varthanan, (2019)

METHODOLOGY

Total Interpretive Structural Modelling (TISM) is a structural technique that provides the framework that describes the interrelationships of variables that define a system. The approach extends ISM by employing expert judgment and even more interpretive logic than is traditionally used for modelling complex systems. TISM offers a clear structure, which when used sorts variables based on driving power and dependence, and thus helps in decision making. In this study, TISM is used to identify the dependency structure between the factors affecting circular economy implementation in the food value chain. This makes it possible for the researchers to manage the important variables – the drivers – while dealing with the dependent variables or outcomes in the most suitable manner possible. Thus, unlike the majority of frameworks, which do not provide a set of practical recommendations, the TISM, with the help of constructing the hierarchical digraph model generates effective strategies to improve the results in the food value chain.

TISM Analysis

The TISM analysis described in the document gives a step-by-step clear picture of how the interrelation among system factors can be systematically planned and organized. TISM process starts with the operation of an Initial Reachability Matrix forming a core of the TISM process. The left part of this matrix contains rows and columns with labels A1 through A8, where number "1" means that there is a direct positive relationship between the two factors, while number "0" means no positive relationship. Another important fact in this stage is the great number of elements in diagonal '1', which means corresponding components migrates and depend on themselves or some parameters. In particular, some of them are selected as strongly connected relationships A4 → A5 and A5 → A6 that implies the existence of a threshold effect inside the system. It also presents the simplest framework of relations out of which further analysis of the form can proceed.

The next step thus involves Hierarchical Structuring in which the reachability and antecedent sets obtained from the initial matrix is used to identify sequential levels of dependence among factors. The factors such as A1, A7 & A8 are at level one and the least dependent on other elements. While Factors A2 and A3 stand in between dependency and influence levels. At the game's top, we identify A5 and A6 as the most sensitive and interdependent essential factors that affect several subsystems. As indicated by this hierarchy structure, the higher in the hierarchy structure is a factor the more dependent and complex that factor is, underscore that disruption in top level factors such as A5 and A6 system has a ripple effect

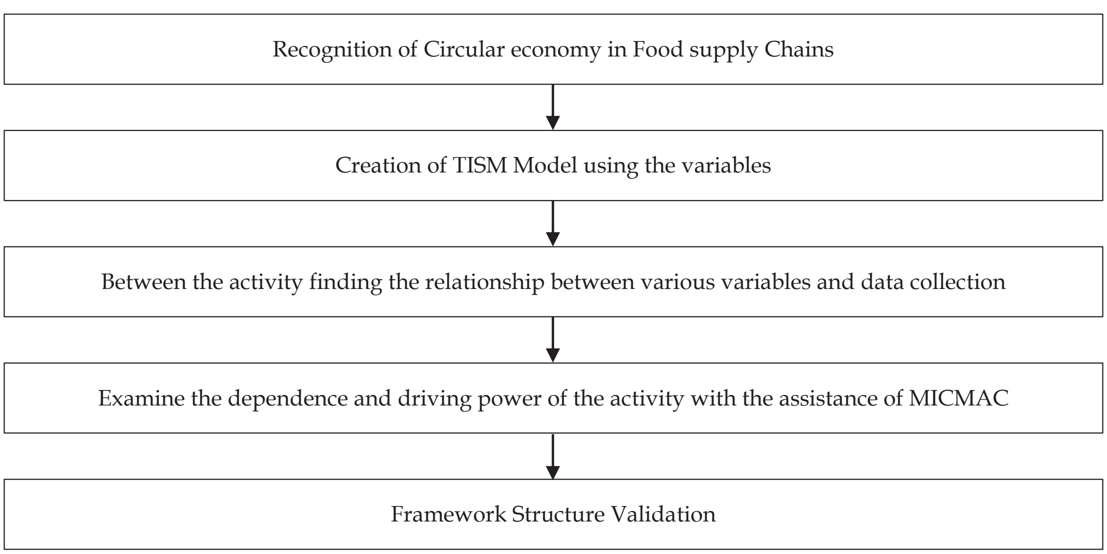


Fig. 1: Suggested Framework for the Paper (Bathrinath *et al.*, 2020)

Table 2: Initial Reachability Matrix

Barriers	Sustai-nability	Cultural	Financial	Legal and Regulatory	Techno-Logical	Lack of Knowledge	Supply chain Integration	Mangement and Collaboration Issues
Sustainability	1	0	0	0	0	0	0	0
Cultural	1	1	1	1	1	1	1	1
Financial	1	1	1	1	1	1	1	1
Legal and regulatory	0	0	0	1	0	0	0	0
Technological	0	0	0	0	1	0	0	0
Lack of knowledge	1	1	1	1	1	1	1	1
Supply chain integration	1	1	1	1	1	1	1	1
Management and collaboration issues	1	1	1	1	1	1	1	1

Table 3: Final Reachability Matrix (Ruben & Varthanan, 2019)

Barriers	A1	A2	A3	A4	A5	A6	A7	A8	Driving power
A1	1	0	0	0	0	0	0	0	1
A2	1	1	0	0	0	0	0	0	2
A3	1	1	1	0	0	0	0	0	3
A4	1	1	1	1	0	0	0	0	4
A5	1	1	1	1	1	0	0	0	5
A6	0	0	1	1	1	1	0	0	4
A7	0	0	0	0	0	0	1	0	1
A8	0	0	0	0	0	0	0	1	1
Dependence power	5	4	4	3	2	1	1	1	

Table 4: TISM Hierarchical Structure

Variable_Name	Reachability_Set	Antecedents_Set	Level
A1	A1	A1 A2 A3 A4 A5	1
A7	A7	A7	
A8	A8	A8	
Variable_Name	Reachability_Set	Antecedents_Set	Level
A2	A2	A2 A3 A4 A5	2
Variable_Name	Reachability_Set	Antecedents_Set	Level
A3	A3	A3 A4 A5 A6	3
Variable_Name	Reachability_Set	Antecedents_Set	Level
A4	A4	A4 A5 A6	4
Variable_Name	Reachability_Set	Antecedents_Set	Level
A5	A5	A5 A6	5
Variable_Name	Reachability_Set	Antecedents_Set	Level
A6	A6	A6	6

to the whole system. These critical factors require scrutinization owing to their superordinate control.

The Driving and Dependence Power Matrix goes one step further to give numerical values to the driving and dependence factors giving a quantitative outlook to their function in the system. Driving power, obtained from the sum of a factor's row values, identifies the ability of a fact to drive other factors. For example, the High driving power factor, established under Factor A5, is described as a system carrying scope with an ability to navigate interrelations and consequences. On the other hand, the dependence power obtained from the sum of the values in a factor's column underlines the receptiveness or the dependence of the factor with the others. Factor A6 is correlated to the existence of high levels of dependence power that are seen as a weakness and that must rely on other factors to operate effectively. These dependencies of the drivers with their dependents show certain dynamics of the system and some components which are driving force and some are dependent on them are identified here as A5 driving force and A6 dependent on that force hence need support and control.

The last step in this process is Contextual Factors Mapping which shows how TISM principles can also apply to other practicalities such practicality, sustainability and contextual, cultural and financial implications. A reachability matrix is developed to show the interrelation or linkage between these contextual factors to illustrate the application of theoretical concepts in practice. For example, in the correlation visibility matrix, "Sustainability" is connected with "Cultural," indicating that cultural forces determine sustainable actions. Likewise, Lack of Knowledge with Supply Chain Integration shows that informational asymmetry hinders operational integration. Among them, "Management and Collaboration Issues" appear as the key aspect, which includes several types of dependencies and can become critical barriers to system integration. This stage help in situating the theoretical propositions in real life settings; the efficiency of TISM in handling diverse and composite problem areas is thus underscored.

In sum, the TISM analysis In the document provides a rich synthesis of system dynamics. It provides a methodical and systematic way of identifying, analyzing interdependencies, simultaneous structuring, the controlling influence and dependency of factors. In the PDF analysis, integration of theoretical implication with practical issues through contextual map also supports the findings of TISM's usefulness in real-world. Drivers like A5 form the basis of the systems and present critical direction on the outcome, while highly depended factors like A6 indicate areas that need strategic considerations in order to avoid regions of risk. This combined framework of tools and techniques applies logically designed mathematical models by integrating them with complex large-scale systems and presents rich opportunities for strategy formulation and problem solving.

MICMAC Analysis

The provided diagram is known as MICMAC (Matrix of Cross-Impact Multiplications Applied to Classification) analysis that sorts raw variables in terms of Driving Power on the vertical axis and Dependence Power on the horizontal axis. Driving Power calculates the extent to which a variable impacts others while Dependence Power determines the extent to which a given variable impacts it by others. These variables are classified into four quadrants: They are; Autonomous, Dependent, Driving, and Linkage that play important roles in the description of the operating system. Sandbhor & Khanum, (2020)

Autonomous Quadrant (IV) has variables A7 and A8 showing small Driving Force and Dependence Power. These variables are only least significant in the context and, in their turn, are least affected by the remaining of the system. They are not that useful when it comes to strategic decisions except when the components hold relevance to context. These variables are A1, A2 found in the Dependent Quadrant where Dependence Power is high but the Driving Power is comparatively low. These are variable that are likely to respond or change to driving or linkage variables and in many cases their

Table 5: MICMAC Analysis

Barriers	Cateory	Driving Power	Dependence Power
Sustainability	A1	1	5
cultural	A2	2	4
Financial	A3	3	4
Legal and regulatory	A4	4	3
Technological	A5	5	2
Lack of knowledge	A6	4	1
Supply chain integration	A7	1	1
Management and Collaboration issues	A8	1	1

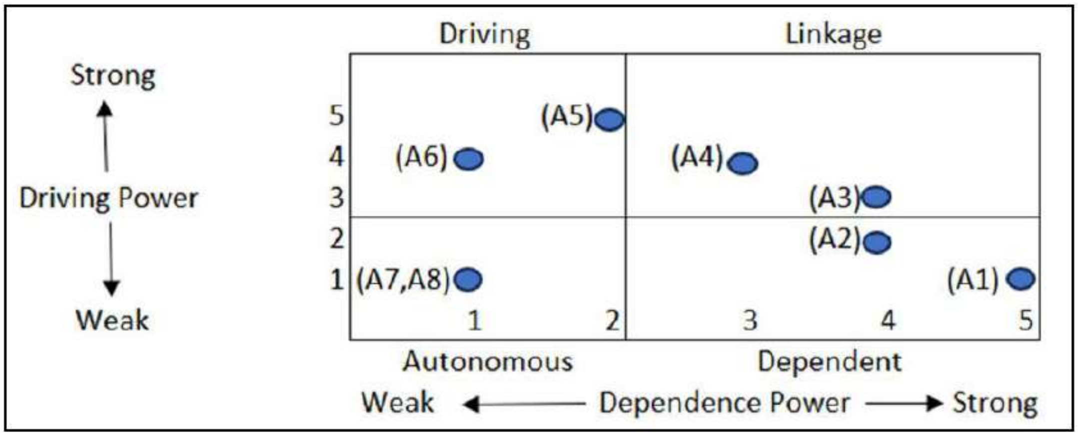


Fig. 2: Plotted Graph of MICMAC Analysis

changes are greatly amplified. Even though they don't clearly play a role of key influencers, they still depend on others and therefore are best managed to avoid avenge effects.

The variables A5 and A6 belong to the Driving Quadrant since they possess high Driving Power and low Dependence Power. They are first-order factors in the system because, though they affect most other factors, they are not as affected themselves. These driving variables are important for strategic interventions and should form an important part of decision making. Lastly, the Linkage Quadrant comprising of variables A3 & A4 showed high analysis on both Driving Power and Dependence Power. These variables are strongly interdependent, which forms positive feedbacks and protracted oscillation of equilibration within the system. Being both influencers and influenced makes them vulnerable to oscillations and needs constant supervision and control to maintain systems stability.

Based on the RCM analysis carried out above, it can be seen that strategic drivers such as A5 and A6 need to be given priority for optimization because change in the value of these variables will trigger changes in other variables. Equity linkage variables A3 and A4 are important since they are interrelated and enable the restoration of the system. The measurement of dependent variables, A1 & A2, should be evaluated regarding the possibility that these indicate features outside the organization liable to exacerbation, while the appraisal of autonomous variables A7 & A8 can typically be dismissed unless directly pertinent to the research environment. This classification proven to be very helpful for interdependencies' analysis within the system, as it defines where an emphasis should be made and which resources should be allocated. As for beneficial uses, it is used in this paper to explicate a number of related research frameworks that oneself utilizes for understanding systems such as supply chains, business level strategies, or policy designs. It," is how variables transact within these four quadrants that allow researchers to find ways on how to perform better, avoid or minimize risks that can take place; as well as create better strategies for decision-making processes.

MANAGERIAL IMPLICATIONS

For circular economy business models to be applied successfully in food supply chains; the adoption of four-point strategy in Industry 4.0 technologies for managers is imperative. Using advanced systems like the block chain system, IOT system and big data analysis is paramount helping to enhancing the traceability and cutting on wastage and redundancy of the available resources. The management needs to facilitate stakeholdership sustainably with suppliers, distributors, and the government to ensure sustainability policy is achieved, legal requirements met, and supply chain management improved. Further still, applying circular economy measures inherently involves implementation that fits the culture and market of a specific locality by considering the consumers and resources available in that market. But most importantly, it gets crucial to deal with the regulations and in erecting the policy frameworks that encourage fussadness. Education and learning development efforts allow corporate employees and partners enhance their ability and knowledge in dealing with cultural resistance and other technicalities. To eliminate funding confining issues, long-term costs and cost effectiveness through advocacy, and partnerships with financial institutions are important components for feasibility.

CONCLUSION

The study therefore calls for a shift from a linear to circular economy standpoint when solving major problems within the SCM of the global food industries including food waste, resource mismanagement, and negative environmental influence. The industry imperative for circular economy, underpinned by Industry 4.0 technologies is critical for sustainability, operational readiness and productivity. As such, there are high implementing costs, technological properties and regulatory pitfalls which need to be addressed by the use of financial motivators and easier technologies. Co-op can scales sustainability because it takes multiple participants and when people work together, their incentives should be aligned. That is why the study contributes to the identification of the best practice and demonstrated that the research is lacking information regarding to scale up of these practices across different context and therefore call for more research and policy support to encourage more organizations to adopt it. Combining the findings of contemporary research and considering these threats, the work offers a versatile approach to developing reliable, diverse and long-term food supply chains

REFERENCES

1. Ada, E., Sezer, M.D., Kazancoglu, Y., & Khaleel, R. (2023). Towards the Smart Sustainable and Circular Food Supply Chains through Digital *Technologies. International Journal of Mathematical, Engineering and Management Sciences,* 8(3), 374–402. https://doi.org/10.33889/IJMEMS.2023.8.3.022
2. Ahmed, H. F., Hosseinian-Far, A., Sarwar, D., & Khandan, R. (2024). Supply Chain Complexity and Its Impact on Knowledge Transfer: Incorporating Sustainable Supply Chain Practices in Food Supply Chain Networks. *Logistics, 8*(1). https://doi.org/10.3390/logistics8010005
3. Bathrinath, S., Koshy, R.A., Bhalaji, R.K.A., & Koppiahraj, K. (2020). Identification of the critical activity in heat treatment process using TISM. *Materials Today: Proceedings,* 39, 60–65. https://doi.org/10.1016/j.matpr.2020.06.157
4. Bezat-Jarzębowska, A., Krieger-Güss, S., Jarzębowski, S., & Petersen, B. (2024). Integration of the Food Supply Chain as a Driver of Sustainability: A Conceptual Framework. *Agriculture (Switzerland),* 14(8). https://doi.org/10.3390/agriculture14081403
5. Gomes, G.M., Pigosso, D.C.A., & McAloone, T.C. (2024). Design and collaboration strategies for circular economy implementation across the value chain. *Proceedings of the Design Society,* 4,1259–1268. https://doi.org/10.1017/pds.2024.128
6. Kline, C.S., Joyner, L.E., Kirchoff, J.F., Crawford, A., Jilcott Pitts, S., Wall-Bassett, E., Gurganus, C., & Dunning, R. (2016). Gaps and barriers along the North Carolina agri-food value chain. *British Food Journal,* 118(2), 301–317. https://doi.org/10.1108/BFJ-06-2015-0223
7. Madani, B., Saihi, A., & Abdelfatah, A. (2024). A Systematic Review of Sustainable Supply Chain Network Design: Optimization Approaches and Research Trends. In *Sustainability (Switzerland)* (Vol. 16,

Issue 8). Multidisciplinary Digital Publishing Institute (MDPI). https://doi.org/10.3390/su16083226

8. Nozari, H., & Aliahmadi, A. (2023). Analysis of critical success factors in a food agile supply chain by a fuzzy hybrid decision-making method. *Iranian Journal of Management Studies,* 16(4), 905–926. https://doi.org/10.22059/ijms.2022.342964.675099
9. Pannila, N., Jayalath, M.M., Thibbotuwawa, A., Nielsen, I., & Uthpala, T.G.G. (2022). Challenges in Applying Circular Economy Concepts to Food Supply Chains. *Sustainability (Switzerland),* 14(24). https://doi.org/10.3390/su142416536
10. Quiroz-Flores, J.C., Aguado-Rodriguez, R.J., Zegarra-Aguinaga, E.A., Collao-Diaz, M.F., & Flores-Perez, A. E. (2024). Industry 4.0, circular economy and sustainability in the food industry: a literature review. *International Journal of Industrial Engineering and Operations Management,* 6(1), 1–24. https://doi.org/10.1108/ijieom-12-2022-0071
11. Rejeb, A., & Appolloni, A. (2022). The Nexus of Industry 4.0 and Circular Procurement: A Systematic Literature Review and Research Agenda. In *Sustainability (Switzerland)* (Vol. 14, Issue 23). MDPI. https://doi.org/10.3390/su142315633
12. Ruben, R. Ben, & Varthanan, P.A. (2019). Application of Total Interpretive Structural Modeling Application of Total Interpretive Structural Modeling Application of Total Interpretive Structural Modeling (TISM) Approach for Analysis of Barriers in Deploying Circular Supply Chains. Indian *Journal of Science and Technology,* 12(24), 1–6. https://doi.org/10.17485/ijst/2019/v12i24/144818
13. Sandbhor, S., & Khanum, H. (2020). TISM Based Hierarchical Analysis of Factors Leading to Accidents on Indian Highways. *Transportation Research Procedia,* 48, 1166–1173. https://doi.org/10.1016/j.trpro.2020.08.140
14. Zou, T., Cheshmehzangi, A., Dawodu, A., & Mangi, E. (2022). DESIGNING AN URBAN FOOD SYSTEM FOR ACHIEVING CIRCULAR ECONOMY TARGETS: A CONCEPTUAL MODEL. *WIT Transactions on the Built Environment,* 210, 15–27. https://doi.org/10.2495/ARC220021

Students' Perception of Green Marketing and Its Influence on Buying Behavior

WeSchool
Management Review
A National, Peer Reviewed
(Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)
Vol. 1, Issue 1, June 2025
pp. 50–60

[1]Somya Mathur, [2]Jalakh Bhat, [3]Shivanki Mahendran, [4]Arnav Kulkarni, [5]Sakshi Jain, [6]Naveen B., and [7]Dr. Rangappa Yaraddi

K E Y W O R D S

Green marketing, environmental concern, behavioural intentions, green purchase behaviour, sustainability, Skincare industry, eco-friendly products, Social Exchange Theory, Dual Factor Theory

A B S T R A C T

This research investigates how consumers perceive green marketing and its impact on their buying decisions, with a specific emphasis on the role of environmental sustainability in encouraging businesses to embrace eco-friendly practices. The data collected from 115 participants were examined, focusing on three significant factors: environmental concern, behavioral intentions and green purchasing behavior, which were supported by social exchange theory and dual factor theory. The findings indicate a moderate association between environmental concern and green purchasing behavior (r = 0.350), whereas a stronger and more significant connection was observed between behavioral intentions and green purchasing behavior (r = 0.691). Mediation analysis highlights the crucial role of behavioral intentions in transforming environmental awareness into actual purchasing choices. Additionally, the study investigates how emerging technologies, including artificial intelligence (AI), blockchain and the internet of things (IOT), can be utilized to improve green marketing. These technologies can generate tailored suggestions, facilitate clear labelling and facilitate the verification of ethical sustainability claims. In line with the global sustainable development goals (SDGs), the findings from this study offer marketers practical guidance to cultivate customer loyalty and trust, particularly in the skincare sector, by promoting transparency and tailoring marketing efforts to individual preferences.

INTRODUCTION

Environmental sustainability has become a burning global issue that has significant impacts on consumer behaviour and corporate strategies. In such a scenario, green marketing, which checks eco-friendly products and sustainable approaches in operations, becomes an important area in various phenomena such as skincare. Current trends pertaining to increased valuing of 'green' consumer goods find the committed marketer of the Body Shop, whose difference is now marked by such things as source responsibility, transport modes, and firm commitment to issues of animal welfare.

Green marketing addresses the environmental demand of consumers by highlighting practices that align with ecological values. It enhances consumer trust and supports sustainable consumption patterns. However, for more effective green marketing strategies, there must be an understanding of the link between consumer environmental control, behavioural intentions, and genuinely green purchases. Despite growing environmental awareness, there are still gaps in converting environmental concerns into consistent purchase behaviour, because of perceived cost and other factors.

[1,2,3,4,5,6]Research Scholar and Student, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.
[7]Assistant Professor-Operations, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.

This study explores the relationship between environmental concerns, behavioural intentions, and green purchase behaviours in the skincare industry. In particular, it evaluates how environmental concerns impact green purchasing behaviour, examines the role that behavioural intentions play as a mediator in the decision to buy eco-friendly products, and ascertains the dynamic relationships between these variables in order to create sustainable marketing strategies.

Thus, this study seeks to address these objectives and the following research questions: i) How does environmental concern influence green purchase behaviour? ii) What role do behavioural intentions play in the willingness to buy eco-friendly products? Furthermore, iii) How can the relationships among these variables enhance marketing strategies in the skincare industry?

Therefore, to gain a more comprehensive understanding of how environmental concerns and behavioural intentions affect green purchase behaviour in the skincare industry, The theoretical framework is embraced with social exchange theory and dual factor theory in understanding the consumer behaviour. Social exchange theory indicates that consumers weigh expected benefits like such as sustainability against the cost of green purchase such as rising prices when accepting to go for green products. In addition, using dual-factor theory, distinguish between motivators such as ethical branding and eco-friendly practices and hygiene factors.

Although earlier research covered the topics of sustainable consumerism in general, little uses such to date in the case of the skincare sector, a sector that decisively merges elements of environmental impact with consumer health. The current research fills this gap with a case study analysing the case of the Body Shop and how green marketing strategies resonate with environment-conscious consumers. By focusing on natural ingredients, ethical sourcing, and sustainable practices, the Body Shop provides a compelling context for understanding mechanisms both promoting and curbing green purchase behaviour.

Emerging technologies like artificial intelligence and blockchain are transforming green marketing by increasing transparency and customer confidence. These technologies also help us address issues such as greenwashing and improve sustainable operations. The use of emerging technologies such as AI, blockchain, and IoT in green marketing can significantly boost its effectiveness.

The following sections are structured as follows. A literature review section will explain the theoretical framework adopted, the development of the hypotheses and the research model, followed by the methodology, the findings and their discussion. Finally, conclusions and implications are presented, together with limitations and suggestions for further research.

RESEARCH OBJECTIVES

1. How does environmental concern influence green purchase behaviour?
2. What role do behavioural intentions play in consumer willingness to choose eco-friendly products?
3. How are the three variables interrelated, and how can this inform marketing strategies?

LITERATURE REVIEW

Ms. Rajeswari. K, (2023) investigates the impact of green marketing strategies on consumer decision-making, particularly in light of growing environmental consciousness. By analyzing survey data from 282 respondents in Chennai, the paper identifies critical factors like eco-labeling, green advertising, and sustainable product pricing that shape consumer behavior. It highlights that while consumers are influenced by green marketing, their choices are still largely guided by price and quality considerations. Challenges such as greenwashing and the need for more consumer trust in green claims are also discussed. The study concludes with suggestions for transparent marketing practices, consumer education, and regulatory frameworks to foster sustainable purchasing habits and long-term loyalty to green brands. study which builds on existing research to underline the dynamic interplay between green marketing and consumer behavior. Advertising, as highlighted by (Nick Grillo, 2008) plays a critical role in raising environmental awareness and creating demand for eco-friendly products. Eco-labels, examined (Bhatia, 2008)help consumers identify sustainable products, though their effectiveness is hampered by low consumer awareness of specific green initiatives. Research also shows that while consumers are open to paying a premium for green products, price sensitivity remains a significant barrier, as noted by (Ghosh, 2024)Cultural and demographic factors further influence consumer preferences, with younger generations more inclined toward sustainable choices (Dr. A. Shaji George, 2022)However, issues like greenwashing erode trust, emphasizing the need for regulatory oversight and transparent marketing. Long-term behavior and loyalty are influenced by the perceived authenticity of green efforts, pointing to the importance of consistent and credible branding strategies.

This synthesis highlights that green marketing's success depends on ethical practices, targeted communication, and robust consumer education, ensuring sustainability becomes a core component of consumer decision-making.

The paper titled "Exploring Purchase Intention of Green Skincare Products Using the Theory of Planned Behavior: Testing the Moderating Effects of Country of Origin and Price Sensitivity" examines the factors shaping consumer intentions to purchase green skincare products. The research tells the Theory of Planned Behavior (TPB), which includes attitude, subjective norm, and perceived behavioral control, as core constructs influencing purchase intentions. The study extends the TPB model by introducing country of origin (COO) and price sensitivity as moderating factors. Using data from 300 female respondents in Taiwan, the research reveals that attitude, subjective norm, and perceived behavioral control positively influence purchase intentions. Furthermore, COO and price sensitivity strengthen these relationships, with higher purchase intentions linked to green skincare products from favorable countries and consumers with lower price sensitivity.

The study highlights several practical implications. Marketers are encouraged to leverage COO through strategic branding and partnerships to enhance product perception. Certification and transparent communication about the environmental benefits of green products can increase consumer trust. Additionally, marketers should consider pricing strategies such as occasional promotions and clear explanations of cost differences to address price-sensitive consumers. Overall, the research provides valuable insights into how green marketing strategies can drive sustainable consumer behavior. (Chia-Lin Hsu, 2016)

Green marketing has gained momentum in the cosmetic industry due to rising consumer awareness of environmental sustainability. Consumers are increasingly opting for eco-friendly products, driven by concerns over pollution and the use of harmful chemicals (Kotler, 2010) Green marketing strategies that focus on sustainable ingredients, ethical sourcing, and eco-friendly packaging not only boost a brand's image but also influence consumer trust and loyalty (Ken Peattie, 1 December 2005)

Psychological drivers such as health consciousness and environmental responsibility play a significant role in consumers' purchasing decisions. Studies suggest that consumers are motivated to choose products that align with their values, such as environmental identity and responsibility (Michelle Andrews) Moreover, transparency in product labeling and eco-certifications can enhance consumer confidence, although brands must avoid "greenwashing," where claims are exaggerated or misleading (Burbano, 2011)

Social media and influencers further amplify the impact of green marketing by creating narratives around sustainability, strengthening the connection between brands and consumers (PATRICK DE PELSMACKER, 2005) In conclusion, green marketing strategies are increasingly pivotal in shaping consumer behavior in the cosmetic industry, offering brands both opportunities and challenges in communicating their environmental commitment. (Elisabete Correia, 2023)

Green marketing has become increasingly popular across a range of industries in response to growing concerns about the environment and customer demand for sustainable practices. Eco-labelling, certification, and transparent marketing techniques are proven to be key factors in gaining consumers' trust and influencing purchasing decisions, concludes research. The increased environmental consciousness in industrialized economies has brought about consumers willing to pay more for environmentally friendly products. This creates a need for green marketing to bridge the divide between ethical branding and customer purchasing decisions. Green marketing enhances brand loyalty but also appeals to those environmentally concerned consumers who wish to reduce their ecological footprint.

While green marketing has been amply studied, its applicability in specific industries, such as cosmetics, is still unexplored. Skincare items are very strongly associated with personal health and well-being and offer an ideal framework to study consumers' attitudes in respect to green activities. Despite that, there is little research on exact motivators and impediments behind encouraging green purchase behaviours in this sector, more so in emerging nations. Students, a demographic group, comprise a fair share of the environmentally concerned consumers, hence it is an ideal target for researching green purchasing behaviour.

Theoretical Framework

Theories that provide insight on the behavioural mosaic behind green consumption include the Dual Factor Theory and the Social Exchange Theory.

Social Exchange Theory suggests that there is always a cost-benefit analysis going on in a consumer's mind. In the green marketing perspective, the costs include higher prices, availability of green products, and choices referred by companies. The benefits are sustainability, environmental concerns, and ethical values that satisfy customers. Social exchange theory is a two-sided process involving two actions – one is to give and the other is to get something in return. Many psychologists consider the social exchange theory as highly individualistic. According to this theory the individual measures all social interactions against personal gains that he achieves. All individual decisions and actions are based on self-serving motivation.

The simple formula to knowing behavior

Behavior (Profit) = Reward of Interaction – cost of Interaction.

According to this study, these benefits are the main drivers in younger generation consumers' minds, particularly in this period of time. Their behaviour intentions are mostly aligned with encouraging green purchasing behaviour and environmental concerns.

It is also seen that when perceived benefits outweigh the costs, such as higher prices, consumers have a higher propensity to buy and purchase more green products. For example, in skin care brands, although choices are limited, companies effectively communicating their sustainability initiatives can positively influence customer trust and loyalty, leading consumers to buy more of their products.

According to the dual factor theory, there are two factors: motivators and hygiene factors. In the context of green marketing, motivators tend to be the communication done by companies about the sustainability practices that they are instilling and making consumers aware of what all of the practices they are engaging in that are green, as well as instilling ethical branding. This all in can be comprised and put towards the consumer's loyalty and trust, which is increasing, and therefore they intend to have a definite purchasing intention to buy the product, but if you look at the hygiene factors, which are the absolutely needed factors for the green marketing is the certifications, environmental claims, and the practices that they are doing, have any Proof or evidence. Such items may be the result of greenwashing, which is a major concern in green marketing. All of these factors, and their absence, can reduce the influence of motivators, even if the product itself is ecologically benign. For example, skin care companies frequently claim that their procedures are environmentally friendly, but they provide no information or proof to back it up.

As you already know, awareness is spreading and environmental concerns are intensifying. Purchasing behaviour, in particular, is becoming a very important factor that is currently impacting our market trends. Despite this, there is only limited research addressing how the current attitude and awareness of greenconscious consumers will translate into buying decisions within specific industries like skin care, which we have taken under this study.

This study also emphasizes consumer behaviour, particularly among groups like Gen Z and millennials, who highlight increasing awareness and action. They are often at the forefront of sustainability trends. Secondly, this study talks about the impact on purchasing behaviour, saying that Gen Z and millennials are aware of and acknowledge the direct influence of heightened environmental concerns, and they are making decisions based on it.

If you focus on the lack of targeted studies, there is a lot lacking in targeted studies of the skin care industry, which is uniquely positioned in this paper. We are trying to find out the consumer purchasing behaviour of younger generations, particularly in the skin care industry.

This research study also analyses the personal impact of consumers and their reliance on ethical sourcing.

Environmental Concern

Environmental Concern is a significant aspect in determining consumer behavioural intention and their purchasing behaviour. Consumers are very much aware of environmental issues these days, which demonstrates their environmental sensitivity. They are presumably aware of the conservation of natural resources and environmental deterioration. Consumers frequently express concern while actively searching for these products, known as green products. And in interviews or when asked questions, they respond with perseverance in thinking about the environment. Concerns about the environment also provide consumers with a better understanding of themselves and their willingness to purchase more sustainable and green items.

Behavioural Intentions

Consumers' concern for the environment does not necessarily imply that they will take action to address it or purchase a green product. This brings us to our mediating behaviour, which is behaviour intention. The consumer's behavioural intention determines their readiness to buy or indulge in the purchase of ecofriendly green items. Consumer activities indicate that they are displaying their actual behaviour, given that they are aware of the product and its sustainability policies. For example, if you believe that people who use skin care products are already aware of the body shop's green practices. Nonetheless, due to the higher prices, few individuals turn to the action perspective and purchase the merchandise. However, some people who are knowledgeable and worried about the environment have behavioural intention or readiness to acquire the product. This can be considered and learned by the group that includes the motivators and hygiene aspects. The motivators exist, and they can be related to the consumers' environmental concerns. However, the hygienic problems overwhelmed factories and their desire to act. However, some people are eager and intend to support environmental concerns, which might translate into product purchases. This is an important factor in determining whether or not consumers will purchase the product, as opposed to simply being aware of it and not having any.

Green Purchase Behaviour

Green purchasing behaviour refers to the actions performed by consumers. Consumers are more likely to buy green items or green-marketed products if they have a strong behavioural intention to protect the environment. Just being aware of it does not imply that they will buy the stuff. So, this is where their behavioural purpose, or intent to support sustainability practice, comes into play. Researchers have discovered that consumers with strong behavioural goals are more inclined to purchase green products. And they have a more regular trend of purchasing green products. Particularly when they are supported by the companies by giving up green marketing advertisements and open and ethical sustainable practices being undertaken by them and evidenced by certificates, transparent operational processes.

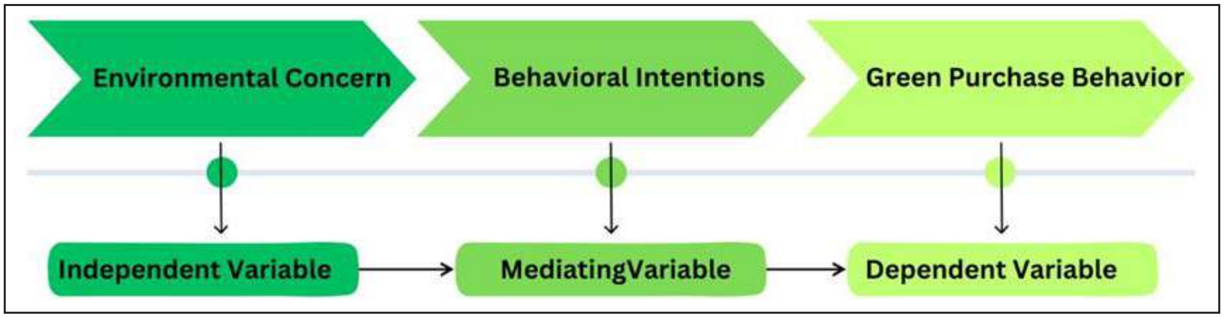


Fig. 1: Interrelationship between the Variables

Interrelationships

Environmental Concern → Behavioural Intentions

Higher degrees of environmental concern have a beneficial influence on consumers who are prepared to buy and purchase green products, displaying green purchasing behaviour. This also means that people who are aware of environmental issues are more likely to seek out or look for green items that correspond with the sustainability principles that they are instilling. This ensures that those who care about the environment are more likely to buy green items. Given that those who act on this will have a favourable association between environmental concern and behavioural attention.

Behavioural Intentions → Green Purchase Behaviour

As it is already known, intention is a mediating component and a vital factor in converting a consumer's environmental concern into actionable purchase behaviour or green marketing. Consumers who are highly aware of environmental issues and have strong intentions to put those concerns into action make more consistent green purchases.

Environmental Concern → Green Purchase Behaviour (mediated by Behavioural Intentions)

The third and most important aspect of the relationship, which is between the independent variable and the dependent variable mediated by behavioural intention, it demonstrates that the direct implementation of environmental concern towards our consumers' green purchasing behaviour is based on the mediating role of behavioural attention. If the consumer has an understanding of the environmental problems will tend to buy the green purchasing behaviour only if he has the willingness to act on that particular goal, which is our behavioural intent of the consumer.

METHODOLOGY

A quantitative approach was adopted through the use of questionnaires. This sample comprised 115 respondents aged 16 to above 45. The survey was distributed randomly among students, with no specific selection criteria, allowing for a random sampling approach. The questionnaire was shared using Google Forms. The questionnaire included two types of questions. The first set comprised demographic questions pertaining to age, gender, and education level. The second set of questions was designed to evaluate the variables - Environmental Awareness, Behavioural Intentions, and Purchase Behaviour, using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The data were analysed using Excel and jamovi.

RESULTS AND FINDINGS

Demographic Characteristics of Respondents

Table 1 presents the demographic characteristics of the respondents. From the selected sample of 115, the percentage of male and female respondents were 48.7% and 51.3% respectively, suggesting an approximately equal representation of both genders. The dominant age category was 18-25 years. A comparison of the education level shows that 55.7% of respondents have an undergraduate qualification and 43.5% of respondents have a postgraduate degree.

Table 1. Demographic Characteristics of Respondents

Demographic Factors	Categories	Male	Female	Total
Gender		56	59	115
Age	Below 18	0	0	0
	18–25	48	46	94
	26–35	8	9	17
	36–45	0	3	3
	Above 45	0	1	1
Education Level	Undergraduate	27	37	64
	Postgraduate	28	22	50
	Doctorate	1	0	1

Frequency of Skincare Product Usage

As illustrated in Figure 1, 51.3% of respondents use skin care products daily, while 26.1% use them occasionally. About 15.7% use skincare products weekly, and 7% never use them. This shows that daily use is most common, but a fair number of respondents use products less frequently.

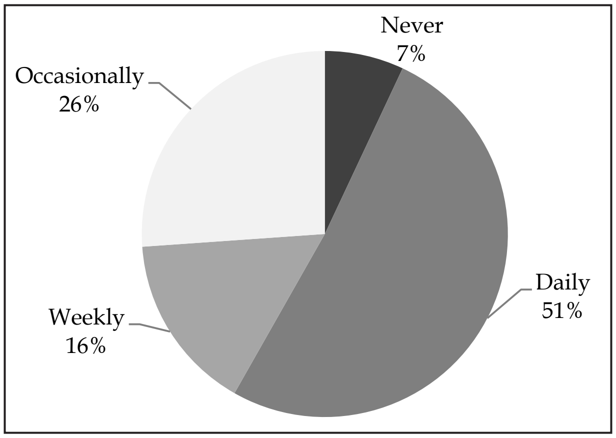


Fig. 2: Frequency of Skincare Product Usage

Correlation of Variables

The correlation matrix reveals significant positive relationships among environmental concern, behavioral intentions, and green purchase behavior. A moderate positive correlation ($r = 0.338$, $p < 0.001$) exists between environmental concern and behavioral intentions, indicating that individuals who exhibit higher concern for the environment are more likely to develop stronger behavioral intentions toward sustainable practices.

Correlation Matrix

Similarly, environmental concern is moderately correlated with green purchase behavior ($r = 0.350$, $p < 0.001$), suggesting that heightened environmental awareness contributes to an increase in eco-friendly purchasing decisions.

The strongest relationship is observed between behavioral intentions and green purchase behavior ($r = 0.691$, $p < 0.001$), signifying that individuals with higher intentions to act sustainably are strongly inclined to translate these intentions into actual green purchase behavior.

These findings underscore the interconnected nature of environmental concern, behavioral intentions, and green consumer practices, emphasizing their collective role in driving sustainable behavior.

Mediation Analysis

The mediation analysis demonstrates the significant role of behavioral intentions as a mediator in the relationship between environmental concern and green purchase behavior.

The indirect effect ($a \times b$) is statistically significant, confirming that behavioral intentions effectively mediate the impact of environmental concern on green purchase behavior. This indicates that environmental concern influences green purchase behavior primarily through its effect on behavioral intentions.

Table 2. Correlation Matrix

		Environmental Concern	Behavioral Intentions	Green Purchase Behavior
Environmental Concern	Pearson's r	–		
	df	–		
	p-value	–		
Behavioral intentions	Pearson's f	0.338	–	
	df	113	–	
	p-value	< .001	–	
Green Purchase Behavior	Pearson's r	0.350	0.691	–
	df	113	113	–
	p-value	< .001	< .001	–

Table 3. Mediation Estimates

Effect	Label		Estimate	SE	Z	p
		a				
Indirect	× b		0.237	0.0669	3.55	< .001
		c				
Direct			0.143	0.0766	1.87	0.062
		c				
Total	+ a × b		0.381	0.0948	4.01	< .001

In contrast, the direct effect (c) of environmental concern on green purchase behavior is marginally nonsignificant. This suggests that environmental concern alone does not substantially predict green purchase behavior when behavioral intentions are not accounted for.

The total effect (c + a × b), which combines the direct effect and the mediation effect, is significant (Estimate = 0.381, SE = 0.0948, Z = 4.01, $p < 0.001$). This indicates that the combined influence of environmental concern and behavioral intentions significantly predicts green purchase behavior.

The path estimates further reinforce these findings. Environmental concern significantly predicts behavioral intentions (Path a: Estimate = 0.367, SE = 0.0954, Z = 3.85, $p < 0.001$), and behavioral intentions significantly predict green purchase behavior (Path b: Estimate = 0.646, SE = 0.0704, Z = 9.17, $p < 0.001$). However, the direct path from environmental concern to green purchase behavior remains marginally nonsignificant (Path c: Estimate = 0.143, SE = 0.0766, Z = 1.87, p = 0.062), emphasizing the importance of the mediating role of behavioral intentions.

In summary, the analysis highlights that environmental concerns alone do not significantly drive green purchase behavior. Instead, it is the behavioral intentions that strongly mediate this relationship, translating environmental concern into meaningful green purchase actions. This underscores the critical role of fostering strong behavioral intentions to encourage sustainable consumer behavior effectively.

DISCUSSION

The main aim of this study was to understand the consumer perception of the green marketing practices and its influence on their buying behaviour. The intention was to see if the green marketing practices that are followed by different skin care brands, have any influence on the purchasing decision of consumers. Further, the study also aimed to find out what all factors might the consumers be taking into consideration for decision making. The study's results add new contribution related to the importance of sustainability practices in customer decision making for skincare products. The result of the study adds to the contribution related to consumer decision

Table 4. Path Estimates

				Label	Estimate	SE	Z	p
Environmental Concern	→	Behavioral Int entions		a	0.367	0.0954	3.85	< .001
Behavioral Intentions	→	Green Behavior	Purchase	b	0.646	0.0704	9.17	< .001
Environmental Concern	→	Green Behavior	Purchase	c	0.143	0.0766	1.87	0.062

making based on green marketing practices, further complementing the findings of Ms. Rajeswari. K *et al.* who investigated the green marketing and its influence on consumer. As Chi-Ya Chang *et al.* identified intention of green skincare products using the theory of planned behaviour. By using the tools of Dual factor theory and Social Exchange theory to analyse the perception of students, this study's results generate insights in each of the research question's findings:

Q. 1. How does environmental concern influence green purchase behaviour?

The first question explored the green purchase behaviour that were prevalent in students. It was observed that primarily, environmental concerns influence the green purchasing behaviour through the effect of behaviour intentions. Although it was observed that the direct relationship between environmental concern and green purchase behaviour is marginally non-significant (Path c: Estimate = 0.143, SE = 0.0766, Z = 1.87, p = 0.062), the mediation analysis explains behaviour intentions acting as an important intermediary in the process. Also, the indirect effect (a × b: Estimate = 0.237, SE = 0.0669, Z = 3.55, p < 0.001) suggests that individuals with high level of environmental awareness are more likely to develop strong sustainability intentions, which significantly impacts consumer decision making. This in turn implies the importance of environmental concern, it does not clearly translate into purchasing actions without the mediation of behavioural intentions.

Q. 2. What role do behavioural intentions play in consumer willingness to choose eco-friendly products?

The study's second research questions identified behaviour intention playing a critical mediating role in this relationship. The corelation between behavioural intensions and green purchase behaviour is the strongest among the variables (r = 0.691, p < 0.001), this indicates that behavioural intentions are the most critical driver for eco-friendly purchasing actions. Mediation analysis gives the evidence for the relation of behaviour intentions significantly predicting green purchase behaviour (Path b: Estimate = 0.646, SE = 0.0704, Z = 9.17, p < 0.001). This analysis signals that these behavioural intentions bridge the gap between environmental awareness and the actual adoption of sustainable practices, highlighting the importance of cultivating strong behavioural intentions among consumers.

Q. 3. How are the three variables interrelated, and how can this inform marketing strategies?

The third research question investigated the interrelationship among the three variables-environmental concern, behavioural intentions and green purchase behaviour. This analysis highlighted the collective importance in promoting sustainable consumer practices. Environmental concern has a moderate positive correlation with both behavioural intentions (r = 0.338, p < 0.001) and green purchase behaviour (r = 0.350, p < 0.001). Behavioural intentions, in turn, exhibit a strong positive correlation with green purchase behaviour (r = 0.691, p < 0.001). This indicates a relationship where environmental concern influences behavioural intentions, which then drive green purchasing decisions.

Marketing Strategies

Foster Strong Behavioural Intentions: The professionals should focus on creating campaigns that underscores the benefits of eco-friendly products and encourage a sense of personal responsibility and commitment, rather than just focusing on raising environmental awareness.

Leverage Personalized Strategies: To improve behavioural intentions and inspire sustainable consumer actions, tools like personalized messaging and alignment of eco-friendly choices with consumers' values can be useful.

Create Platforms for Action: Some platforms such as reward programs for eco-friendly purchases or collaboration with environmentally responsible brands can add value for a wider adoption of green products.

AI can make individualized eco-friendly recommendations based on user behavior, while blockchain ensures transparency in product claims and certifications, addressing issues such as greenwashing. IoT can help with real-time tracking of sustainable activities, increasing trust and responsibility.

Furthermore, these improvements are closely related to the UN's Sustainable Development Goals (SDGs), namely Goals 12 (Responsible Consumption and Production) and 13 (Climate Action). Marketers can contribute to sustainable customer behavior by utilizing technological developments. to global environmental objectives. Future policies should focus on leveraging these tools to create frameworks that support transparent and ethical green marketing strategies.

CONCLUSION

The research indicates that green marketing has a major role to play on the behavior of consumers at influential levels, such as GenZ and millennial generation. Strategies for a more sustained marketing in the market are described as focusing on transparency, ethical branding, values, and accommodating clients. Some of these initiatives can include an Eco-friendly certificate, which may make their awareness into action.

This shows to them how green could be promisingly accepted if combined with the unique skill of awareness. Overcoming greenwashing is very important because there are many ways in which businesses give themselves credit but don't really engage in green practices.

The hindrances to green marketing strategies include mostly greenwashing, price sensitivity, and rather limited trust that demand immediate redress. By improving the customer trust situation and educating them, the companies can foster long-term consumption patterns in the minds of their target customers. It is significant to integrate the environmental values into a strategic approach hence affecting the consumer to involve himself into sustainable purchasing acts.

Technological developments such as AI, blockchain, and IoT have the potential to improve green marketing by increasing transparency, personalizing consumer experiences, and building trust. Aligning green marketing strategies with the UN's SDGs can increase their relevance and have a worldwide impact on sustainability initiatives.

REFERENCES

1. Rajeswari, K., & Suganya, R.V. (2023). Green marketing and its influence on consumer purchasing behaviour. Tuijin Jishu/Journal of Propulsion Technology, 44(4), 1001-4055.
2. Hsu, C.-L., Chang, C.-Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. Journal of Retailing and Consumer Services, 34, 145–152. https://doi.org/10.1016/j.jretconser.2016.10.006
3. Correia, E., Sousa, S., Viseu, C., & Larguinho, M. (2023). Analysing the influence of green marketing communication in consumers' green purchase behaviour. International Journal of Environmental Research and Public Health, 20(2), 1356. https://doi.org/10.3390/ijerph20021356
4. Braga Junior, S., Pagán Martínez, M., Correa, C.M., Moura-Leite, R. C., & Da Silva, D. (2019). Greenwashing effect, attitudes, and beliefs in green consumption. RAUSP Management Journal, 54(2), 179-191. https://doi.org/10.1108/RAUSP-03-2019-0089
5. The jamovi project. (2022). jamovi (Version 2.3) [Computer software]. Retrieved from https://www.jamovi.org R Core Team. (2021). R: A language and environment for statistical computing (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).
6. Testa, R., Vella, F., Rizzo, G., Schifani, G., & Migliore, G. (n.d.). What drives and obstacles the intention to purchase green skincare products? A study of the Italian market of green skincare products. Department of Agricultural, Food and Forest Sciences, University of Palermo.

7. Praharjo, A., & Wijaya, R. (2024). Consumer's behavior intention in using green skincare products. In Robbie *et al*. (Eds.), Environmental issues and social inclusion in a sustainable era (pp. [page range]).
8. Universitas Muhammadiyah Malang. https://doi.org/10.1201/9781003360483-20
9. Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior.
10. Journal of Consumer Marketing, 26(2), 87–96. https://doi.org/10.1108/07363760910940456
11. Moeliono, N., Fakhri, M., Sari, D., Kurnia, B., & Anindita, D. A. (2020). Green brand awareness factors on The Body Shop product: A case study. In Proceedings of the 2nd African International Conference on Industrial Engineering and Operations Management (pp. [page range]). Telkom University, Harare, Zimbabwe.
12. Kalafatis, S.P., Pollard, M., East, R., & Tsogas, M.H. (1999). Green marketing and Ajzen's theory of planned behaviour: A cross-market examination. Journal of Consumer Marketing, 16(5), 441–460. https://doi.org/10.1108/07363769910289550
13. Rahbar, E., & Wahid, N.A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. Business Strategy Series, 12(2), 73–83. https://doi.org/10.1108/17515631111114877
14. Lai, C.K.M., & Cheng, E.W.L. (2015). Green purchase behavior of undergraduate students in Hong Kong. Social Science Journal, 52(2), 145–155. https://doi.org/10.1016/j.soscij.2015.11.003
15. Reddy, K.P., Chandu, V., Srilakshmi, S., Thagaram, E., Sahyaja, C., & Osei, B. (2023). Consumers' perception on green marketing towards eco-friendly fast moving consumer goods. International Journal of Engineering Business Management, 15, 1–14. https://doi.org/10.1177/18479790231170962
16. Govender, J.P., & Govender, T.L. (2016). The influence of green marketing on consumer purchase behavior. Durban University of Technology.

Modelling the Dark Tourism Barriers

WeSchool Management Review
A National, Peer Reviewed (Bi-Annual) Research Journal
ISSN: 3107-7463 (Print)
Vol. 1, Issue 1, June 2025
pp. 61–71

[1]Shiwani Khandelwal, [2]Prathamesh A. Petkar, [3]Manasi M. Thipse, [4]Sanskar Ladha, [5]Amitesh Bhardwaj, [6]Maajidh A., and [7]Dr. Kiran

KEYWORDS

Dark tourism, constraints, ethical, cultural, industry, psychological, sociocultural factors, marketing and presentation barriers, TISM, MICMAC analysis, global tourism development, barriers

ABSTRACT

Dark tourism refers to traveling to locations associated with death, tragedy, and human misery. This is an emerging specialty in the realm of tourism. However, expansion of dark tourism is met with significant challenges on account of culture, emotions, psychology, social stigma, and a low degree of appropriate marketing techniques. This research utilizes Total Interpretive Structural Modelling (TISM) and MICMAC analysis to examine the interconnections among these obstacles. The results indicate that these barriers exhibit a high degree of interconnectivity, with "Ineffective Marketing Strategies" and "Lack of Interest" as the most influential driving barriers, significantly impacting the growth of dark tourism worldwide. Additionally, factors such as "Cultural and Ethical Concerns" and "Social Stigma" show a high degree of mutual influence, highlighting the need for a balanced and culturally sensitive approach. Further MICMAC analysis classifies no barrier as autonomous thus highlighting their high interdependence and impact on one another. Through this, dark tourism industry will be able to unlock the opportunities in its growth and development. The study also recommends certain implications that can be incorporated by the dark tourism industry worldwide that can support the growth prospects of it.

INTRODUCTION

The term dark tourism, which was introduced by Lennon and Foley in 1996, defines the act of visiting sites connected with death, tragedy, and human suffering. Formal conceptualization in this area has only recently appeared, but practice is very old. It goes as far back as a gladiatorial combat spectator in ancient Rome or even visitors to the medieval execution site (Magano *et al*., 2023; Punitha & Rajashekar, 2018). Currently, dark tourism represents a broad destination range, including Holocaust memorials, genocides sites, disaster zones, and crime and punishment locations. This aspect is interconnected with aspects from history, psychology, and culture studies, providing the opportunity to learn and think about death and memory in general. Dark tourism provokes discussions on the ethicality of trading suffering but facilitates remembrance and empathy (Stone, 2006; Magano *et al*., 2023). As indicated by Ashworth and

[1,2,3,4,5,6]Research Scholar and Student, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.
[7]Associate Professor, Prin. L. N. Welingkar Institute of Management Development and Research, Bengaluru.

Hartmann (2005), the correct ethical management of such places makes sure that commemoration does not become exploitation.

Dark tourism has gained much importance globally, and the major reason behind this is media depiction and growing interest in places associated with historical disasters (Foley & Lennon, 2000). Digital media channels have played a significant role in making these places more attractive and thus increasing their reach to a larger audience. (Magano *et al*., 2023). Places like Auschwitz-Birkenau are the best examples of how dark tourism can not only educate visitors but also conserve cultural heritage. (Tarlow, 2005). Dark tourism is highly underdeveloped in India with a broad historical scope and large growth potential. Prominent sites, such as the Bhopal gas tragedy site and the Jallianwala Bagh massacre memorial, have been of high importance; however, they face difficulties in the form of inadequate infrastructure and traditional constraints (Naik & Botre, 2019; Punitha & Rajashekar, 2018). These examples emphasize on the need for thoughtful management and development of strategic marketing initiative to overcome social barriers and enhance visitor engagement (Sharpley & Stone, 2009).

RESEARCH GAP

Existing literature on dark tourism talks about the concept, exploring motivating factors for visitors and examining different dark sites as case studies. However, there is a noticeable lack of research addressing the barriers or challenges to dark tourism development and a very few of the studies talk about the interdependence among these barriers. Understanding the relationship among the various barriers is eminent as they have an additive effect on the growth prospects of the dark tourism industry.

RESEARCH OBJECTIVE

The aim of this study is to identify, analyse, and evaluate the potential key barriers to the development of dark tourism by recognizing their relationship and influence on each other using TISM and classifying them based on their driving and dependence power with the help of MICMAC analysis, with the goal of understanding the barriers and challenges created by them that hinder the futuristic growth opportunity of dark tourism worldwide.

RESEARCH METHODOLOGY

Research Design

A qualitative research approach was selected to establish relationships among different barriers of dark tourism. The main objective of this research is to understand the influence of each of the barriers on the others and to build a hierarchical framework of these barriers. The TISM method was selected for this study after considering multiple methods.

Data Collection

To have a better understanding of the barriers to dark tourism, a literature review as well as a semi-structured questionnaire was considered so as to understand both theoretical and practical implications.

Identification of Barriers

In this study, 47 research papers were collected, and out of those, literature of 30 research articles and a few case studies was done to identify major potential barriers impacting the growth and development of dark tourism. The review included and focused on variables such as psychological, sociocultural, structural, and marketing-related barriers that might impact the industry's growth. This process provided a strong theoretical foundation for the study and eased the identification of key challenges in dark tourism influenced by the existing research.

Responses Collected

The adopted method involved the use of a semi-structured questionnaire Administration of the communication-response questionnaires was done among people in the tourism industry. This approach combined fixed questions with limited response alternatives with free response dimensions, where, to each respondent, definite yes or no answers could be given, but s/he could also comment on his/her viewpoint.

Semi-structured interview design was helpful in explaining the richness of the concept at the base of each impediment. The primary respondents of this study were frequent travellers and experts in the tourism field among which 19 individuals were selected to gather responses. The collected responses were vital in verifying and refining the observed barriers. The input not only confirmed the importance of the barriers obtained from the literature but also provided additional insights, leading to a more intricate understanding of the factors hampering the growth of dark tourism.

Methodological Framework

Total Interpretive Structural Modelling (TISM)

TISM was chosen as the principal method of assessment of barriers and to develop logical connections between the barriers. TISM is further development of ISM with enriched interpretative insights as an innovative qualitative modelling method. It also aids in building a systematic SMART target structure, which establishes a vertical taxonomy of goals to address each of the barriers directly and indirectly (Ben Ruben & Varthanan, 2019; Chandler & Harris, 2018; Mathivathanan *et al*., 2022; Ramesan *et al*., 2022).

TISM process follows a series of systematic steps:

1. Defining the Problem and Identifying barriers/factors
2. Data collection
3. Developing Initial Reachability Matrix (IRM)
4. Developing Final Reachability Matrix (FRM)
5. Identifying Levels of Variables (Hierarchy Development)
6. Developing Interpretive Logic-Based Relationships
7. Developing TISM Model (Hierarchical Diagram)
8. Conducting MICMAC Analysis

MICMAC Analysis

The MICMAC analysis was then carried out to have a clearer vision of the impact of each barrier so as to classify it. This technique categorizes barriers into four key groups or quadrants: The four categories identified are the: L1 = autonomous, dependent, linkage, and driving barriers. The dependency and driving power gained from the MICMAC analysis were helpful in deriving business strategies to overcome every barrier that was identified. (Mathivathanan *et al*., 2022).

Research Validity and Reliability

In order to establish the reliability and validity of the study several checks were incorporated in the process of carrying out this research. These include; comparison with other scholarly work, comparison with the reviews people or respondents which also eliminated bias and enhanced the reliability of the findings (Ben Ruben & Varthanan, 2019).

LITERATURE REVIEW

In recent times there has been a global increase in the popularity of dark tourism, which refers to traveling to or visiting locations associated with death, tragedy, and human misery. But the growth of this type of tourism is very much restricted due to various barriers that prevent its growth to the best of its ability. This literature review talks about those barriers in a global context based on a thorough study of the existing literature and case studies.

Cultural and Ethical Concerns

Cultural and ethical concerns play a huge impact on the acceptance of dark tourism in both Indian and global societies and also inhibits the publicity of dark tourism in a commercial setup. Many journals show moral concerns on commercializing dark tourism as it reflects death, misery and pain (Stone, 2006; Magano *et al*., 2023). Deep cultural sensitivities associated with the death culture and bereavement culture that exists in Indian society oppose the approval of sites

Table 1

Notions	Barriers	Definition	References
A1	Cultural & Ethical Concerns	Refers to societal norms, religious beliefs, or moral considerations that discourage participation in certain activities, such as visiting sites associated with death or tragedy. These concerns include the fear of disrespecting traditions, cultural taboos around death, or ethical dilemmas about the commodification of suffering.	Stone, (2006) Magano *et al*., (2023) Naik & Botre, (2019) Lennon & Foley, (1996)
A2	Emotional & Psychological Reactions	Relates to feelings such as fear, sadness, anxiety, or discomfort that arise from confronting themes of mortality, tragedy, or suffering. These reactions can deter individuals from engaging with dark tourism experiences, as they anticipate distressing emotional impacts.	Martini & Buda, (2020) Prayag, Buda, & Jordan, (2020) Nawijn & Biran, (2019)
A3	Social Stigma	Involves negative societal attitudes or disapproval associated with engaging in certain activities, such as dark tourism. Visitors may avoid participation to avoid being judged as morbid, insensitive, or inappropriate.	Gentry, (2007) Holloway, 2010 Punitha & Rajashekar, (2018) Zheng *et al*., (2016)
A4	Lack of Interest	Refers to the absence of personal motivation or curiosity to engage with an activity or topic. In the context of dark tourism, this could stem from a preference for leisure-focused or nature-based tourism over somber, reflective experiences.	Dancausa *et al*., (2020) Yan *et al*., 2016 Zheng *et al*., 2016
A5	Lack of Awareness	Describes the insufficient knowledge or understanding about a subject, site, or its significance. For dark tourism, this may mean potential visitors are unaware of the site's historical or cultural importance due to poor information dissemination.	Singh *et al*., (2016) Punitha & Rajashekar, (2018) Lennon & Foley, (1996)
A6	Non-responsiveness	Refers to a lack of engagement or action despite being aware of the opportunity or information. In dark tourism, this might mean individuals do not visit a site even when they know about its existence or significance, possibly due to indifference or competing priorities.	Korstanje & Ivanov, (2012) Lennon & Foley, (1996)
A7	Lack of Perceived Benefits	Indicates that individuals do not see the value or advantages of participating in a particular activity. For dark tourism, this might include not recognizing the educational, emotional, or reflective benefits of visiting such sites.	Chang, (2014) Sharma & Nayak, (2019) Zheng *et al*., (2016) Punitha & Rajashekar, (2018)
A8	Ineffective Marketing Strategies	Refers to inadequate efforts to promote or communicate the significance of a product, service, or experience. In dark tourism, this includes poorly designed campaigns, unengaging storytelling, or failure to convey the historical and emotional value of sites, leading to low interest and participation.	Singh *et al*., (2016) Korstanje & Ivanov, (2012) Lennon & Foley, (1996)

related to dark tourism (Naik & Botre, 2019). The third reason is the fear of hurting the sentiments of victims and their kin, which often brings ethical issues in tourism developments at such sites (Lennon & Foley, 1996). Finally, historical interpretation in such locations often invokes moral and ethical questions about both facts and motives (Stone, 2006; Magano *et al*., 2023; Lennon & Foley, 1996).

Emotional and Psychological Reactions

Dark tourism evokes emotional and psychological responses among visitors as well as among the residents. Researchers conclude that dark tourist destinations are associated with past tragedies. Such visits may evoke feelings of sorrow, anxiety, and even distress. (Martini & Buda, 2020; Nawijn & Biran, 2019). While residents of potential dark tourism locations, such as Bhopal and Jallianwala Bagh, feel a mix of emotions by remembering the trauma (Prayag, Buda, & Jordan, 2020). The psychological effects stemming from such tourism experiences require meticulous management to guarantee favourable experiences for visitors, all while honouring the feelings of the impacted communities. Research indicates that unaddressed trauma and fear play a significant role in fostering avoidance behavior among prospective tourists. (Martini & Buda, 2020; Nawijn & Biran, 2019; Prayag, Buda, & Jordan, 2020).

Social Stigma

Social stigma is a very significant barrier in the development of dark tourism in India. Most researches reveal that the experience of visiting destinations associated with death and suffering is often considered despicable, thus preventing many visitors from going there (Gentry, 2007; Holloway, 2010). The negative perception that is associated with locations of disaster plays a crucial role in their underutilization and prevents them from being acknowledged as genuine tourist destinations. A dominant adverse opinion among the masses, driven by social stigmas and misconceptions, prevents the acceptance of dark tourism initiatives (Punitha & Rajashekar, 2018; Zheng *et al*., 2016).

Lack of Interest

Lack of interest or disinterest is a critical challenge in the Indian tourism sector when compared with its international tourism trends. International tourists are more inclined towards visiting places associated with dark tourism that reflect historical tragedies and human pain than the domestic ones who are more into going to places that are relaxing and more fun to be at rather than being at places that are associated with death and human suffering (Dancausa *et al*., 2020). The more relaxing and happening places pose a strong competition to the promotion of dark tourism and contribute further to the challenges faced by this industry, as lack of interest due to cultural influences adds up to the challenges and prevents the sector from growing in the Indian market (Zheng *et al*., 2016; Yan *et al*., 2016).

Lack of Awareness

There are numerous academic studies stating that one of the prime challenges for growth in dark tourism is the lack of awareness. Most of the aspiring visitors are ignorant of the presence of this dark tourism destination and its importance in history (Singh *et al*., 2016). Effective campaigns of mass awareness and knowledge-building measures concerning these locations is a prime responsibility. Awareness that is spread through a diverse range of platforms and implementation of innovative narrative techniques foster audience awareness effectively (Punitha & Rajashekar, 2018; Lennon & Foley, 1996).

Non-responsiveness

One of the critical barriers in developing dark tourism relates to the poor responsiveness of the stakeholder groups, such as local communities, tourism agencies, and policymakers. The observed data revealed that inert perspectives and inadequate proactive action defeat all efforts towards building and maintaining dark tourism sites. A limited policy perspective without a proper collaboration by the stakeholders gives an inconsistent approach and lacks control on wide range of opportunities that exist within dark tourism (Korstanje & Ivanov, 2012; Lennon & Foley, 1996).

Lack of Perceived Benefits

The perceived benefits of dark tourism remain ambiguous to several stakeholders, including inhabitants and decision-making authorities. Studies show that communities often fail to recognize the monetary and cultural benefits that dark tourism can bring, leading to an absence of support for its growth (Chang, 2014; Sharma & Nayak, 2019). Rectifying this misconception requires focused efforts to highlight the potential benefits of dark tourism in terms of employment opportunities, cultural conservation, and education (Zheng *et al.*, 2016; Punitha & Rajashekar, 2018).

Ineffective Marketing Strategies

The ineffective marketing strategies is a significant challenge in promoting dark tourism sites in India. Current literature points to insufficient promotional efforts and the absence of targeted marketing initiatives that could attract tourists interested in such encounters (Singh *et al.*, 2016). Developing strategic marketing plans that underscore storytelling and educational value can help eliminate this barrier. A focus on digital marketing and partnerships with travel enthusiasts could enhance recognition and interest (Korstanje & Ivanov, 2012; Lennon & Foley, 1996).

The analysis of existing literature shows that though dark tourism holds tremendous potential, several barriers hinder its growth. Cultural sensitivities, emotional challenges, social stigma, and a lack of interest and awareness are critical barriers. Additionally, addressing perceived benefits and implementing effective marketing strategies are crucial for promoting the development of dark tourism globally. Further studies should lay greater emphasis on developing a strategies plan that effectively addresses the challenges global dark tourism currently faces and fully leverages its rich historical and cultural heritage for its development.

RESULTS

Obtained Data

The data obtained from the reponses consist of binary response matrix where each barrier to dark tourism is shown by notation A1 to A8. The responses in the data are denoted using binary values. (Table 1) Yes (Y): indicates presence of barrier; No (N): Indicates absence of a barrier.

Initial Reachability Matrix (IRM)

The IRM presents the relationships among the identified barriers by establishing dependencies and hierarchical interactions. The binary matric was transformed from Y and N to 1 and 0. (Table 2)

Final Reachability Matrix (FRM)

After Transitivity links was found for IRM, Final Reachability Matrix is depicted in Table 3. Transitivity links are represented by 1*.

Partition Level

After validating the FRM, level partitions are being performed to determine the hierarchy the among the barriers. (Table 4)

TISM Analysis

Analysis done by TISM has given very useful insights and understanding into the hierarchical structure of barriers which impacts dark tourism growth globally. The results have identified and divided barriers into five levels of hierarchy, showing their interrelationship and influence on each other (Figure 1)

Barrier Hierarchy Formation

- **Level 1:** Lack of Perceived Benefits (A7): Identified as the most dependent and fundamental barrier that impacts the perception of dark tourism's value among tourists.

- **Level 2:** Emotional and Psychological Reactions (A2): Acts as a critical barrier influenced by awareness and cultural factors, contributing to avoidance behavior.
- **Level 3:** Lack of Awareness (A5), Ineffective Marketing Strategies (A8)

  These barriers reinforce each other and significantly impact public perception and tourist engagement.
- **Level 4:** Cultural and Ethical Concerns (A1), Social Stigma (A3), Non-Responsiveness (A6)

  These are strong linkage barriers with both high dependence and high driving power, requiring balanced intervention strategies.
- **Level 5:** Lack of Interest (A4)

  Positioned as the most influencing/driving barrier, reflecting how other factors influence global interest in dark tourism.

Table 2: Obtained Data

Notion	Factors	A1	A2	A3	A4	A5	A6	A7	A8
A1	Cultural & Ethical Concerns	Y	N	N	N	Y	N	Y	Y
A2	Emotional & Psychological Reactions	N	Y	N	N	N	N	Y	N
A3	Social Stigma	N	Y	Y	N	Y	Y	Y	N
A4	Lack of Interest	N	N	Y	Y	N	N	N	Y
A5	Lack of Awareness	Y	Y	N	N	Y	N	N	Y
A6	Non-responsiveness	N	N	Y	N	N	Y	Y	N
A7	Lack of Perceived Benefits	Y	N	N	N	N	Y	Y	N
A8	Ineffective Marketing Strategies	N	Y	N	Y	Y	N	Y	Y

Table 3: Initial Reachability Matrix

Notion	Factors	A1	A2	A3	A4	A5	A6	A7	A8
A1	Cultural & Ethical Concerns	1	0	0	0	1	0	1	1
A2	Emotional & Psychological Reactions	0	1	0	0	0	0	1	0
A3	Social Stigma	0	1	1	0	1	1	1	0
A4	Lack of Interest	0	0	1	1	0	0	0	1
A5	Lack of Awareness	1	1	0	0	1	0	0	1
A6	Non-responsiveness	0	0	1	0	0	1	1	0
A7	Lack of Perceived Benefits	1	0	0	0	0	1	1	0
A8	Ineffective Marketing Strategies	0	1	0	1	1	0	1	1

Table 4: Final Reachability Matrix

Notion	Factors	A1	A2	A3	A4	A5	A6	A7	A8	Driving Power
A1	Cultural & Ethical Concerns	1	1*	0	1*	1	1*	1	1	7
A2	Emotional & Psychological Reactions	1*	1	0	0	0	1*	1	0	4
A3	Social Stigma	1*	1	1	0	1	1	1	1*	7
A4	Lack of Interest	0	1*	1	1	1*	1*	1*	1	7
A5	Lack of Awareness	1	1	0	1*	1	0	1*	1	6
A6	Non-responsiveness	1*	1*	1	0	1*	1	1	0	6
A7	Lack of Perceived Benefits	1	0	1*	0	1*	1	1	1*	6
A8	Ineffective Marketing Strategies	1*	1	1*	1	1	1*	1	1	8
-	Dependence Power	7	7	5	4	7	7	8	6	-

Table 5: Partition Level

Factors	Notion	Reachability Set	Antecedent Set	Intersection Set	Level
Cultural & Ethical Concerns	A1	1	1	1	IV
Emotional & Psychological Reactions	A2	2	1,2,3,4,5,6,8	2	II
Social Stigma	A3	3,6	3,4,6	3,6	IV
Lack of Interest	A4	4	4	4	V
Lack of Awareness	A5	1,4,5,8	1,3,4,5,6,8	1,4,5,8	III
Non-responsiveness	A6	3,6	3,4,6	3,6	IV
Lack of Perceived Benefits	A7	1,3,5,6,7,8	1,2,3,4,5,6,7,8	1,3,5,6,7,8	I
Lack of Effective Marketing Strategies	A8	1,3,4,5,8	1,3,4,5,8	1,3,4,5,8	III

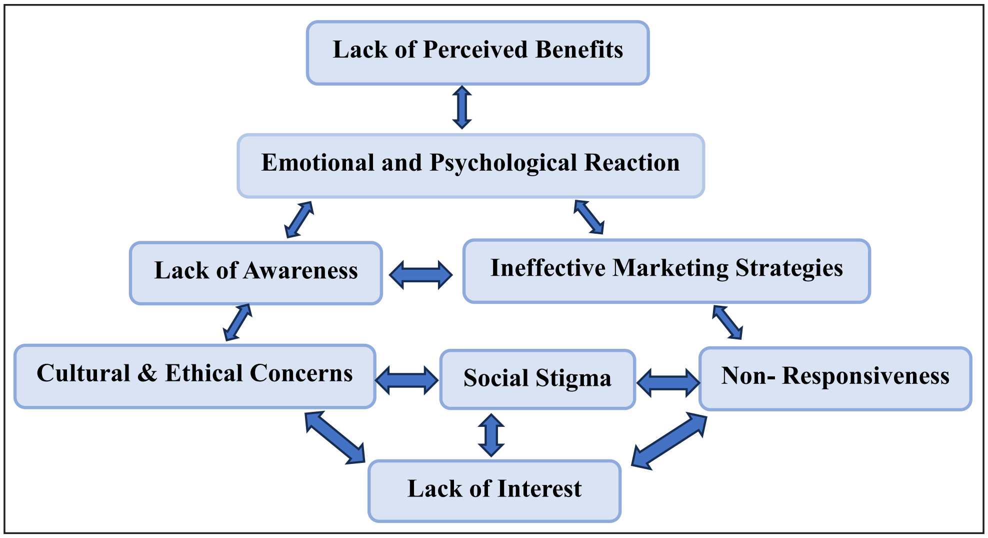


Fig. 1: Structural Model

MICMAC Analysis

The MICMAC (Matrice d'Impacts Croisés Multiplication Appliquée à un Classement) analysis categorizes barriers based on their driving power and dependence power, helping to classify them into four important categories (Figure 2)

- **Independent Barriers** (High Driving Power, Low Dependence): Lack of Effective Marketing Strategies (A8) and Lack of Interest (A4) and Social Stigma (A3) act as the core drivers influencing other barriers and require attention for strategic interventions.
- **Linkage Barriers** (High Driving Power, High Dependence): Cultural and Ethical Concerns (A1) barriers exhibit strong mutual influence, meaning interventions in one area will impact others. A comprehensive approach is necessary to address them.
- **Dependent Barriers (Low Driving Power, High Dependence):** Emotional and Psychological Reactions (A2), Lack of Awareness (A5), Lack of Perceived Benefits (A7) and Non-Responsiveness (A6) rely heavily on improvements in marketing and cultural acceptance, making them key focus areas for policymakers.
- **Autonomous Barriers (Low Driving Power, Low Dependence):** No major barriers fell into this category, indicating that all barriers are interconnected in some form.

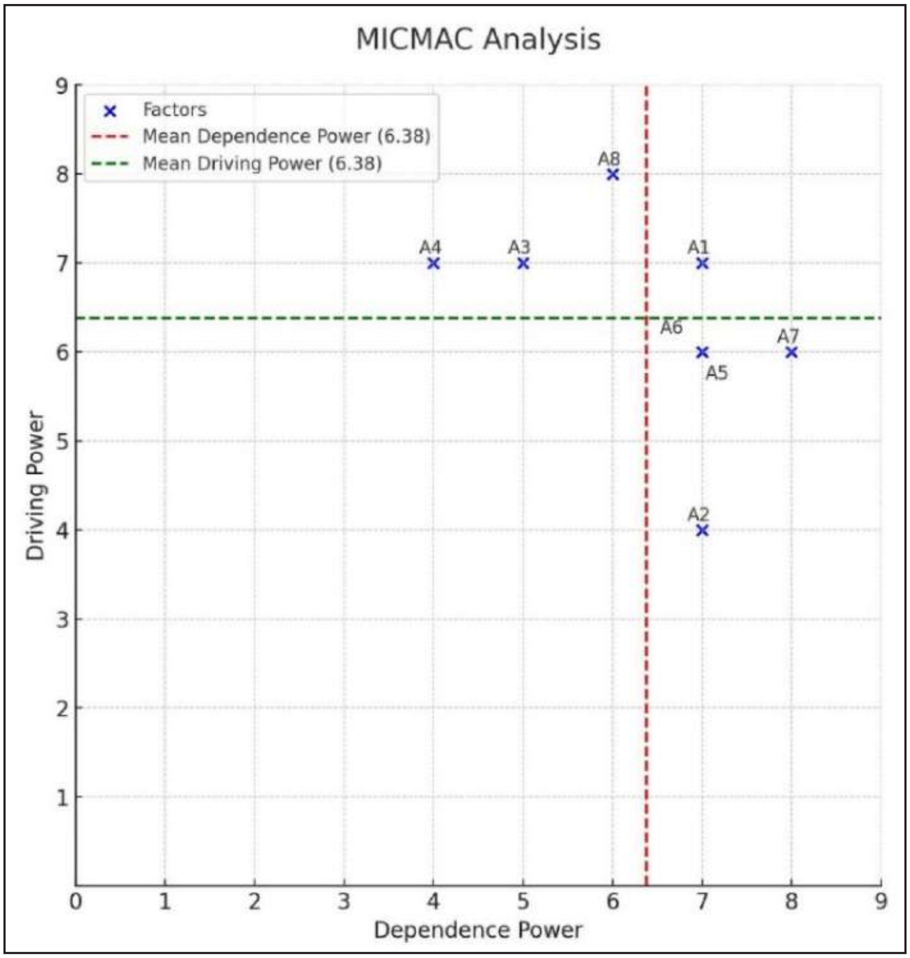


Fig. 2

DISCUSSION

The results obtained from TISM and MICMAC analysis highlight several important parameters for dark tourism development on a global scale.

Interconnected Nature of Barriers

The findings validate that the barriers to dark tourism development are not independent challenges that has to be dealt rather a part of intertwined process. For example, ineffective marketing (A8) directly contributes to a lack of awareness (A5), which in turn affects public interest (A4).

Importance of Addressing Driving Factors

The study identifies that ineffective Marketing Strategies (A8) and Lack of Interest (A4) are pivotal driving barriers. These are to be addressed through targeted marketing campaigns, educational programs, and strategic partnerships for improvements across other dependent barriers.

Cultural and Ethical Considerations

Ethical concerns (A1) and social stigma (A3) continue to pose significant challenges globally. Sites must be managed with sensitivity to avoid commercializing tragedy while still promoting historical education and remembrance.

Role of Technology

Using digital platforms and immersive experiences such augmented reality (AR) virtual reality (VR) could help address psychological barriers (A2) and increase interest (A4) in dark tourism sites worldwide.

STRATEGIC IMPLICATIONS

1. To increase awareness and interest, targeted digital marketing strategies should be implemented to cater different segments.
2. To ensure respectful site management ethical guidelines should be developed.
3. Utilizing emerging technologies such as augmented reality, virtual reality and others to enhance visitor experiences and perceived benefits.

CONCLUSION

The study adequately recognizes the major barriers that prevents the growth of dark tourism globally and builds the hierarchical and interdependent relationships among them using TISM and MICMAC analysis. The findings implicate the need for meaningful measures that can be taken focusing on marketing, awareness and ethical considerations to promote and enhance the growth of dark tourism. Working on these barriers collectively can lead to a sustainable development in dark tourism globally.

REFERENCES

1. Lennon, J.J., & Foley, M. (1996). Dark tourism: The attraction of death and disaster. International Journal of Heritage Studies, 2(4), 198–211.
2. Stone, P.R. (2006). A dark tourism spectrum: Towards a typology of death and macabre related tourist sites, attractions and exhibitions. Tourism, 54(2), 145–160.
3. Sharpley, R., & Stone, P.R. (2009). The darker side of travel: The theory and practice of dark tourism. Channel View Publications.
4. Punitha, S.J., & Rajashekar, H. (2018). Review of literature: Dark tourism. Journal of Emerging Technologies and Innovative Research.
5. Naik, S.N., & Botre, P.B. (2019). Dark tourism concept, features and significance in India. International Journal of Research and Analytical Reviews.
6. Tarlow, P.E. (2005). Dark tourism: The appealing dark side of tourism. In M. Novelli (Ed.), Niche tourism: Contemporary issues, trends and cases (pp. 47–58). Elsevier.
7. Foley, M., & Lennon, J. (2000). Dark tourism. Annals of Tourism Research, 27(3), 862–866.
8. Ashworth, G., & Hartmann, R. (2005). Horror and human tragedy revisited: The management of sites of atrocities for tourism. Cognizant Communication Corporation.
9. Magano, O., *et al*. (2023). Perspectives on the role of dark tourism in contemporary society. Journal of Tourism Studies.
10. Magano, J., *et al*. (2023). Cultural and ethical concerns in dark tourism. *Tourism Review, 78*(1), 123-145.
11. Naik, S., & Botre, R. (2019). Infrastructure challenges in Indian dark tourism sites. *Journal of Destination Marketing & Management, 10*, 23-34.
12. Martini, A., & Buda, D. (2020). Psychological impacts of visiting dark sites. *Journal of Heritage Tourism, 14*(3), 299-314.
13. Nawijn, J., & Biran, A. (2019). Emotional experiences in dark tourism. *International Journal of Tourism Research, 21*(5), 468-480.
14. Prayag, G., Buda, D., & Jordan, E. (2020). Residents' perceptions of dark tourism sites. *Tourism Geographies, 22*(4), 677-696.
15. Gentry, G. (2007). Social stigma and dark tourism. *Annals of Tourism Research, 34*(2), 256-271.
16. Holloway, J. (2010). Thanatourism and emotional experiences. *Tourism Analysis, 15*(1), 39-52.
17. Punitha, S.J., & Rajashekar, H. (2018). Public perceptions of dark tourism in India. *Tourism Management Perspectives, 28*, 156-168.
18. Zheng, C., *et al*. (2016). The effect of social stigma on dark tourism participation. *Journal of Tourism and Cultural Change, 14*(2), 123-138.
19. Dancausa, C., *et al*. (2020). Exploring motivations and constraints in dark tourism. *Journal of Travel Research, 59*(4), 501-517.
20. Yan, H., *et al*. (2016). Entertainment vs. heritage tourism preferences. *Current Issues in Tourism, 19*(7), 654-672.
21. Singh, S., *et al*. (2016). Awareness and interest in dark tourism destinations. *International Journal of Tourism Cities, 2*(3), 234-249.
22. Korstanje, M., & Ivanov, S. (2012). Dark tourism resilience. *Journal of Tourism Studies, 20*(2), 145-159.
23. Chang, T. (2014). Dark tourism motivations and perceived benefits. *Tourism Management, 45*, 321-334.
24. Sharma, P., & Nayak, J.K. (2019). Economic impact of dark tourism. *Tourism Economics, 25*(6), 933-950.
25. Lennon, J. (2017). Marketing dark tourism destinations. *Tourism Management, 60*, 229-244.
26. Singh, R., *et al*. (2016). *Dark tourism in India: Challenges and opportunities.* Tourism Review, 71(3), 256-270.

27. Zheng, C., Zhang, J., & Qian, L. (2016). *Exploring sub-dimensions of intrapersonal constraints to visiting dark tourism sites*. Asia Pacific Journal of Tourism Research, 21(15), 1710-1727.

28. Ben Ruben, R., & Varthanan, P.A. (2019). *Application of Total Interpretive Structural Modeling (TISM) Approach for Analysis of Barriers in Deploying Circular Supply Chains*. Indian Journal of Science and Technology, 12(24), 1-10.

29. Mathivathanan, D., Mathiyazhagan, K., Khorana, S., Rana, N. P., & Arora, B. (2022). *Drivers of circular economy for small and medium enterprises: Case study on the Indian state of Tamil Nadu*. Journal of Business Research, 149, 997–1015.

30. Ramesan, S., Kumar, P., & Garg, S.K. (2022). *Analyzing the enablers to overcome the challenges in the adoption of electric vehicles in Delhi NCR*. Case Studies on Transport Policy, 10, 1640–1650.

S.P MANDALI'S weschool Welingkar Education

Core Values

- **Passion**
  The soul of welingkar blossoms in our heart, mind and body.
- **Breakthrough thinking**
  We foster academic rigour in an environment conducive to innovation.
- **Result oriented process driven work ethic**
  We adopt dynamic quality processes to ensure accountability and exceptional performances.
- **We link and care**
  We support and collaborate with all our stakeholders through mutual trust and respect.

Quality Policy

We are committed to give our students Quality Management Education in tune with the changing needs of business and industry.

We shall endeavour to do this by

- Providing the best learning resources.
- Making the environment conducive for students to develop their creativity, leadership skills and ability to learn continuously.

We shall follow a data oriented factual approach to quality Management leading to continual improvement of our processes culminating in total customer satisfaction

S.P MANDALI'S
weschool
Welingkar Education

S. P. Mandali's
Prin. L.N. Welingkar Institute of Management Development & Research

102/103, Hosur Rd, next to BSNL Telephone Exchange, Electronics City Phase 1, Electronic City, Bengaluru, Karnataka 560100
we.blrjournal@welingkar.org

Designed & Printed by **Excel Printing Universe**, New Delhi-110067, e-mail: printing@groupexcelindia.com | www.groupexcelindia.com

Group Excel India
www.groupexcelindia.com

Publishing Consultancy
Excel INDIA PUBLISHERS
EXCEL INDIA PUBLISHERS
91 A, Pratik Market, Munirka, New Delhi-110067
+91 9899127755/ 9999609755/ 9910757755/ 8130607755
publishing@groupexcelindia.com/ books@groupexcelindia.com
www.excelindiapublishers.com/ www.groupexcelindia.com