

The Role of Green Supply Chain Practices: Exploring Customer Preferences and Perception in Marketing Sustainability

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Abstract— This research investigates the role that green supply chain management practices (GSCM) have on corporate sustainability performance relative to the DS Group. As organizational sustainability is becoming a pillar of brand positioning in today's corporate environment, organizations are taking to Green Supply Chain Management (GSCM) to address environmental practices. The research suggests that full green supply management practices are the basis for long-term sustainability. The DS Group is inextricably caught up with sustainable practices, i.e., water-management initiatives, renewable energy, and sustainable packaging. There is also movement to sustainability as a performance breakthrough from sustainability as a compliance tool as a brand differentiator. The results further suggest that organizations should exercise the desire to integrate sustainability across the value chain if they want to grow brand equity and have a competitive edge. There will always be challenges/limits practicing green branding, as indicated by experts highlighted the risks of misalignment and the fact that investing in short-term costs may be necessary.

Keyword— Green Supply Chain Management, sustainability, Customer Preferences and Perception

INTRODUCTION

There is evidence from some firms and researchers that 'hopeful green supply chains' are emerging truths of significance in the world today. This trajectory is evidenced, we believe, due to the environmental changes being experienced worldwide, as well as the broadening challenges being felt across all sectors of industry. Environmental changes have shown it is vital to improve traditional supply chain practices to be able to adopt more environmentally friendly options that can lessen the negative environmental impacts of production, as well as by the more environmentally conscious customers businesses would like to attract in their supply chain.

Green Supply Chain Management ("GSCM") takes the view that if environmental considerations can be incorporated, the supply chain can encompass things like the source of materials, the activity of manufacturing, the packaging, transportation, and distribution practices, as well as the disposal of the product. Green supply chain practices are activities carried out that make up the GSCM practices. The types of green supply chain practices that can be implemented are not to be viewed as an entirety but instead thought of as unique sets of unique resource sets with environmental considerations taken into account. Performance, resource and organizational factors, markets, stakeholders, and competition help organizations to develop and implement green supply chain practices and the decisions taken to be sustainable. The green supply chain practices play the role of operational practices that are conducted, by an organization, with the hope of reducing an impact on the environment and achieving sustainability. The move towards implementation of GSCM is, in part, because an organization's customer base is demanding organizations to follow environmental sustainability (green)

practices, to comply with green and eco-friendly strategies to reduce the harmful environmental impact of their products and services.

This research focuses on how using eco-friendly supply chain practices can improve a company's brand reputation and help it to a competitive advantage.

It highlights the need to flexible chain activities with sustainability goals to attract environmentally aware customers. To support this, the study includes a detailed case study of the DS Group, a well-known multinational company recognized for its strong commitment to sustainability.

I. OBJECTIVE OF THE STUDY

The objectives of the study are as follows-

1. To understand the role that green supply chain practices play to agenda sustainable marketing strategies and brand positioning, through examining DS Group's responsible sourcing, eco-friendly packaging, and logistics.
2. To understand how sustainability driven supply chain activities shape consumer perception and brand image, focusing specifically on how sustainability practices directly drive customer trust and competitiveness.
3. To understand with the implementation of green supply chain models- challenges and opportunities, specifically based on developing economies like India, and recommendations for incorporating sustainability into business model for sustaining growth

II. METHODOLOGY

A. PRIMARY DATA COLLECTION

In this research study, primary data collection was conducted to evaluate consumers' preferences and perceptions of the DS Group's green supply chain practices and the effects upon the company's established brand position. Primary data were collected using a standardized questionnaire specifically designed for this study.

The primary research component involved the collection of quantitative data from a sample of 100 consumers through a structured online questionnaire. This research project targeted consumers of DS Group products with a convenience sample method. The researcher designed a structured questionnaire to capture consumer preferences and comprehension of DS Group's sustainability practices based on- Product Preferences – Familiarity and preference for DS Group products, Perception of Green Supply Chain Practices – asked about the company

sustainability efforts in packaging, logistics, and sourcing and Brand Image and Positioning – regarding the perception of DS Group's brand concerning green practices.

Participants received the questionnaire using an online Google Form, and answers were gathered over the course of two days. The results provide preliminary evidence of information that can serve as a foundation for future studies.

This information will help DS Group evaluate how effectively the business' commitment to sustainability is being received by consumers and support market research more generally into sustainability-led brand positioning.

B. SECONDARY DATA COLLECTION

We took into a qualitative case study research approach the effect of DS Group's sustainability programs on its supply chain processes and reputation is studied. It allows for a thorough examination of how DS group integrates environmental goals into its operational and strategic contexts, the case study methodology is appropriate for evaluating specific strategies.

A variety of secondary sources was used in gathering the data, including website presentations, impact reports, and DS Group annual sustainability reports. DS Group was selected as the subject of this case study due to its clear carbon neutrality goals, commitment to sustainable technologies, and role in spearheading ESG trends in the industrial industry.

This study adopts a mixed-method approach, integrating both primary and secondary data sources to thoroughly investigate The Role of Green Supply Chain Practices: Exploring Customer Preferences and Perception in Marketing Sustainability. Extensively using secondary data was also necessary to validate the primary findings and develop a deeper understanding, while addressing the issue of green supply chain practices and brand positioning.

III. FINDINGS

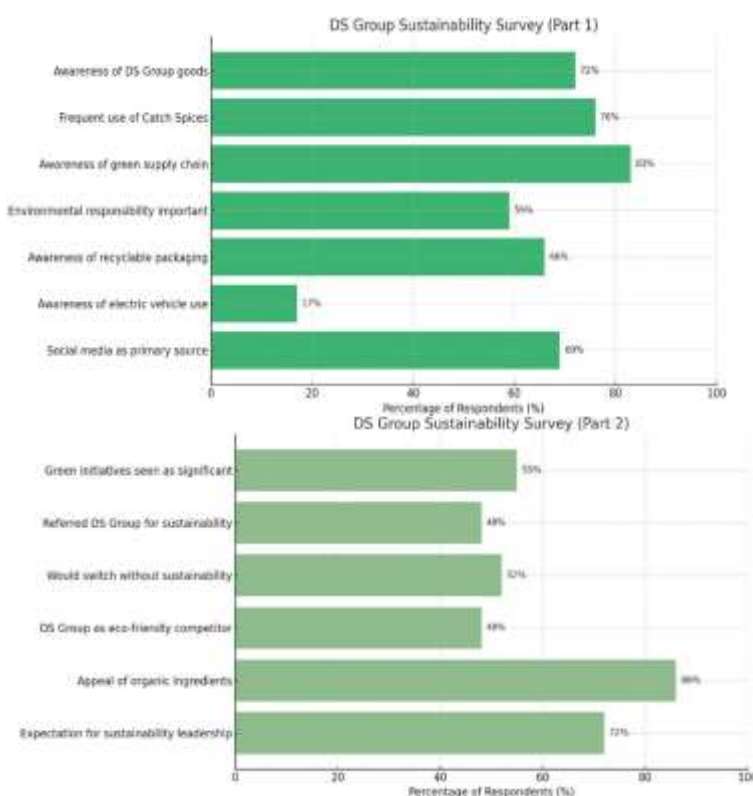


Fig. 1 (a) & (b)

The survey completed with 100 respondents indicated that 72% of consumers reporting awareness of their goods, and 76% of consumers reporting frequent use of Catch Spices. Further, the DS Group has an incredible 83% awareness of the green supply chain, with 59% of consumers noting environmental responsibility as very important in a brand decision. 66% of consumers indicated an awareness of DS Group recyclable packaging while 17% of consumers noted the DS Group electric vehicle use among other estimates of sustainability demonstrating a lack of consumer awareness as explained by existing communication approaches. In addition, the role of social in information consumption is presented as a proposed elemental, as 69% of consumers knowledge social media as being their primary source. More than half of consumers (55%) felt the company's green initiatives were significant and 48% stated the company's sustainability initiatives led them to refer DS Group. 52% of consumers noted they would have shifted to a greener alternative if the DS Group had not focused on sustainability, while 48% indicated they were a virtue competitor of DS Group due to its ecologically friendly initiatives. The respondents indicated they found organic ingredients to be the most appealing green feature (86%) while 72% of consumers though the DS Group

had a responsibility to set sustainability standards; this implies higher expectations for continual improvement and potential leadership in sustainable branding from consumers going forward. [as shown in fig. 1(a) & (b)]

The results confirm that sustainable supply chain practices play a significant role in influencing consumer preferences and loyalty. While these findings are consistent with previous studies focused on sustainable supply chain practices through transparent, authentic, and consumer-driven sustainability options, DS Group brands sustainable practices, mainly in sourcing ingredients and packaging, resonated well with consumers highlighting their contribution to brand equity.

However, it is apparent that consumer ignorance of certain initiatives (e.g. electric logistics), and waste reductions highlight areas the company can strengthen its communication with consumers. The company may also want to strengthen the storytelling elements around their green practices to influence consumer cognition and emotional engagement. Investing in sustainability reporting and consumer education may also foster more meaningful relationships with environmentally focused consumers.

IV. LITERATURE REVIEW

CONCEPT OF GREEN SUPPLY CHAIN

Green Supply Chain Management (GSCM) has recently evolved into a new way of thinking about supply chain into sustainability practices, aiming to meet environmental and economic goals. The conceptualization of GSCM is the inclusion of environmental issues into supply chain management from design to the end user to its waste. A lot of researchers have found that GSCM is not only a means of reducing negative environmental impacts but improves the sustainability performance of organizations. This literature review examines some of the main aspects, strategic importance, and GSCM in the context of marketing sustainability, with examples related to the DS Group.

The underlying premise of GSCM includes the collective need to act as a responsible corporate citizen and lean towards sustainable development. GSCM enables firms to develop and engage in practices that support sustainability in sourcing, production, packaging, logistics, and reverse logistics. It is,

however, generally accepted that organizations are practicing sustainability to meet heightened regulatory demands, societal expectations, and task groups requiring compliance with environmental models and standards.



Fig. 2 Components of Green Supply

One of the key elements of GSCM is green purchasing. Green purchasing refers to purchasing materials and services that have reduced adverse environmental effects, and this means that when suppliers are selected, consideration is given to the supplier and their environmental performance, not just their price and quality. Green design is also an element which focuses on designing products that are recyclable, use less materials, and have the least impact over their life cycle on the environment. Green manufacturing emphasizes the reduction of waste, going clean/clean energy, and controlling pollution. This shows that manufacturing has the largest impact on the environment, so it should be a focus. Green packaging and green distribution include minimizing packaging material, arranging transportation routes to reduce carbon emissions. Green logistics includes using electric vehicles, route optimization, and best practices in warehousing (as shown in fig. 2).

Efforts such as these correlates with literature suggesting sustainability is a moral obligation as well as a competitive strategy. Their transparency and commitment to using renewable energy and responsible packaging, as well as community programs, all help to reinforce their brand image as a socially responsible brand. There is value in incorporating these elements into their marketing campaigns, as it provides a good 'return on investment' regarding brand loyalty and creates a benchmark in the FMCG industry.

NECESSITY OF GREEN SUPPLY CHAIN MANAGEMENT

As a result of climate change, increasing levels of pollution, and customers demanding their brands be responsible, a call for GSCM practices is growing. The decisions to adopt green supply chains can also be made on whether cost savings, along with the company differentiating their brand, and the need to comply with

international standards. Companies that adopted GSCM activities in their companies are reporting increased brand loyalty, operational efficiencies, and trustworthiness with their stakeholders.

When looking at GSCM practices through the marketing spectrum, there are ways to positively influence the brand position. While customers are increasingly valuing sustainable products, companies will take the opportunity of using GSCM as a differentiating factor for their business. Sustainable marketing communication initiatives, such as open communication, reporting transparency and community engagement have enhanced emotional ties to their consumers.

DS GROUP OVERVIEW

GSCM can be illustrated well with the example of the DS Group, a diversified Indian business. The company operates in various markets of FMCG, hospitality, dairy, and agriculture and has impacted green practices throughout its value chain. The company engaged in agroforestry based sustainable sourcing, moved to logistics that utilized electric vehicles, and launched projects that conserve water in its agricultural supply chain, as well as eco-friendly packaging efforts found in their 'CatchTheRightBin' initiatives. All the sustainable practices the Group has engaged in include stakeholder-led community initiatives, investment in renewable energy and many other sustainable practices stated elsewhere in our article. While some of the sustainability initiatives may appear small on their own, when the sustainable practices are considered as a total, it has provided the Group with substantially lower environmental impacts and a strong brand position for being responsible and a forward-thinking organization.

INTEGRATION OF SUSTAINABILITY INTO MARKETING AND BRANDING

Sustainability has become part of the commercial strategy, particularly in marketing and branding. As consumers become increasingly informed and aware of social and environmental issues, they are demanding socially aware, ethically produced, or environmentally beneficial products. Through embracing sustainability, companies need to shift their strategies to accommodate consumers. Sustainable marketing starts with product design, and companies are innovating to ensure products are long lasting, repairable, recyclable, or are renewable resources. Storytelling in an important way communicates sustainability efforts. Therefore, companies that utilize transparent and sustainable practices like Dharampal Satyapal Group (DS Group) are trendsetters in this finding there are commercially viable opportunities. If a company integrates sustainability into their operational strategy, it will build consumer loyalty and consumer trust in the brands products. Ultimately undergoing sustainability will show consumers and the organization itself that you can be environmentally sustainable and make a profit.

CUSTOMER PREFERENCES & PERCEPTION OF GREEN SUPPLY CHAIN PRACTICES IN DS GROUP'S BRAND POSITIONING

Corporate marketing needs to rely on careful tracking and analysis of the market the corporation is involved in that is adaptable enough to modify competition's elements to satisfy changing consumer's needs. Green Marketing, or eco- marketing, is one aspect of marketing that has become significant to consumers as they evolve their understandings of their ecological footprints.

Corporations will need to set out their positioning and values in relation to environmentally minded products and promote those openly and transparently to the public domain in a way the consumer may understand. The example of the Dharampal Satyapal Group (DS Group) suggests that sustainability can be incorporated into a branding strategy, that can shift consumer perception positively making the brand more loyal. With a positive perception of a brand, consumers are more likely to be brand-loyalty as they become more inclined to make a re-purchase of goods and/or services. A passionate consumer can transition into being a promoter, making renewed purchases to nurture and grow the brand. Also, as illustrated in the DS Group example, sustainability is today a branding element not just a conversation topic that corporations proclaim.

IMPACT ON BRAND POSITIONING

The Green Supply Chain Management (GSCM) initiatives implemented by DS Group have bolstered the branding process to present a brand that demonstrates and promotes respect and support for the environment. Sustainability while making purchasing decisions is increasing, and the DS Group has utilized several green initiatives as part of their GSCM to minimize environmental footprints and produce a unique brand image based on trustworthy practices from a multinational like DS Group. Data from consumer surveys suggested that more than 80% of the respondents had awareness of the GSCM initiatives of DS Group, and several of them acknowledged the levels of success DS Group has attained in their environmental undertakings.

Additionally, the perception of environmentally responsible branding, together with customer assurance that they are using ethically sourced products from a reputable and responsible corporate citizen has led to converting perceptions into brand preference and loyalty. Data from the survey showed that almost half of those surveyed had converted to total use of DS Group products based solely on the practices they uphold in their operations to support sustainability. In addition, having transparency in information disseminating on sustainability and their green initiatives has done further work to enhance market credibility for DS Group, which is a requisite for perfume or an FMCG sector which finds consumers giving more consideration to ethical purchases.

As a result, the company is in good standing with developing stakeholder expectations and regulatory trends in relation to corporate responsibility policy about regulating business practices in the marketplace. All of which helps to further solidify brand perceptions amongst investors, partners, and consumers alike. Between the green practices established by the DS Group that affect consumer attitudes towards purchasing products of the DS Group, prior literature has demonstrated that consumers determine their preferences through the environmental responsibility orientation of a brand.

The clear and transparent communication of sustainability programs or aims also created positive visibility as a responsible brand. Changes to the operations aspect of DS Groups brand has transitioned to a value-based brand from being product-oriented, this future development will provide both sustainable competitive advantage and overall strengthened competitive market positioning.

V. CHALLENGES AND RECOMMENDATIONS

The DS Group has committed to sustainability in numerous ways, however there are many barriers to full-scale adoption and optimization of GSCM practices in India. These barriers are typical of developing economies, and addressing them is vital to ensure long-term sustainability.

- **Inadequate Supplier and Distribution Networks-** Many suppliers have no green practices or certifications for sustainable sourcing. This makes it difficult to keep a consistent green supply chain in process for suppliers to use and increases the cost of compliance.
 - **Stakeholder Resistance to Change-** Supply chain partners (e.g., internal departments) may resist moving to green alternatives as they are concerned about cost or productivity that is lost during the transition, and do not understand the long-term benefits.
 - **High Initial Capital Investment-** Moving to sustainable packaging, using electric vehicles, switching out old machinery with energy efficient machinery and getting green certifications require large amounts of upfront investments, which can stall smaller scale implementations or slow the pace of change.
 - **Technological Constraints-** The limited use of digital tools like AI (for predictive logistics), IoT (for tracking energy), or blockchain (for traceability) restricts DS Group's ability to scale and manage the green practices.
 - **Poor Infrastructure in Rural Areas-** The availability of charging stations for EVs, appropriate recycling infrastructure and reliable routes for transport for rural locations create limitations on the ability to execute sustainable logistics and waste management.
 - **Lack of Public and Consumer Awareness-** As evident from the survey findings, though 83% understand of green supply chain practices though only 17% acknowledged electric vehicle use. This can indicate a lack of communication between DS Group's practices and how it is viewed by consumers.
 - **Uneven Government Regulations-** Sustainability compliance can often, by individual states in India, and in many situations there may not even, be adequate management systems in place. There may be fundamental loopholes surrounding the notions of green certification, emission controls, or waste disposal standards.
- The following strategic measures should be put in place by DS Group in order to get beyond these obstacles and increase the impact of its sustainability agenda-
- **Stakeholder Education and Engagement-** It is important for employees, vendors, and logistics partners to learn GSCM and its benefits. This simple act can mitigate resistance and even lead to innovation internally, and in the supply chain ecosystem. DS Group may need to prioritize their time and pick the options that fit best with their overall sustainability effort, resources, and their supply chain environment.
 - **Integration of Smart Technologies (AI, IoT, Blockchain)-** Employing AI to optimize delivery routes and reduce emissions. Using IoT devices to have live data of energy consumption. Exploring options with blockchain technology to provide transparency in end-to-end supply chains as well as ethically sourced materials.
 - **Strengthening Community, NGOs and Other**

Partnerships- Working with local NGOs, farmers and community suppliers to co-design sustainable sourcing programs, increase local buy-in, better raw materials traceability and recognize ethical labor practices.

- **Enhance Emotional Storytelling Through Branding-** Creating captivating sustainability stories that worked emotionally with consumers. Utilize employee, supplier, and customer stories to humanize DS Group's sustainability initiatives and create connections via all social and advertising formats.

- **Use Up-to-date Social Media Channels-** Utilizing the statistic that 69% of consumers hear about sustainability on social media. Investing in engaging formats, such as infographics, reels, or video explainers on social media platforms like Instagram, LinkedIn, and YouTube.

VI. ENHANCING DS GROUP'S SUSTAINABILITY STORYTELLING AND SOCIAL MEDIA ENGAGEMENT

Even though DS Group implemented sustainable practices for water conservation, electric vehicle logistics, and sustainable packaging solutions, there is still a great chance to influence brand perception and build emotional bonds with its employees by communicating these sustainability initiatives in a way that makes sense to the market. A single sustainability project can be transformed from an abstract concept to a human-centered experience by using storytelling, which is more than a marketing scheme.

Importance of Storytelling

Emotional Connection: Research in behavioral science has shown that stories light up more areas of the brain than facts. A customer might read, "DS Group reduced water by 30%," and understand it logically, but a story about a farmer in Rajasthan that DS Group sponsored, who now grows crops using drip irrigation funded by the company, creates empathy and trust.

Memory- Consumers will remember stories better than they will remember data. A video that shows the lifecycle of sustainable packaging from the factory through the supply chain to supermarket shelf is far more memorable than a simple assertion about recyclable materials.

Trust and Authenticity- With the majority of concerns and conversations being around what is seen as "greenwashing," i.e. when companies *pretend* to be sustainable just for marketing, without real action. Personal stories, behind-the-scenes content, and community statements create claims that are more credible and transparent.

Brand Differentiation- In the industry of FMCG, storytelling is the differentiating factor that changes sustainability from compliance action to a brand differentiator.

Emotional Connection- Research in behavioral science has shown that stories light up more areas of the brain than facts. A customer might read- DS Group reduced water by 30% and understand it factually, but a story about a farmer in Rajasthan that DS Group sponsored, who now grows crops using drip irrigation funded by the company, creates empathy and trust.

Strategies for DS Group

- **Human-Centered Stories-** Featuring stories of people who have been affected by green supply chain efforts, such as farmers engaging in sustainable destinating, employees using electric vehicles for delivery orders, or local communities

benefitting by a project to enhance water conservation.

- **Behind-the-Scenes-** Provide a behind-the-scenes look (in short form video or in Instagram reels format) into the day-to-day operations of sustainable factories, sustainable packaging re-designs or sustainable logistics upgrades in order to be transparent, but also a little exciting.

- **Sustainability Timelines-** Developing a timeline that visually lays out the DS Group's green journey over the years (2000–2025), including milestones like glow-in-the-dark solar installs, the introduction of #CatchTheRightBin, or sustainable farming. Chronological storytelling emphasizes commitment.

- **Weekly Updates-** Weekly posts from various departments or partners to share sustainability wins.

SOCIAL MEDIA ENGAGEMENT

According to a survey, 69 percent of consumers use social media to learn about sustainability. However, DS Group's communications to date do not seem to leverage this insight. This is how DS Group can position its sustainability content to be more strategic, emotional, and shareable across platforms-

- **Measure & Feedback Loops-** Tracking engagement metrics, such as sentiment, shares and saves, rather than likes. Use of Instagram Story Polls or Twitter polls to find out what sustainability action your fans care about the most-packaging, logistics, or sourcing- and create content accordingly.

- **Platform-Specific Content Strategy-** DS Group must adapt the content they create to fit the way the different channels operate. Instagram and Facebook allow for some visual storytelling and can be very interactive with customers. LinkedIn is less consumer-facing and more thought leadership/CSR report related. YouTube provides a great format to build the story of the sustainability initiative through mini-documentaries or ongoing/series of sustainability efforts. Twitter/X is also a good channel to get information out in the moment to the audience and join in on conversations occurring in the various industries.

- **Partnerships & Collaborations-** Partner with influencer who has an eco-positive brand. Sustainability influencers can create content visiting DS Group operations, reviewing green products, and creating authentic experiences through storytelling. Their following and credibility can spread DS Group's message exponentially to sustainability-minded consumers.

- **Authentic brand voice-** For maintaining consistency and credibility in brand voice across all social channels, it is vital that DS Group should always speak in a clear and human voice that reflects sincerity, accountability and purpose to their user. This will create trust in the long run and position DS Group as the sustainability example with heart.

VII. LIMITATIONS OF THE STUDY

- **Lack of Behavioral Observation-** One of the study's limitations is that self-reported consumer perceptions may be biased. Because of social appeal, or the desire to seem more environmentally sensitive than they actually are, some respondents may normatively overstate their level of environmental awareness or concern. Furthermore, it's possible that many people are unaware of the company's true sustainability procedures. Their responses will reflect this.

- **Absence of Multi-Stakeholder Perspectives-** The report does share the views of consumers but does not share the views of other stakeholders in the green supply chain such as supply chain partners, employees, sustainability officers, and government or regulatory organizations. Including these views would provide a clearer picture of the challenges and opportunities for Green Supply Chain Management (GSCM), as GSCM can be investigated with both organizational and external influences upon sustainability initiatives.
- **Insufficient Focus on Regional Diversity-** The study has neglected to Account for the regional diversity of India as a country of vast geographical and cultural diversity. The study does not even differentiate between urban and rural consumers and again does not differ between the regions (north versus south), Each of these populations likely has different levels of awareness and expectations of sustainability. The study does not account for these differences in order to get full and elaborate understanding of consumer perceptions across India.
- **Convenience Sampling Bias-** The research was conducted using convenience sampling, floated online, which may not be representative of the entire target population. There may also be some potential drawbacks to this method of sampling, which likely excludes consumers who don't have internet access, and those who aren't as active on online platforms, and results in a sample that leans toward a more urban, higher-tech solution audience, as well as missing other consumer insight from potentially other important demographic information.

VIII. CONCLUSION

The research on the green supply chain practices (GSCM) of DS Group highlights a multifaced approach to understanding the many ways in which sustainability is changing the way supply chains operate, how customers perceive and connect with a corporate brand. The research highlights that sustainability is not just an element in the supply chain, or an item to comply, but a necessary element in supply chain management and brand development. By examining the sustainable sourcing, packaging, electric logistics, and water preservation undertaken by DS Group, we understand that sustainability, when approached holistically, provides a brand uplift and competitive advantage.

Within the corporate governance of the DS Group, GSCM is not merely about operational advancements; it is about establishing the company to satisfy stakeholders' expectations of ethical business and sustainable supply chain management in a rapidly changing consumer market; most notably in the context of India. As we see in the survey results, consumers expect brands to take action responsibly, as 72% of participants really expected the DS Group would act in accordance with sustainability standards, and over 80% claimed some awareness of their GSCM programs. Awareness of this kind denotes not only a positive result in terms of corporate social responsibility (CSR) but reflects a paradigm shift in market expectations generally speaking, where transparency and ethical considerations in selection and production choices are now the assumed norms.

Even though consumer awareness is strong in some areas (e.g. packaging and product integrity), the research reveals gaps in awareness around specific initiatives, such as electric vehicle rollouts and deeper logistics changes. These gaps demonstrate a further need of DS Group to refine its communication strategy,

whereby communicating a story, transparency, and special content for social media formats can address the gaps. By telling their technical processes as stories, they can convert these into slideshows that support more feelings of involvement with the brand and consumer trust and loyalty. Also keep in mind the power of emotional storytelling, which the study highlights. Consumer behavior researchers found that people remember and connect with stories, worldly they connect with facts. Therefore, DS Group has a distinct opportunity to retell their sustainability milestones as human- focused stories which promote connection. These could have been to demonstrate how the DS Group is affecting farmers, logistics, or communities' sustainable practices that convert the abstract measuring of environmental efficiencies into fully-loaded stories of experience.

Moreover, the research validates that companies that adopt sustainability measures often enjoy not just reputational benefits but also tangible operational efficiencies and improved stakeholder relationships. While challenges remain, including capital investment barriers and uneven enforcement of sustainability standards, these are surmountable through innovation, education, and collaboration. By leveraging smart technologies such as AI, IoT, and blockchain, DS Group can further optimize its supply chain, enhance transparency, and solidify its leadership in sustainable business.

In conclusion, DS Group exemplifies how Green Supply Chain Management, when embedded authentically and communicated effectively, becomes a core pillar of organizational excellence. It aligns corporate responsibility with market expectations and serves as a model for Indian and global firms seeking to merge profitability with purpose. For DS Group and similar organizations, the road ahead involves not only maintaining current sustainability standards but also setting new benchmarks through continuous innovation, stakeholder inclusion, and dynamic communication strategies. With the right investments in technology, community partnerships, and storytelling, DS Group is poised to redefine sustainability as a business norm, not an exception—an evolution that benefits the planet, the people, and profits alike.

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