




Analysis of Sustainable Marketing Status for Consumer Behavior Management Using the Importance-Performance Approach in the Automotive Industry



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Abstract: The present study was conducted to analyze the status of sustainable marketing for managing consumer behavior in the country's automotive industry. This study employed a pragmatic approach with an inductive-deductive reasoning framework. In terms of purpose, it is an applied-developmental research, and based on data collection method and time span, it is a cross-sectional survey study. To achieve the research objective, an exploratory mixed-methods research design was utilized. The qualitative phase included marketing management professors and managers from the national automotive industry as participants. Purposeful sampling was employed, and after conducting 17 interviews, theoretical saturation was reached. The statistical population of the quantitative phase comprised managers and experts in the marketing and sales departments of the automotive industry. The sample size for gap analysis and comparison of two means from a single group was estimated at 131 individuals, and cluster-random sampling was applied. Data collection was conducted through semi-structured interviews and a researcher-developed questionnaire. Data analysis in the qualitative phase was performed using thematic analysis with Maxqda software, while in the quantitative phase, the importance-performance analysis method was applied using SPSS software. Based on the research findings, foundational factors (organizational factors, customer factors, environmental factors, sustainability infrastructure, and social responsibility), consumer behavior (sustainable consumption behavior and sustainable consumption strategy), and sustainable marketing (sustainable marketing, environmental sustainability, economic sustainability, and social sustainability) were identified as the core factors of the study. The gap analysis revealed that in the area of "sustainable consumption strategy," expectations (importance) were close to perceptions (performance). However, for constructs such as "environmental sustainability," "social responsibility," and "sustainability infrastructure," the gap was more profound.

Keywords: Sustainable Marketing, Consumer Behavior Management, Automotive Industry

1. Introduction

With the increasing pressure from the sustainability movement in recent years, many automotive companies are now engaged in adopting green initiatives to alleviate these pressures and enhance their corporate image while

maintaining their business in a sustainable manner. Examples of such initiatives include green supply chain management, reverse logistics, green marketing, green advertising, and the use of eco-labels [1]. Leading automotive companies have set a target to produce net-zero carbon dioxide vehicles between 2030 and 2040. They strive to remain committed to addressing climate change, global warming, greenhouse gas emissions, and energy security [2]. However, the fundamental issue is that these transformations require significant costs, time, and resources. The continuation of sustainable vehicle production programs necessitates that these vehicles secure a considerable market share. Achieving such a market share requires specific and targeted marketing activities, commonly referred to as sustainable marketing [3]. Sustainable marketing in the automotive industry aims to raise consumer awareness about the benefits of environmentally friendly vehicles and employs green promotional and incentive strategies to increase consumer participation in purchasing and adopting sustainable vehicles [4].

Sustainable marketing seeks to create added value for its target customers by generating social and environmental values. Currently, the number of businesses adopting this marketing approach has significantly increased [5]. Companies have actively integrated sustainability principles into their business plans to achieve not only economic benefits but also contribute to society and the environment [6]. Various businesses and industries attempt to utilize sustainable marketing as a key strategy for introducing their products and services [7]. This approach involves efforts to develop and facilitate exchange processes that meet customers' needs and desires while minimizing negative consequences for society and the environment [8].

Consumer behavior plays a crucial role in the successful implementation of sustainable marketing strategies. The strategies adopted by businesses have yielded varying degrees of success. For instance, a company may adhere to sustainability standards, yet consumers may not perceive it as such. Consequently, the expenses incurred in this area may prove ineffective, having no impact on sales or customers' purchase intentions [9]. Understanding consumer behavior is essential for fostering sustainable business development. If a company invests in improving its ability and willingness to engage in sustainable marketing activities based on consumer perspectives, consumers will benefit from these initiatives, appreciate the business, and develop a positive attitude toward it [10]. Due to the role consumers play in sustainability effectiveness and the use of sustainable products and services, their overall behavior significantly influences the sustainability performance of businesses. Therefore, the success of sustainable marketing depends on understanding consumer behavior throughout the consumption process [11].

Recent studies have extensively explored the significance of sustainable consumption in marketing and its role in shaping consumer behavior. Norouzi et al. (2023) found that the most critical variables influencing sustainable consumption include attitudes, motivation, and subjective norms, which collectively lead to behavioral formation [11]. In a related study, Irajinejad (2023) examined the factor structure, validity, and reliability of the Sustainable Marketing Orientation Questionnaire, revealing that strategic integration, ethical capabilities, and social participation are strong predictors of sustainable marketing [12]. Landran Esfahani et al. (2023) investigated sustainable marketing from the perspective of perceived consumer value, concluding that complexity, relative advantage, and testability significantly impact customers' perceived value, whereas compatibility does not [13]. Bashokoh Ajirlou et al. (2023) developed a model for sustainable marketing in digital marketing, identifying eight dimensions: human capabilities, communication capabilities, social marketing, emphasis on education, fostering loyalty and customer-centricity, emotional motivators, accessible distribution, and product sustainability [14]. Similarly, Azadi et al. (2023) highlighted that sustainable marketing components in knowledge-based companies include customer value management, sustainable brand development, environmental sustainability, sustainable product development, environmental and social capital, sustainable business, sustainable innovation, green

marketing management, strategic sustainability management, and integrated change management [5]. In a different context, Farsijani et al. (2022) designed a sustainable production model in the automotive industry under sanction conditions with a world-class approach [15], while Fathi et al. (2022) found that cultural sustainability has the greatest influence on brand image among other dimensions of sustainable marketing [10]. Hassan Gholi Pour Yasouri et al. (2022) identified key factors influencing sustainable marketing, emphasizing that increasing customer support and welfare enhances customer satisfaction, loyalty, and overall company performance [16]. Expanding on industry-specific research, Chauhan and Purohit (2024) analyzed the role of sustainability and corporate social responsibility in the automotive industry, stressing that the future of this sector belongs to companies that align with sustainable development [17]. Gong et al. (2023) examined the impact of sustainable marketing on customer engagement and consumer purchase behavior, demonstrating that sustainable marketing enhances brand image, which is crucial for customer interaction [4]. Gleim et al. (2023) studied the role of fit in sustainable marketing strategies and found that consumer perceptions of fit, perceived corporate sustainability, and perceived organizational effectiveness are all significant predictive constructs [9]. Additionally, Jung and Kim (2023) reviewed research trends in sustainability and marketing, showing that studies have evolved from general sustainability concepts to environmental and industrial technologies, highlighting 14 latent themes through empirical evidence [18]. Vargas et al. (2022) investigated sustainable marketing orientation and sustainable performance in small businesses, concluding that as companies mature, the relationship between sustainable marketing and sustainability performance strengthens in proportion to interaction levels [19]. Given the novelty of sustainable marketing and the lack of studies on sustainability in Iran's automotive industry, as well as the existing research gap, this study adopts an exploratory approach to develop a sustainable marketing model based on consumer behavior within Iran's automotive sector. Additionally, this research integrates a global perspective with a localized and specialized approach, making it an applied study within the Iranian automotive industry.

The automotive industry, as one of the key and leading industries, has been widely studied from academic and scientific perspectives. However, few studies have examined it from the sustainability standpoint [15, 20, 21]. Specifically, assessing the status of sustainable marketing in the country's automotive industry has been overlooked by researchers. The present study seeks to bridge this research gap by analyzing the issue from the perspective of automotive industry professionals. To this end, an exploratory mixed-methods research design is employed, drawing on the perspectives of senior executives, marketing managers, and sales professionals from major automotive companies in Iran. Theoretical synergy and the contribution of this study to knowledge enhancement include identifying the key constructs of sustainable marketing to influence consumer behavior in the national automotive industry and explaining the performance gap relative to the desired state using a gap analysis approach. This research aims to address the fundamental question: What is the status of sustainable marketing for consumer behavior management using the importance-performance approach in the automotive industry?

2. Methodology

This study is based on the philosophy of pragmatism and follows an inductive-deductive approach. It is an applied-developmental research that analyzes the status of sustainable marketing for consumer behavior management using the importance-performance approach in the country's automotive industry. In terms of data collection, it is a non-experimental (descriptive) study conducted through a cross-sectional survey method. To achieve the research objective, an exploratory mixed-methods research design was employed.

The qualitative phase included both theoretical experts (marketing management professors) and practical experts (managers from the national automotive industry) who possess sufficient experience in sustainable marketing systems. Participant selection was based on Miller et al.'s (2010) five key criteria: centrality, prominence, theoretical knowledge, diversity, and motivation for participation. Purposeful sampling was applied, and after the fifteenth interview, data saturation was reached, with no new codes or constructs emerging. However, to avoid false theoretical saturation, two additional interviews were conducted, resulting in a total of 17 expert interviews.

In the quantitative phase, the statistical population comprised managers and experts from the marketing and sales departments of the country's automotive industry. The sample size was calculated using the G*Power software for paired t-tests. Based on power analysis at a 95% confidence level, with an effect size of 0.15 and statistical power of 80%, the minimum sample size was estimated at 131 participants. A cluster-random sampling method was employed for the quantitative phase.

For data collection in the qualitative phase, semi-structured interviews with six initial questions were used. In the quantitative phase, a researcher-developed questionnaire was utilized, comprising 11 main constructs and 68 items rated on a five-point Likert scale. The questionnaire items were developed based on fundamental themes derived from coding the interviews.

The validity of the qualitative phase was assessed and confirmed based on Lincoln and Guba's four criteria: credibility, transferability, confirmability, and dependability, as evaluated by expert reviewers. The reliability of the qualitative phase and interview coding was examined using Holsti's method. Double coding was performed, and the observed agreement percentage was 0.686, which exceeds the 0.6 threshold, indicating sufficient reliability for qualitative analysis. The questionnaire's validity was assessed through face validity (expert review) and content validity ratio (CVR). To measure reliability, the overall Cronbach's alpha coefficient of the questionnaire was 0.856 in a preliminary study, with values exceeding 0.7 for all dimensions.

For data analysis, thematic analysis was used in the qualitative phase to identify and explain the constructs related to sustainable marketing for consumer behavior management in the automotive industry. In the quantitative phase, the importance-performance analysis (gap analysis) method was applied. Data analysis was conducted using MaxQDA software for the qualitative phase and SPSS software for the quantitative phase.

3. Findings

In the qualitative phase of this study, 17 participants were involved. The theoretical experts included five marketing management professors, while the practical experts consisted of 12 professionals: three from Iran Khodro, three from Saipa, two from Kerman Motor, two from Pars Khodro, and two from Modiran Khodro. In terms of education, three participants held master's degrees, and 14 had doctoral degrees. Regarding work experience, five participants had between 15 to 20 years of experience, while 12 had more than 20 years of managerial and professional experience in the automotive industry.

In the quantitative phase, the study included the perspectives of 131 managers and experts from the automotive industry. In terms of gender distribution, 73 participants (55%) were male, and 58 (44%) were female. Regarding age, 24 participants (18%) were under 35 years old, 61 (46%) were between 35 and 45 years old, and 46 (35%) were above 45 years old. In terms of education, 32 participants (24%) held a bachelor's degree, 60 (29%) had a master's degree, and 39 (29%) held a doctoral degree. Concerning work experience, 26 participants (19%) had less than 10 years, 44 (33%) had between 10 to 15 years, and 23 (17%) had more than 20 years of experience.

For interview text coding, thematic analysis was conducted based on Attride-Stirling's (2001) six-step method. The interview transcripts were recorded, transcribed, and supplemented with descriptive details (such as the interviewee's emotional expressions in response to questions and environmental conditions). The data were repeatedly reviewed, and initial ideas were documented by the researcher, forming the backbone for subsequent stages. At this stage, key ideas for coding and pattern identification were developed. The coding process was iterative and applied to the entire dataset. Each new interview was coded and analyzed similarly until data saturation was achieved. The criterion for reaching saturation was the repetition of extracted codes. During the open coding stage, 298 codes were identified. Ultimately, through axial coding, five overarching themes, 10 organizing themes, and 55 basic themes were identified. The themes of the sustainable marketing model based on consumer behavior management are presented in Table 1.

Table 1. Themes of the Sustainable Marketing Model Based on Consumer Behavior Management

Overarching Themes	Organizing Themes	Basic Themes
Industry Infrastructure	Organizational Factors	"Support and endorsement from automotive industry managers for sustainable marketing"; "Strategic planning for sustainable marketing"; "Review and reengineering of automotive industry structures"; "Continuous monitoring and evaluation of sustainability performance in the automotive industry"; "Enhancing sustainability culture in the automotive industry"; "Training and empowerment of human resources in the automotive industry"; "Allocating and securing sufficient budget for sustainable marketing"
	Customer Factors	"Responding to customer needs and demands"; "Increasing two-way interactions with customers"; "Establishing long-term relationships with customers"; "Customer complaints handling system"; "Continuous monitoring of customer needs"; "Enhancing customer satisfaction"
	Environmental Factors	"Regulations and policies governing the automotive industry"; "Competitors' adoption of sustainable vehicle production"; "Implementation of green marketing activities in the industry"; "Public awareness of sustainability and sustainable development"; "Government support for sustainable vehicle production"; "Societal acceptance of green and sustainable vehicles"; "Boom in vehicle production activities"; "Intensity of competition in sustainable vehicle production"
	Sustainability Infrastructure	"Access to new vehicle production technologies"; "Availability of equipment and facilities for green vehicle production"; "Appropriate software infrastructure for sustainable vehicle production"; "Access to skilled human resources in sustainability"; "Availability of sustainable raw materials for vehicle production"; "Financial support and suitable loans for sustainable vehicle production"
	Social Responsibility	"Compliance with legally assigned responsibilities in the industry"; "Respecting legitimate societal demands"; "Adherence to ethical responsibility"; "Observing financial ethics and economic fairness"; "Efforts to respect and protect the environment"
Consumer Behavior	Sustainable Consumption Behavior	"Green consumption as a consumer value"; "Consumers' green and environmentally friendly attitudes"; "Consumers' environmental concerns"; "Consumers' knowledge and awareness of sustainability"; "Consumer support for and purchase of sustainable products"
	Sustainable Consumption Strategy	"Clear vision for sustainable consumer behavior"; "Defined missions in line with sustainable consumer behavior"; "Long-term goals for sustainable consumer behavior"; "Specific strategies aligned with long-term goals"; "Short-term goals for sustainable consumer behavior"; "Policy components of short-term goals"; "Implementation processes and procedures for sustainable consumer behavior"; "Formulation and enforcement of regulations for sustainable consumer behavior"
Sustainable Marketing	Sustainable Marketing	"Utilization of green marketing mix"; "Integration of sustainable marketing processes"; "Incentive programs for purchasing sustainable vehicles"; "Appropriate pricing and cost strategies for sustainable vehicles"; "Awareness campaigns and educational programs"; "Special facilities and incentives for customers purchasing sustainable vehicles"; "Building trust among consumers and vehicle buyers"; "Ensuring stable revenue generation in the automotive industry"
	Environmental Sustainability	"Improvement of environmental performance in the automotive industry"; "Institutionalizing a culture of environmental respect"; "Use of recyclable and eco-friendly materials"; "Reducing reliance on non-renewable energy sources"; "Minimizing pollution and hazardous materials affecting the environment"
	Economic Sustainability	"Increasing market share in the automotive industry"; "Enhancing return on investment"; "Increasing sales of sustainable vehicle units"; "Expanding the customer base for sustainable vehicles"; "Improving profitability in sustainable vehicle production"

Social Sustainability	"Participation in charitable activities and donations"; "Sponsorship and support for social conferences"; "Engagement in public welfare initiatives"; "Active presence in social events"; "Addressing societal expectations"
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According to the initial model, it is evident that organizational, environmental, and customer factors influence sustainability infrastructure. Sustainability infrastructure, in turn, affects sustainable consumption strategies and social responsibility, which collectively have a significant impact on sustainable consumption behavior. Sustainable consumption behavior also has a positive and significant influence on economic, social, and environmental sustainability, ultimately leading to sustainable marketing.

After identifying the constructs of sustainable marketing for consumer behavior management, their status in the country's automotive industry was examined. Each indicator was evaluated from two perspectives: the current state (performance) and the desired state (importance). To assess the gap between the current and desired performance levels of sustainable marketing constructs in consumer behavior management within the automotive industry, a paired t-test was used. This test was applied to examine the gap between expectations and perceptions regarding sustainable marketing constructs in consumer behavior management.

Table 2 presents the results of the paired t-test conducted on the sustainable marketing constructs for consumer behavior management:

Table 2. Paired t-Test Results for Sustainable Marketing Constructs in Consumer Behavior Management

Research Constructs	Performance	Importance	Gap	Significance	t-Statistic	Result
Organizational Factors (OF)	3.141	4.441	1.300	0.000	13.459	Significant
Customer Factors (CF)	3.350	3.875	0.525	0.000	6.637	Significant
Environmental Factors (EF)	3.293	4.619	1.326	0.000	14.072	Significant
Sustainability Infrastructure (SIS)	2.009	4.155	2.146	0.000	28.269	Significant
Corporate Social Responsibility (CSR)	2.111	4.316	2.307	0.000	23.258	Significant
Sustainable Consumption Behavior (SCB)	2.988	4.424	1.437	0.000	17.729	Significant
Sustainable Consumption Strategy (SCS)	3.735	3.864	0.129	0.192	1.311	No Gap
Sustainable Marketing (SM)	2.744	3.854	1.110	0.000	10.770	Significant
Environmental Sustainability (Env)	1.765	3.896	2.131	0.000	18.668	Significant
Economic Sustainability (Eco)	3.026	4.409	1.383	0.000	13.786	Significant
Social Sustainability (Soc)	2.934	3.898	0.963	0.000	10.457	Significant

Based on the paired t-test results presented in Table 2, and given the observed significance level at a 5% error threshold, it can be asserted that in all cases, there is a gap between importance and performance, with individuals' perceptions falling below their expectations. The significance level is smaller than the 5% error threshold, and the t-statistic is greater than the critical value of 1.96. Therefore, the observed gap is statistically significant, meaning there is a meaningful difference between the current state and the desired state. This difference is illustrated in a radar chart in Figure 1.

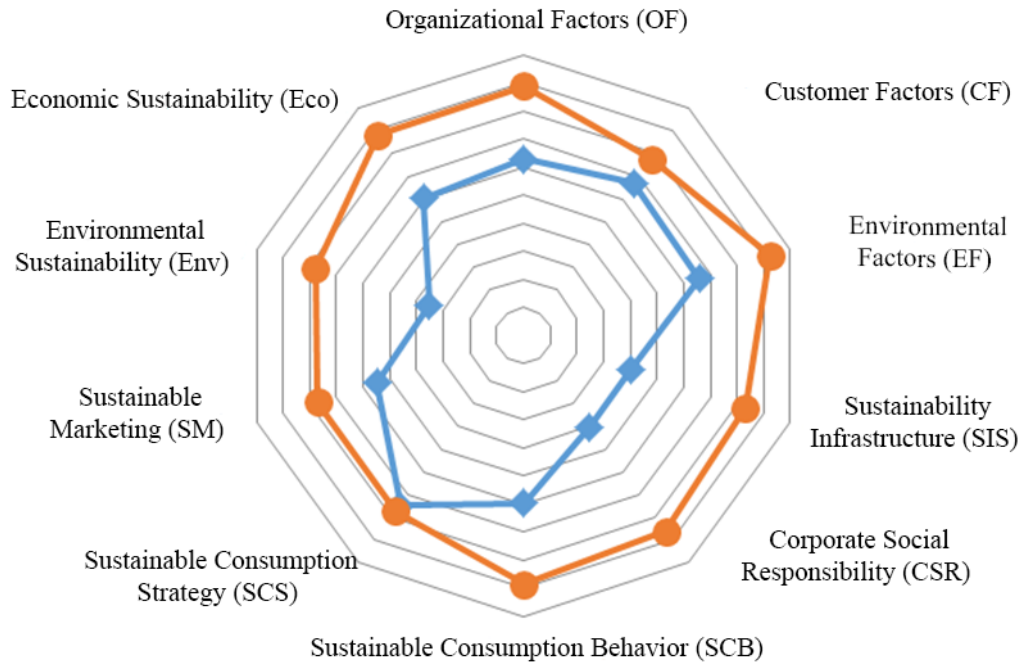


Figure 1. Radar Chart of the Gap Between Current and Desired State

According to the radar chart, it is evident that in the area of "Sustainable Consumption Strategy," expectations (importance) are closely aligned with perceptions (performance). However, for constructs such as "Environmental Sustainability," "Corporate Social Responsibility," and "Sustainability Infrastructure," the gap is deeper.

Additionally, in this study, each indicator was examined from two perspectives:

- Importance (denoted as I)
- Performance (denoted as P)

Since analyzing importance and performance separately—especially when both datasets are studied simultaneously—may not yield meaningful insights, the data for each indicator's importance and performance were mapped onto a two-dimensional grid, where the **Y-axis** represents the importance dimension, and the **X-axis** represents the performance dimension. This two-dimensional grid is known as the Importance-Performance Matrix (IP Matrix). The role of the IP Matrix, which consists of four quadrants, is to facilitate decision-making processes. This matrix is used to determine the priority level of indicators for improvement. The general structure of the Importance-Performance Analysis (IPA) matrix is presented in Figure 2.

Weakness Zone	Acceptable Zone	High Importance
Indifference Zone	Waste Zone	Low Importance
Low Performance High Performance		

Figure 2. General Structure of the Importance-Performance (IPA) Matrix

Based on the level of importance (desired state) and the performance level (current state) of each indicator, four quadrants are identifiable:

- **Indifference Zone:** Low Performance – Low Importance
- **Waste Zone:** High Performance – Low Importance
- **Weakness Zone:** Low Performance – High Importance
- **Acceptable Zone:** High Performance – High Importance

The IPA evaluation results are presented in Figure 3.

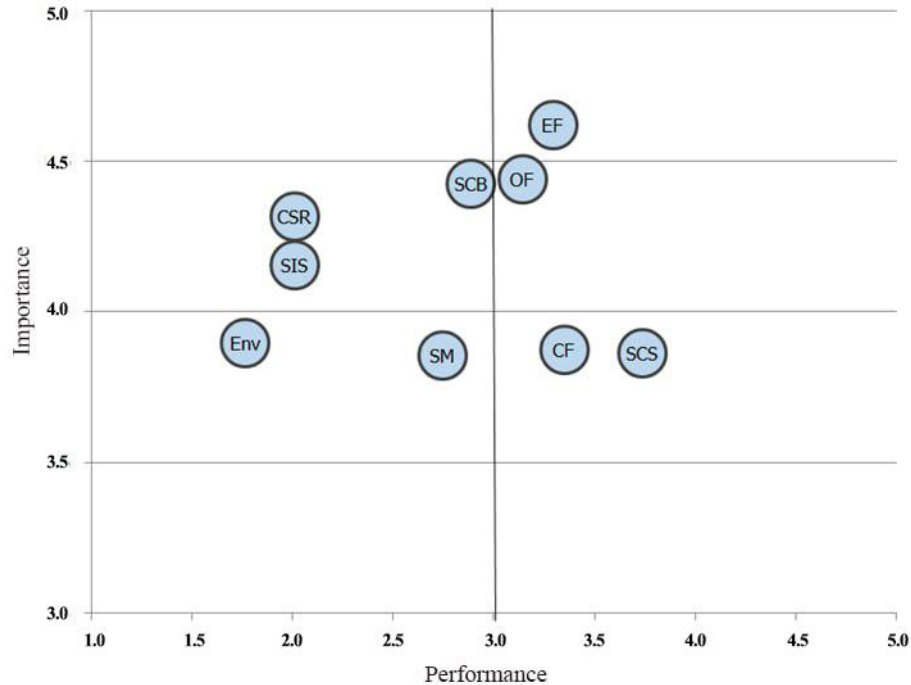


Figure 3. Importance-Performance (IPA) Evaluation Results

According to the results of the Importance-Performance Analysis, and given that all identified indicators hold high importance, the two quadrants of "Indifference" and "Waste" are absent.

4. Discussion and Conclusion

The present study was conducted with the aim of analyzing sustainable marketing for consumer behavior management. Based on the results, it was determined that the constructs of environmental sustainability, corporate social responsibility, sustainability infrastructure, sustainable marketing, sustainable consumption behavior, and social sustainability fall into the "weakness" category, as they exhibit high importance but poor performance. The findings of Azadi et al. (2023) indicate that the components of sustainable marketing in knowledge-based companies include customer value management, sustainable brand development, environmental sustainability, sustainable product development, environmental and social capital, sustainable business, sustainable innovation, green marketing management, strategic sustainability management, and integrated change management [5].

Additionally, it was shown that the constructs of economic sustainability, organizational factors, environmental factors, customer factors, and sustainable consumption strategy fall into the "acceptable" category. However, based on the importance-performance analysis, there is a significant gap between these constructs and their ideal state. The study by Landran-Esfahani et al. (2023) also demonstrated that complexity, relative advantage, and testability influence customers' perceived value, whereas compatibility does not significantly impact consumers' perceived value [13].

Ultimately, the research findings indicate that only in the area of sustainable consumption strategy is there no significant gap, suggesting that appropriate strategies have been developed within the industry for sustainable consumption, which can help improve the current state in the long term. The study by Gleim et al. (2023) states: *"In implementing sustainable marketing strategies, consumer behavior is a critical success factor. The strategies adopted by businesses have yielded varying levels of success. For instance, a business may adhere to sustainability standards, yet consumers may not perceive it as such. Consequently, the expenses incurred in this area may prove ineffective, having no impact on the company's sales or customers' purchase intentions."* [9]

It is recommended that automotive industry managers enhance their support for sustainable marketing and engage in strategic planning for sustainable marketing. In this regard, reviewing and reengineering the industry's structures can be considered, and this goal can be achieved through continuous monitoring and evaluation of the industry's sustainability performance. Over the past decades, environmental concerns have not only become a critical public issue but have also gained prominence in academic research. As environmental concerns have grown, the global market for eco-friendly products has expanded. Consequently, green marketing activities are increasing in many parts of the world, offering sustainable products to consumers who make purchasing decisions based on personal environmental criteria. Additionally, the training and empowerment of human resources in the automotive industry should be a priority for relevant managers.

It is recommended that companies prioritize responding to customers' needs and demands. In customer-oriented approaches, increasing two-way interactions with customers and establishing long-term relationships with them is essential. Additionally, implementing a customer complaint handling system and continuously monitoring customer needs can enhance customer satisfaction. All these factors play a crucial role in encouraging customers to pre-order vehicles.

It is suggested that developing regulations governing the automotive industry can increase competitors' engagement in sustainable vehicle production. This goal can be achieved by implementing green marketing activities in the industry and raising public awareness about sustainability and sustainable development. Furthermore, with government support for green and sustainable vehicle production, broader societal acceptance of such vehicles can be achieved.

It is recommended that access to new vehicle production technologies and equipment for green vehicle production be improved. This can be achieved by focusing on global automotive standards and adopting best practices. Additionally, attention should be given to appropriate software infrastructure for sustainable vehicle production and its continuous updates. The automotive industry requires access to skilled human resources specializing in sustainability. Furthermore, the availability of sustainable raw materials for vehicle manufacturing, as well as financial support and suitable loans for sustainable vehicle production, are critical considerations.

It is recommended that companies comply with their legally assigned responsibilities and respect the legitimate demands of society. The most crucial aspect of corporate social responsibility is adhering to ethical standards and fulfilling ethical responsibilities. Additionally, automotive industry managers should uphold financial ethics and economic fairness in fulfilling their financial obligations to society. Moreover, efforts to protect and respect the environment should be prioritized.

It is suggested that green consumption be promoted as a core value among consumers. In this regard, consumers' eco-friendly attitudes and environmental consciousness play a crucial role in stimulating and encouraging sustainable consumption. Addressing consumers' environmental concerns can be achieved by increasing their

knowledge and awareness of sustainability. Furthermore, consumer support for and purchase of sustainable products will contribute to the economic goals of the industry.

It is recommended that green marketing mix strategies be employed and that sustainable marketing processes be integrated. In this context, incentive programs for purchasing sustainable vehicles and appropriate pricing strategies for sustainable vehicles are essential. Additionally, raising awareness through educational programs and providing special incentives and facilities for customers purchasing sustainable vehicles should be prioritized. Furthermore, building consumer trust will lead to stable revenue generation in the automotive industry.

By implementing these strategies, achieving environmental sustainability will be feasible, including improvements in the environmental performance of the automotive industry, institutionalizing a culture of environmental respect, using recyclable and eco-friendly materials, reducing reliance on non-renewable energy sources, and minimizing pollution and hazardous materials affecting the environment. Additionally, achieving economic sustainability will be facilitated. This includes increasing market share in the automotive industry, enhancing return on investment, expanding the customer base for sustainable vehicles, and improving profitability in sustainable vehicle production.

Another key component leading to sustainable marketing is social sustainability. This can be achieved through participation in charitable activities, supporting social conferences, engaging in public welfare initiatives, actively participating in social events, and addressing societal expectations.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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