

Unveiling the Influence of Sustainable Practices on Customer Loyalty

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Abstract

The primary objective of this research was to comprehensively examine the impact of sustainable marketing strategies on enhancing customer equity within the market. The study aimed to assess how the implementation of sustainable marketing practices influences the long-term value and loyalty of customers towards a brand or company. A mixed-methods approach was necessary due to the complex nature of the study and the need to identify relevant variables. The qualitative part thoroughly explored sustainable marketing categories and aspects through expert interviews and grounded theory. This process resulted in identifying six core classifications and 13 distinct categories. These categories were then validated using the Fuzzy Delphi technique and expert input. Moving to the quantitative phase, these categories were incorporated as crucial variables. In the quantitative phase, the impact of sustainable marketing on customer equity was analyzed using the PVAR model tailored for detergent companies based on the variables identified in the qualitative phase. The findings showed that sustainable marketing with the customer equity approach had a negligible influence on consumer behavior and organizational performance.

Keywords: Sustainable Marketing, Customer Equity, Consumer behavior, Organizational Performance

1. Introduction

Since the 1970s, there has been a proliferation of marketing concepts that have addressed the interplay of social and environmental considerations. Belz and Peattie (2012) have outlined various marketing paradigms that emerged during this era, including social, environmental, green, and sustainable marketing. Building upon these foundational frameworks, sustainable marketing represents a natural evolution encompassing and extending these concepts into a comprehensive marketing approach. Sustainability, as a core tenet of this approach, entails a concerted effort to mitigate the depletion of natural resources by placing a strong emphasis on the biophysical environment of the planet. Unlike mere environmental protection measures, sustainability aims to strike a delicate equilibrium in utilizing natural resources to support ongoing economic development (Clement, 2023). Central to this discourse is the consideration of the threshold at which resource extraction may jeopardize the ecological integrity of the land (Portney, 2015). A fundamental premise of sustainability is the acknowledgment that the planet's finite resources are not inexhaustible, and their depletion poses a significant threat to the continuity of life. For instance, managing and conserving water resources have profound implications for the well-being of human populations, wildlife, and flora. Sustainable marketing is defined as "internal marketing and sustainable development support" (Van Dam & Apeldoorn, 1996) and refers to market processes that inclusively support sustainable economic development. This issue ultimately results in the welfare of individuals and the community (Jha, 2012). Sustainable marketing is a cultural phenomenon that attributes its responsibilities to companies (Finney, 2014). In other words, sustainable marketing shows an evolution that integrates the standard economic and technical view with emerging concepts of communication marketing and social, ethical, environmental, and intergenerational perspectives in a sustainable development program (Hosseini & Rajabipoor, 2023).

Companies are dominant economic units that turn natural and social resources into products and services (Hawken, 1993), thereby playing an essential role in the success or failure of sustainable economic development. Within companies, marketing performance is a strategic decision to turn resources into customer value (Pantelic et al., 2016). Therefore, while marketing is responsible for sustainable development, sustainable marketing implementation and consequences vary in each company (Pereira et al., 2012). To achieve organizational goals, traditional marketing management focuses on planning, organizing, executing, and controlling marketing resources and plans to meet customers' needs. While pointing out the importance of these stages, sustainable marketing management also considers social and environmental criteria (Gigauri et al., 2023). The sustainable marketing management approach encompasses six main elements: social-environmental problems, consumer behavior, sustainable marketing values and goals, sustainable marketing strategies, integration of sustainability marketing, and sustainable marketing developments (Belz & Peattie, 2012). The concept of sustainable marketing is derived from corporate social responsibility (CSR), which specifically emphasizes the balance and development of long-term environmental, economic, and social goals to attract customers and meet stakeholders' needs (Yilmaz & Flouris, 2010; Sun et al., 2014). CSR is one of the essential tools for sustainable marketing (Sun et al.,

2014). Accordingly, a sustainable marketing structure includes environmental, economic, and social dimensions (Song & Ko, 2017). These sustainable marketing dimensions are extracted from Elkington's triple bottom line concept (1994), which balances the environment and social efficiency with economic performance. These three sustainable marketing dimensions have been modified to reflect the marketing efforts of a corporation; the environmental dimension focuses on the necessity of presenting an eco-friendly image by organizations, emphasizing their products' compatibility with the environment in their advertisements, and making efforts to protect the environment (Lober, 2017). The economic dimension obligates corporations to achieve short and long-term goals, develop competitive advantage, create value, increase financial performance, and distribute products fairly (Bansal, 2005).

On the other hand, the social dimension encourages coequitabilyions to improve social and human welfare through enhancing employees' welfare, supporting charities, and establishing a good relationship between society and stakeholders (Sun et al., 2016). The balance between these three dimensions can vary according to the company's motivations, market, and specific characteristics (Sun & Ko, 2016). Corporations seeking sustainable marketing aim to use the company's processes and marketing techniques to balance the environmental, economic, and social dimensions to ensure long-term development, attract customers, and participate in society (Proszowska et al.,2023).

According to Martin and Schouten (2012), people's experiences and activities in buying, using, and disposing goods and services constitute consumer behavior. Consumer behavior is motivated by different needs, which might be social or psychological. Also, consumer behavior is affected by both internal and external forces. The main question for sustainable marketing is how customers' attitudes can be used to encourage more sustainable behaviors in these individuals. To this end, the conventional marketing approach must be followed to find specific dimensions of customers that affect their purchasing preferences to benefit particular brands and products. In other words, extensive efforts must be dedicated to controlling customers' issues toward sanctioning a specific product or company to motivate them to purchase more sustainable products and services. This emphasis on buying different or better specific goods is only part of the challenge of controlling consumer behavior for sustainability. There are three areas for sustainable development in which theories and practices related to consumer behavior must be developed:

1. Sustainable consumer behavior needs to grow from relatively stable purchases of specific goods and services to the entire consumption process among a wide range of goods and services, especially those with the most impact.
2. Sustainable consumer behavior needs access to the mass market segment, primarily focusing on sustainability issues.
3. Commercial marketers must be involved to change the situation from a sustainable lifestyle and consumption that has become a social norm to a situation of sustainable behavior and consumption. This requires learning how customers are encouraged to change their behaviors toward being more sustainable users. We must understand how customers deal with economic, practical, psychological, and social barriers.

Standard marketing assumes that sustainable consumption (i.e., goods and services that differ based on better sustainability and have a higher price) is something that wealthy consumers with high purchasing power participate in (Belz & Peattie, 2012). Marketing-based organizations are fundamentally crucial in value development for companies and customers. Marketing necessitates organizations to develop the share value and long-term customer relationships to create customer-specific value and improve long-term performance (Stahl et al., 2003). Customer assets that are critical to the long-term performance of the organization exist in loyal customers (Rust et al., 2004), which are the total life values of current and future customers (Liu et al., 2014) and equal to customer lifetime value (CLV) (Sun et al., 2016).

Today's managers deal with complicated and unique social, environmental, technological, and market trends (Arabiun et al., 2023). They still need help with sustainable strategies and solutions because they believe their costs have exceeded their benefits. This misconception contradicts the benefits of sustainability and academic Research on sustainable marketing practices. Without a doubt, sustainability approaches positively affect business performance. Customers must also learn about the adverse effects of their improper use on the environment (Rajabipoor Meybodi et al., 2023). They also need to be aware of the desirable products and services. In addition to customers, companies must also feel social media users and non-governmental organizations (NGOs) that focus on environmental welfare. Therefore, several researchers and stakeholders have considered sustainability (Sulaymon, 2016; Jung et al., 2020; Kemper et al., 2020).

The issue of sustainable marketing is critical in the detergent industry, which can cause environmental damage due to productive and flammable products and plastic and non-degradable packaging. Therefore, the government is solemnly responsible for the detergent industry and is expected to support it. One may not believe marketing concerns customers' health, profitability, and sales. Nevertheless, the dynamism and intense competition increased environmental concerns, government regulations, and consumer awareness, encouraging companies to focus on customers' physical and mental health and environmental cleanliness. Therefore, cleaning with green products and using fewer detergents that harm the environment is expected. Given the importance of detergents, the role of users as customers, and issues related to the damage caused to the environment, sustainability concepts are of paramount importance in this industry.

To date, many studies have focused on sustainable marketing. However, most studies have evaluated the effect of sustainable marketing on customers' behavior or organizational performance. No research has been carried out to assess both of the mentioned issues simultaneously. Furthermore, most previous studies have had qualitative or quantitative approaches, and few have applied a mixed method. The qualitative part of this Research was performed using the grounded theory method, one of the new and commonly used qualitative research methods. The method accurately analyzes variables in six categories: core phenomenon, causal conditions, strategies, contextual conditions, intervening conditions, and consequences. Also, regression analysis by the six processes is possible owing to their unique nature. Finally, sustainable marketing modeling in most Research has been done using methods such as structural equations and questionnaires, and a limited number of studies have used accurate statistical data

and PVAR regression. All of these points show the novelty of the current study. About the information provided here, the main objective of the present study is to evaluate the effect of sustainable marketing with the customer equity approach on consumer behavior and organizational performance, which is split into two sub-objectives. The first one examines the impact of sustainable marketing with the customer equity approach on consumer behavior. The second is to reflect on sustainable marketing's effect on organizational performance with the customer equity approach. Thus, based on the mentioned objectives, the following questions are addressed:

1. How does sustainable marketing with the customer equity approach affect consumer behavior in detergent companies?
2. What effect does sustainable marketing with the customer equity approach have on the organizational performance of detergent companies?

2. Research Literature

2.1. Sustainable Marketing with Customer Equity and Consumer Behavior Approach

While marketing goals (e.g., revenues) focus on the results of customers' actual behaviors, sustainable marketing goals monitor the mental processes of consumer behavior (Ayman & Choudhry, 2023). A positive perception of a product or brand is assumed to affect consumers' purchasing tendencies (Belz & Peattie, 2012). The concept of sustainable development must be understood to realize the effect of sustainable development with the customer equity approach on customers' behaviors. In this regard, Martin and Schouten (2012) asserted: "It is something that satisfies the needs of individuals without compromising the consumers' purchasing tendencies and their own needs." In other words, individuals and families need to plan the improvement of the environment regularly. Their consumption does not help destroy the environment or lead to the future generation's sustainable consumption. Sustainable marketing is crucial in removing barriers to sustainable consumption as much as possible (Sanders & Wood, 2024). Sustainable and successful marketing can ultimately sell a sustainable product to the customer. In this way, the customer can have the knowledge, attitude, and necessary resources to sustainably use or dispose of a product (Trivedi et al., 2023). Afterward, an ideal relationship is created between the customer and marketer that the customer and marketer, society, and the environment evaluate. Consumer and sustainable marketing complement each other in making positive land care changes (Martin & Schouten, 2012). Consumers understand the need for food and water and the need for sustainability of social and environmental systems.

Customers' knowledge encourages them to reduce environmental damage by purchasing eco-friendly products (Martin & Schouten, 2012). Customers select products and services that meet their needs, considering the information available. Therefore, some companies actively inform customers about the sustainability of their products. Compatibility with the environment (green products) is critical for buyers' decision-making, whereas cost, quality, and comfort are still significant (Veisten, 2007). Sustainable marketing plays a prominent role in the strengthening of customers' awareness of brands. Some sustainable marketing measures persuade customers to pay for green products' insurance rights (Garcia & Georgantzis, 2011). This is mainly because they

know the importance of sustainability and which brand is spending more money. Marketers can always change customers' behaviors (Bilro et al., 2023). General behaviors and customs must be changed to become sustainable. We need the considerable efforts of markets and stakeholders and the efforts of customers with no behavioral change tendencies.

Meanwhile, these customers can significantly affect the sustainability of a product by changing their lifestyle. Ethical products and services change customers' behavior so that they can live with more sustainability in life. Social and environmental concerns can also change customers' behaviors (Oliveira & Sullivan, 2008). According to Fraj-Andre et al. (2008), Covin & Miles (2000), Miles and Munilla (1993), Pujari et al. (2003), Shrivastava (1995), York (2009), Yidan & Heck (2013), Sun et al. (2018) and Vesal et al. (2020), sustainable marketing is beneficial to companies in many ways, including strengthening customer image and increasing customers' purchases. Since awareness of the brand and brand image is known as a knowledge brand, sustainable marketing can increase brand equity. A good brand and a higher knowledge level are essential for customers' purchasing behaviors. Therefore, brand equity can affect consumer behavior. Brand equity and consumer brand can be developed in this way, and sustainable marketing affects brand equity and customer equity (Keller, 2003).

2.2. Sustainable Marketing with Customer Equity Approach and Organizational Performance

Sustainability is a symbolic concern of the modern world due to maintaining resources for the current and future generations. In 1987, the World Commission on Economic Development (WCED) published the first sustainability report entitled "Our Common Future," also known as the Brundtland Report, resulting in more sustainability research. Researchers have often warned that business interests have created a typical consumption pattern and that businesses are responsible for adopting social marketing methods (Heck & Yidan, 2013). Environmental protection is the primary responsibility of managers in any organization. As mentioned by Hawken (2007): "because companies are the dominant institution on earth, they must seriously address the social and environmental problems that are imposed on human beings."

The Global Compact-Accenture report (2013) presented information about sustainable trade practices from one thousand CEOs. According to the report, the global economy needs to catch up in regulating society sustainably despite the increasing commitment to environmental sustainability issues. The majority of CEOs refer to sustainability as a way to succeed and improve performance in the future. However, they recognize this concept as "ambition" due to its low benefits compared to lots of effort. McKinsey (2012) reported many companies' success in integrating sustainability principles with their business practices. Today, companies have saved a lot in investment, energy use, production of green products, and retaining employees to achieve long-term growth and create commercial value. Kramer and Porter (2011) discussed the "win-win" concept, where social-environmental performance leads to better market performance. The "win-win" concept can be described as a shared value approach, which brings trade and communities closer together by creating economic value for companies and dealing with society's challenges. The approach can heighten managers' awareness of significant needs met, new markets that can be

supplied, and internal costs of social damtotopetitive advantage that can be paid. Sample examples of achieving this "win-win" concept include segregating product success based on proper environmental and social performance and reducing energy consumption, pollution, and waste related to a product or service by innovating new or cost-effective designs (Charter et al., 2002). On the other hand, there is a lot of pressure from customers and other stakeholders in anticipation of expectations. Studies show that business investors and consumers care about sustainable business practices. The sustainable performance of companies can act as a decision-maker in consumer buying behavior. According to Heck and Yidan (2013), adopting sustainable strategies leads to a win-win situation that benefits both the environment and the company's performance improvement. Nevertheless, the relationship between sustainability strategies and commercial value is yet to be determined. Any company's main challenge is creating value for consumers and investors. Companies with better environmental and social performance have a better situation compared to their competitors. Proper implementation of sustainability strategies leads to cost-saving, efficiency, and organizational performance improvement (Reutlinger, 2012; Agyabeng-Mensah et al., 2020; Rajesh, 2020). While innovation in the production process needs heavy investment, the efficiency of sustainable processes is much better. Sustainability in the process of production, packaging, distribution, and improvement of costs increases efficiency. This is the only approach to distinguish yourself in a highly competitive market. According to Barlett (2012), a company's social performance will probably lead to the corporation's financial performance. However, several studies must be carried out to confirm the positive correlation between the two. The current economic, financial, and environmental crisis mainly seeks sustainable economic growth. Sustainable development can be guided in many occupations by forming social responsibility, environmental improvement, and targeted strategies. Given the public concerns, issues related to the environment are on the rise, making the development of strict rules for sustainable marketing techniques inevitable (Trivedi et al., 2018).

3. Conceptual Framework

The conceptual framework of the Research is shown in Figure (1). The model focuses on how sustainable marketing with a customer equity approach affects consumer behavior and organizational performance. Therefore, the first step was to evaluate the effect of sustainable marketing with a customer equity approach on consumer behavior and organizational performance.

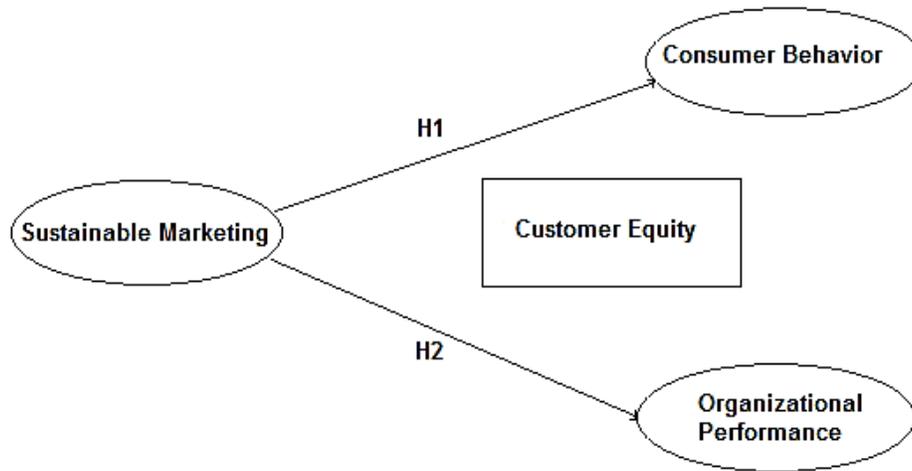


Figure (1). Conceptual Framework

3.1. Effect of Sustainable Marketing with Customer Equity Approach on Consumer Behavior

Consumer behavior is the heart of marketing. Success for sustainability marketers is based on understanding consumer behavior through the consumer process to develop a marketing strategy that meets the needs of consumers more effectively and sustainably than their competitors (Belz & Peattie, 2012). Consumer behavior will determine the success or failure of new products or services marketed based on their sustainability performance. Sustainable marketing affects consumer behavior due to its impact on consumer behavior and the purchase level during the use and disposal stage in the consumption process. Therefore, sustainable marketing and the customer equity approach affect consumer behavior and increase their interest in using sustainable products (Sun et al., 2018; Sun et al., 2016). As such, hypothesis one is proposed as follows:

H1: Sustainable marketing with the customer equity approach affects consumer behavior.

3.2. Effect of Sustainable Marketing with Customer Equity Approach on Organizational Performance

Given the importance of sustainable marketing, sustainability has recently been the focus of performance organizations. Marshall et al. (2010) state that managers' attitudes and perceptions about adopting environmental procedures affect organizational performance. Also, Martin et al. (2010) reported the effectiveness of environmental strategies on organizational performance. Furthermore, Cruz and Boehe (2010) evaluated CSR's role based on an environmentally friendly approach to performance, demonstrating the positive effect of SCR on organizational performance due to its eco-friendly effects.

Also, sustainable marketing standardization has been discussed in Research on organizational performance. Some of the studies performed in this area include the Research by Lages et al. (2008). In this respect, Hunt (2011) showed that sustainable marketing with a customer equity approach would eventually result in economic growth through improving organizational

performance. Moreover, Ajour El-Zein et al. (2020) indicated the positive effects of sustainable development with a customer equity approach on organizations' financial performance. Therefore, hypothesis two is proposed as follows:

H2: Sustainable marketing with the customer equity approach affects organizational performance.

4. Methodology

The study utilized a mixed-methods approach encompassing both qualitative and quantitative methodologies. The qualitative segment involved semi-structured interviews with experts, culminating in the development of a comprehensive model based on the grounded theory method. Subsequently, the final model was validated through the fuzzy Delphi method. The statistical population for this phase comprised managers and experts from detergent companies, with 18 male and two female participants. Among the participants, ten held a Bachelor's degree, 5 possessed a Master's degree, and 5 had a Ph.D. degree. The subjects were selected through judgmental sampling, which continued until theoretical saturation was achieved. In this context, theoretical saturation was attained following 20 interviews. Table 1 provides an overview of the number of detergent companies and experts involved in the study. Conversely, the quantitative segment estimated statistical data about the categories identified in the qualitative phase from 2010 to 2019 for nine companies, as delineated in Table 1. This estimation utilized the panel vector autoregression (PVAR) model within the EViews software platform.

Table (1). Name of detergent companies and the number of experts in the grounded theory approach

Column	Detergent Company	Number of experts
1	Paksan Co.	2
2	Pakshoo Co.	3
3	Paknam Co.	2
4	Kaf Joint Stock (Darugar)	2
5	Goltash Co.	2
6	Tolypers Co.	2
7	Henkel Pakvash Co.	2
8	Saina Co.	3
9	Sehat Industrial and Commercial Company	2

The steps to implement this study as a whole are illustrated in Figure (2).

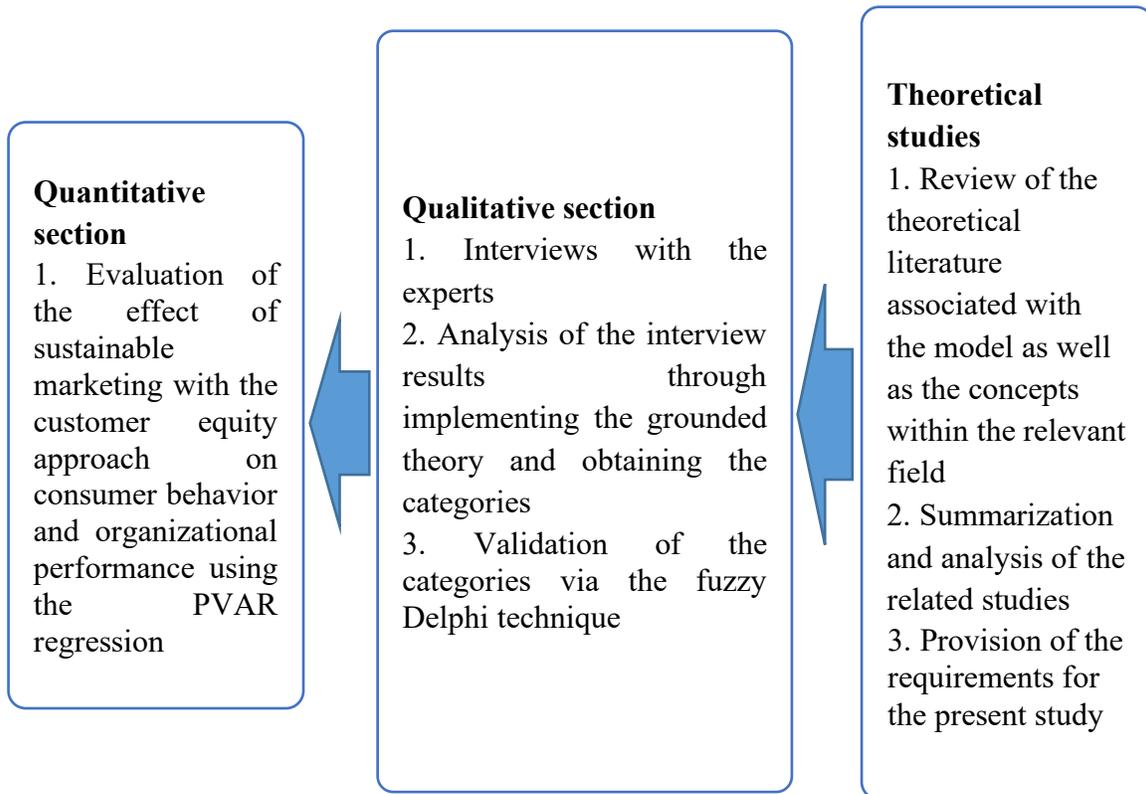


Figure (2). Reserach steps

5. Grounded Theory Method

Glaser and Strauss (1967) developed grounded theory as a general, inductive, and interpretive research method to generate and verify theory (Hildebrand, 2004). However, the fundamental theory is related to previous models of research methods and has yet to emerge suddenly. Data-derived theory (fundamental theory) is an inductive and exploratory research method that allows researchers in various subject areas to develop a theory and proposition instead of relying on existing and pre-formulated theories (Wagner et al., 2010).

This section applied three necessary steps of grounded theory, including open, axial, and selective coding stages. The codes identified were classified based on the model by Strauss & Corbin (2008) in six main grounded theory categories: core phenomenon, causal conditions, strategies, contextual conditions, intervening conditions, and consequences.

5.1. Open Coding

In this study, we first transcribed all interviews and carried out the open coding of the information using key points. First, the data collected from the interviews were entered into a Word file, and open codes were formed using ATLAS-ti. Open coding includes three of the first three coding stages. Codes are identified in the first stage, and an explanation is provided for each code in the second stage. Finally, similar codes found in the second stage are integrated to form a code with a

shortened title (Markey et al., 2020). In total, 268 codes were extracted from the third open coding stage. Table 2 lists the number of codes extracted from each interview. Also, Table 3 shows a part of the interviews along with the components extracted.

Table (2). The number of codes extracted in the third stage of open coding in each interview

Interview No.	Number of open codes extracted in the third stage
1	10
2	12
3	15
4	11
5	11
6	10
7	10
8	12
9	23
10	21
11	19
12	17
13	15
14	9
15	13
16	14
17	10
18	10
19	14
20	12

Table (3). A part of interviews, along with components extracted

Interview Text	Extracted Component
Sustainable marketing discusses two themes: First, it checks the issue of sustainability in the economy, which includes the number of sales and sales rate, and explains high profitability based on product diversity. Other issues are related to the environment and social responsibility; for example, do you harm animals with your product? Is a tree cut because of your product? However, in your field, the subject is somewhat different from this process.	High profitability Corporate social responsibility (CSR)
Most detergents are in the mass market, which has a moderate return. However, product diversity can be created by assessing the market, understanding customers' tastes, improving the product's quality, and increasing productivity to determine an acceptable cost for the product. A mass market is a proper place for all classes of society because of its logical cost. However, the middle class is falling due to sanctions and economic conditions.	Product diversity for customer equity Fair cost Sanction and reduced purchasing ability Understanding customers' expectations Proper quality Increased productivity

5.2. Axial Coding

Axial coding is the second analysis stage in grounded theory; the main goal is to establish a relationship between the classes generated in the open coding stage (Creswell, 1998). The process is carried out based on the paradigm model and facilitates theory generation by the analyst. The axial coding stage connects the codes generated in the previous step by creating communication networks between these codes. The process is obtained by analyzing the data gathered in the open coding stage. Therefore, axial coding mainly focuses on relations between the concepts (Sun, 2011). When making connections on the network, it is essential to consider how these categories relate. This step was performed by forming ATLAS-ti software networks to establish connections between concepts, categories, and components.

Therefore, six main networks were identified by axial coding, including core phenomenon, causal conditions, contextual conditions, intervening conditions, strategies, and consequences. Table 4 shows the axial coding network for assessing sustainability with the customer equity approach and its impact on customer behavior and organizational performance.

The core phenomenon's leading network is related to customer equity, which was considered the core phenomenon in the model. Customer equity includes customer attraction, retention, development, and churn. Customer equity is the financial value and profit from the relationship with customers. Companies can attract and retain customers by sustainable marketing. Also, they can increase the number of their customers and establish a long-term relationship with them.

The leading network of causal conditions includes three sustainable marketing dimensions: environmental, economic, and social. Recycling is critical in the environmental dimension. Producing recycling wastewater and using recyclable containers and boxes can save costs and help keep the environment clean and sustainable. Therefore, green and recyclable products must be produced to cause no problems in the recycling process. Also, various products must be tested to

guarantee their safety and lack of damage to gain customers' trust. Moreover, renewable energy, such as solar energy, and clean fuels, such as gas, must be used to produce a product that causes the most minor damage to the environment.

Products made with fuels such as diesel extensively damage the environment and cause pollution. In the economic dimension, all factors related to a company's increased sales rate are paramount. An example would be a price change (e.g., discounts), which leads to more sales and profitability for the company and benefits the customer and the company. Production self-efficiency, correcting product errors, and high-quality, sustainable marketing products are other components of the economic dimension. In the social dimension, social responsibility is significant for production. This is mainly because corporations with high social responsibility will produce healthy and green products for customers rather than just focusing on their products' profitability. However, relations with customers must be established continuously, and corporate managers and staff in the social dimension of sustainable marketing must fully understand customer equity. The leading network of contextual factors includes three categories of commitment, justice, and trust related to Confucian principles proposed in China. Companies will earn the trust of customers and be more welcomed if their managers have work ethics, consider customers' health, are committed to helping society, confirm their products to be harmless and green, can be held accountable, and can increase the quality of their products in line with environmental sustainability.

The leading network of strategies includes customer support, customer welfare, and sustainable product provision. Customers must be able to purchase the product quickly, express their opinions, easily interact with managers and experts, pay a reasonable price, receive the products with proper and green packaging, receive after-sales services, and not experience any financial or physical damage. Therefore, detergent companies must fully understand their customers' needs and establish and maintain their relations with customers, society, and the environment. Also, they must guide customers as much as possible to satisfy them. All of these issues must be due to the lack of damaging the environment. All these measures can contribute to customer retention and improve organizational performance. The leading network of consequences included two categories: customer loyalty and corporate performance improvement. In establishing sustainable marketing with a customer equity approach in a company, customers will have a greater desire to purchase from the company due to being satisfied with the product. Therefore, customers' loyalty increases, leading to increased efficiency, profitability, and, ultimately, corporate development.

Table (4). Axial coding network for sustainable marketing with customer equity approach and its effect on customer behavior and organizational performance

Main Category	Sub-Category	Concept
Core phenomenon	Customer Equity	Customer attraction Customer retention Customer development Customer churn
Causal conditions	Environmental dimension	Recycling Raw material quality Quality control Confirming the harmlessness of products

		<ul style="list-style-type: none"> Using renewable energies Establishing a detergent wastewater treatment unit Environmental considerations for customers Customer retention with green production Focusing on customers' health Company's relation with organizations active in the environmental field Using clean fuels Washing the production lines for reuse of wastewater Using harmless substances for detergent products
	Economic dimension	<ul style="list-style-type: none"> Knowledge Increase sales for customer needs Changing prices in favor of sustainable development Self-sufficiency in production Correcting product problems High-quality, sustainable marketing products
	Social dimension	<ul style="list-style-type: none"> social responsibility Ecology in Sustainable Marketing Understanding the areas of customer influence Valuating the customer Sustainable relationships with the customer Relationships with the environment and society
Contextual conditions	Commitment	<ul style="list-style-type: none"> Customer health Not tested on animals. Helping competitors Helping the society Proper testing of the product Lack of logging
	Justice	<ul style="list-style-type: none"> Creating a win-win situation Accuracy of money received (or appropriateness of price with the actual value of products) Equality in society Work ethics The proportion between benefit and correct behavior Conscientiousness Understanding consumer behavior and expectations The organization's adherence to social rules and customs
	Trust	<ul style="list-style-type: none"> Product Quality Product health Product accuracy
	Government situations	<ul style="list-style-type: none"> Sanctions and reduced purchasing power Inflation Government policies
Intervening conditions	Customer Protection	<ul style="list-style-type: none"> Fair price Customer complaints unit Having an interactive voice response for the company Customer Survey Good history Correcting product problems Good packaging
	Customer Welfare	<ul style="list-style-type: none"> Availability Easy purchase product variety Product development

	Providing sustainable products	Production of green products No loss of products for the customer Implementing sustainable marketing strategies Compensating for environmental damages
Consequences	Customer loyalty	Maintaining stable relationships with the customer. Understanding customer expectations A long-term relationship with the customer
	Corporate performance improvement	Increased productivity High profitability Corporate Research and development Product development

5.3. Selective Coding

Selective coding is the integration and improvement of categories. At this stage, the critical point was presenting the results as interrelated concepts and not just a list of topics if the research goal is theorization. It is worth noting that there is always more than one way to show the relations. To achieve the desired integration, the researcher must adjust the mainline of the subject and explain the story's mainline with a commitment to it. Selective coding involves discovering a principle and regularly relating the main category to other categories (Zhang & Ma, 2009). The following features must be found in the main category: first, it is obtained by codes that are more central to the axial coding stage; second, it must show the highest frequency in the coding process; and third, all relations with categories must be established spontaneously (He & Shi, 2009).

In line with the qualitative section of the research goals, we found six main categories through selective coding: core phenomenon, causal conditions, contextual conditions, intervening conditions, strategies, and consequences. We were coded based on sustainable marketing with a customer equity approach and its impact on consumer behavior and organizational performance. In core phenomenon, selective coding is customer equity. In causal conditions, selective coding includes sustainable marketing dimensions, namely environmental, economic, and social. In contextual conditions, selective coding included commitment, justice, and trust. In intervening conditions, selective coding was defined as government conditions, while in strategies, selective coding included customer protection, customer welfare, and providing sustainable products. Finally, in the category of consequences, selective coding included customer loyalty and corporate performance improvement.

6. Validation of Grounded Theory by the Fuzzy Delphi Method

The fuzzy Delphi technique was applied to ensure that the categories extracted from the interviews reached a consensus on the identified categories and confirmed the model's validity. Also, this method was exploited to design the final model and conduct the qualitative validation of the model. To this end, the identified categories were presented to 10 experts as a questionnaire. Afterward, the validation of the model was determined according to mean fuzzy triangular and mean definite based on the second stage survey and the study of their differences with other experts' opinions. The survey process will stop if the difference between the two steps is less than the shallow threshold (i.e., 0.1) (Cheng & Lin, 2002).

6.1. Definition of Linguistic Variables

The Delphi Fuzzy Questionnaire was designed to receive experts' opinions regarding an agreement with the identified categories following the identification of grounded theory categories. The response range and fuzzy triangular numbers are shown in Table 5.

Minkowski's formula obtained the definite fuzzy numbers in the form of equation (1):

$$x = m + \frac{\beta - \alpha}{4} \tag{1}$$

For instance, a definite fuzzy number was obtained very high in the linguistic variable, as follows:

$$x = 1 + \frac{0 - 0.25}{4} = 0.9375$$

Table (5). The range of answers to questions and fuzzy triangular numbers

Linguistic variables	Triangular fuzzy numbers	Definite fuzzy number
Very high	(1, 0.25, 0)	0.9375
High	(0.75, 0.15, 0.15)	0.75
Moderate	(0.5, 0.25, 0.25)	0.5
Low	(0.25, 0.15, 0.15)	0.25
Very low	(0, 0, 0.25)	0.0625

6.2. Expert Survey of the First Stage

In this stage, the categories identified in qualitative fuzzy were presented to 10 experts as a questionnaire, and mean fuzzy triangular numbers were obtained by equations (2) and (3).

$$A_i = (a_1^{(i)}, a_2^{(i)}, a_3^{(i)}), i = 1, 2, 3, \dots, n \tag{2}$$

$$A_{ave} = (m_1, m_2, m_3) = \left(\frac{1}{n} \sum_{i=1}^n a_1^{(i)}, \frac{1}{n} \sum_{i=1}^n a_2^{(i)}, \frac{1}{n} \sum_{i=1}^n a_3^{(i)} \right) \tag{3}$$

Where A_i indicates the viewpoint of the ITH expert and A_{ave} indicates the mean viewpoints of experts. Table 6 presents the mean triangular fuzzy estimated by equation 3 using definite Minkowski's formula. The definite mean obtained showed the severity of the expert's agreement with each category. All definite numbers obtained were above 0.5, thereby showing the high agreement of experts with all categories.

Table (6). Mean fuzzy triangular and the definite mean of categories (the first stage)

Column	Categories	Mean Triangular Fuzzy			Mean Degraded Fuzzy (definite)
		β	α	m	
1	Customer Equity	0.090	0.213	0.715	0.750
2	Environmental dimension	0.079	0.231	0.798	0.836
3	Economic dimension	0.087	0.230	0.789	0.825
4	Social dimension	0.068	0.235	0.857	0.916
5	Commitment	0.089	0.234	0.802	0.838
6	Justice	0.102	0.209	0.777	0.803

7	Trust	0.098	0.212	0.718	0.746
8	Government conditions	0.070	0.232	0.788	0.828
9	Customer Protection	0.088	0.232	0.790	0.826
10	Customer Welfare	0.084	0.251	0.821	0.863
11	Providing sustainable products	0.068	0.234	0.821	0.7795
12	Customer loyalty	0.084	0.265	0.812	0.76675
13	Corporate performance improvement	0.085	0.261	0.798	0.754

6.3. Expert Survey of the Second Stage

At this stage, the second questionnaire was designed and again presented to the group of experts along with each expert's previous comments and the extent of their differences with the views of other experts. Estimating the mean triangular fuzzy and definite mean was similar to the previous stage. According to Table 7, the difference between the first and second stages was less than 0.1 in all 13 categories identified. Therefore, a consensus was reached in all three categories, which resulted in the survey's discontinuation. Therefore, the validation of the categories identified by the experts' consensus and the fuzzy Delphi method was confirmed.

Table (7). Mean triangular fuzzy and the definite mean of categories (the second stage)

Column	Categories	Mean Triangular Fuzzy			Mean Degraded Fuzzy (definite)	Difference between the first and second stages
		β	α	m		
1	Customer Equity	0.102	0.246	0.719	0.755	0.005
2	Environmental dimension	0.089	0.251	0.802	0.835	0.001
3	Economic dimension	0.090	0.235	0.799	0.798	0.027
4	Social dimension	0.075	0.241	0.862	0.903	0.013
5	Commitment	0.079	0.231	0.898	0.934	0.096
6	Justice	0.095	0.201	0.790	0.816	0.013
7	Trust	0.098	0.239	0.765	0.800	0.054
8	Government conditions	0.065	0.230	0.765	0.806	0.022
9	Customer Protection	0.091	0.231	0.798	0.830	0.004
10	Customer Welfare	0.081	0.256	0.789	0.832	0.031
11	Providing sustainable products	0.069	0.236	0.791	0.74925	0.03025
12	Customer loyalty	0.074	0.265	0.812	0.76425	0.0025
13	Corporate performance improvement	0.082	0.251	0.798	0.75575	0.00175

7. Panel Vector Autoregressive Model (PVAR)

In this study, the panel vector autoregressive model (PVAR) was applied to evaluate the effect of sustainable marketing with a customer equity approach on consumer behavior and organizational performance without monitoring potential internalization. In the analysis of PVAR models, variance and reaction functions were used, and less attention was paid to the significance criteria of coefficients and t-statistics. The variables applied in the model were the categories identified in grounded theory. Descriptive statistics and measurements of nine detergent companies during 2010-2019 are presented in Table 8.

Table (8). Definition of variable operationalization and descriptive statistics

Variable	Variable Type	Description	Source	Mean	SD	Min	Max
Customer equity (CE)	Independent	Product of multiplying the number of customers by the mean CLV of the company	Hansotia (2004)	1960896	833429.1	719993	3203256
Environmental dimension (EN)	Independent	Waste recycling rate per kilogram	Qualitative section results	139514	268801.6	7820	2048702
Economic dimension (EC)	Independent	Changes in prices in favor of sustainable development are equal to the ratio of the number of expenses that the company incurs to the greenness of the products over the company's total expenses.	Qualitative section results	0.048	0.038	0.011	0.214
Social dimension (SO)	Independent	CSR level in the company is defined as the company's training programs. If the company has training programs for the customer's unique value, the number	Ting (2020)	0.63	0.48	0	1

		one and otherwise the number zero will be allocated.					
Commitment (CO)	Independent	No logging; numbers one and zero are allocated in the lack of logging and logging, respectively.	Qualitative section results	0.48	0.50	0	1
Justice (JU)	Independent	The organization's adherence to rules and social norms; the numbers one and zero are allocated if the company adheres and does not adhere to the rules, respectively.	Qualitative section results	0.34	0.47	0	1
Trust (TR)	Independent	Product quality: Numbers one and zero are allocated if the company's products have and do not have ISO 9000 certification, respectively.	Qualitative section results	0.52	0.50	0	1
Inflation (INF)	Independent	The inflation rate of the country	Qualitative section results	18.5	8.39	9	35
Customer protection (PR)	Independent	Average product prices	Qualitative section results	30321.97	408563.5	2629	29265
Customer welfare (WE)	Independent	Availability: If the products are in chain stores, the number one and otherwise	Qualitative section results	0.45	0.5	0	1

		zero are allocated.					
Providing sustainable products (SU)	Independent	Production of green products: If the products are produced green, the number one and otherwise zero will be allocated.	Qualitative section results	0.33	0.47	0	1
Customer Loyalty (Behavior) (BE)	Dependent	Company sales rate	Qualitative section results	318927.1	927089.1	1032	6067519
Corporate performance improvement (PE)	Dependent	ROA, Which is equal to the ratio of net profit to total assets	Wen & Lee (2020).	0.048	0.038	0.01	0.21

7.1. Sustainable Marketing with Customer Equity Approach and Consumer behavior

This study applied the PVAR model to evaluate sustainable marketing with customer equity and a consumer behavior approach. In this model, the reaction to stimulate consumer behavior as a standard deviation for ten periods was investigated by factors identified in sustainable marketing and customer equity in the qualitative section. The reaction diagram in Figure 3 and Table 9 shows that sustainable marketing and customer equity factors did not affect consumer behavior in the first round. However, it was affected by sustainable marketing with the customer equity approach in the following periods. While customer equity hurt consumer behavior in the second period, its effect was positive in the following periods, which might be due to a lack of customer equity implementation in a short time. The environmental dimension of sustainable marketing positively affected customer equity in all periods.

On the other hand, the economic dimension negatively impacted this regard, and the social dimension had a positive, negative, positive, and negative effect in the second, third, fourth-sixth, and seventh-tenth periods, respectively. According to these results, the causal conditions or the dimensions of sustainable marketing in detergent companies have been more successful in the environmental dimension and have attracted customers. However, complete success has yet to be achieved economically and socially. The commitment had a negative, positive, and adverse effect on consumer behavior in the second, third-seventh, and eighth-tenth periods. On the other hand, justice had a negative, positive-negative, and positive impact on consumer behavior in the second, third, fourth, fifth, sixth, eighth, ninth, and tenth periods.

Moreover, trust positively affected consumer behavior in all periods except the tenth. According to these results, the only trust, among the contextual factors, including Confucian principles

proposed in China, was the only success factor for customer attraction. Government conditions (i.e., inflation rate) positively affected consumer behavior in all periods. According to these results, people are more likely to buy goods and services when faced with rising prices. This is caused by the assumption that future costs will increase. Customer protection hurt consumer behavior in all periods.

On the other hand, consumer behavior positively affected consumer behavior in all periods except the fifth, ninth, and tenth periods. Besides, providing sustainable products hurt consumer behavior in all periods. According to the results, sustainable marketing with the customer equity approach was only successful in customer welfare in detergent companies. It could have done better in customer protection and sustainable products.

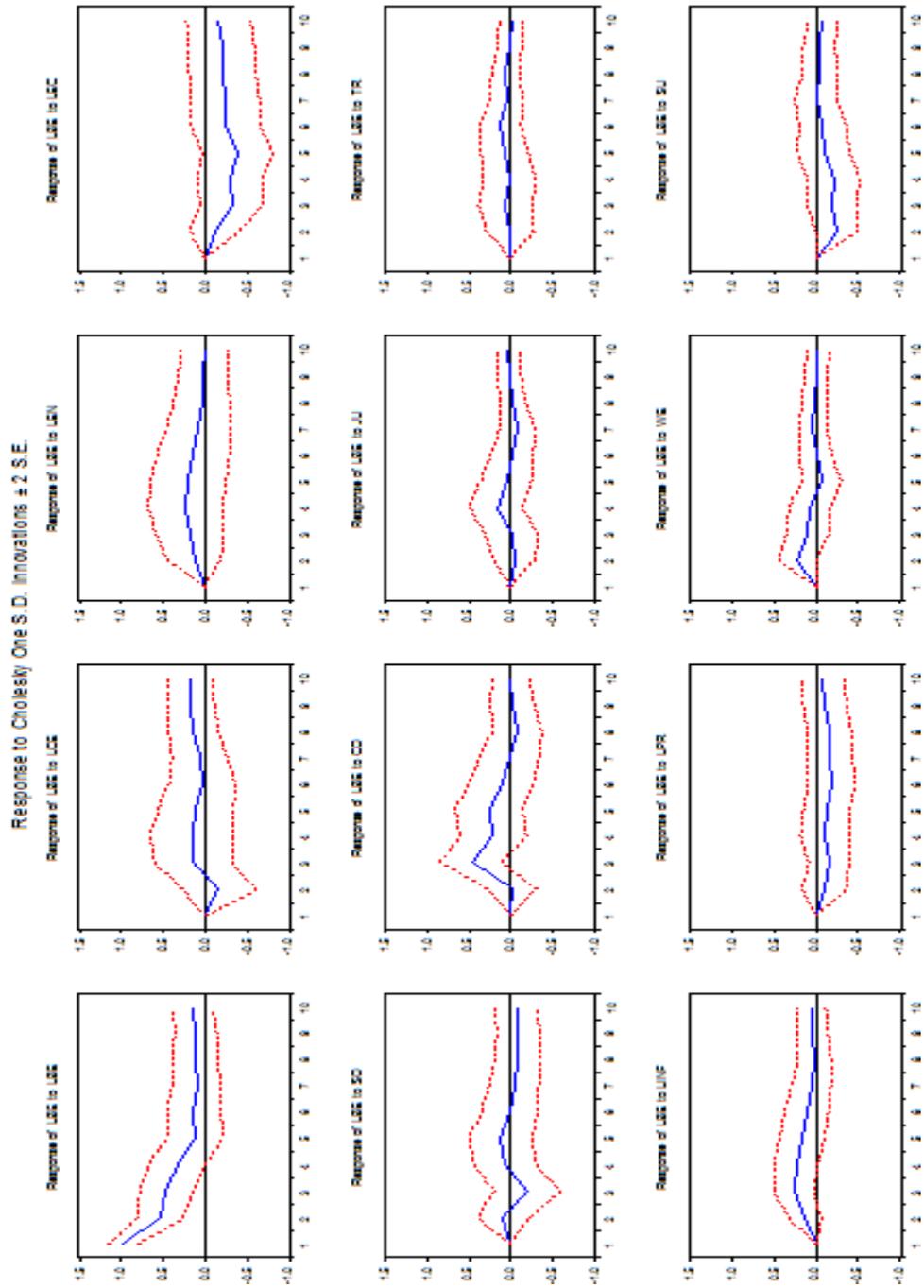


Figure (3). Stimulation reaction functions of sustainable marketing with customer equity approach on consumer behavior (blue lines are the function of stimulation reaction, and dotted red lines indicate standard deviation)

Table (9). Results of stimulation reaction of sustainable marketing with customer equity approach on consumer behavior

Period	LBE	LCE	LEN	LEC	SO	CO	JU	TR	LINF	LPR	WE	SU
1	0.983200 (0.08431)	0.000000 (0.000000)										
2	0.531622 (0.13856)	-0.164051 (0.22003)	0.125894 (0.15791)	-0.114707 (0.14603)	0.084808 (0.15390)	-0.016732 (0.14333)	-0.041350 (0.12109)	0.001860 (0.13891)	0.125807 (0.09692)	-0.105925 (0.13604)	0.221362 (0.11171)	-0.244126 (0.12084)
3	0.463541 (0.15816)	0.139078 (0.22991)	0.185268 (0.19839)	-0.314122 (0.18529)	-0.201050 (0.19649)	0.467900 (0.18204)	-0.015699 (0.15773)	0.063637 (0.16019)	0.267441 (0.11726)	-0.150879 (0.11857)	0.101617 (0.12844)	-0.181651 (0.14613)
4	0.329342 (0.16882)	0.160812 (0.24489)	0.233464 (0.22152)	-0.295852 (0.19498)	0.060531 (0.18205)	0.206287 (0.19798)	0.171411 (0.15980)	0.012112 (0.15634)	0.242198 (0.13256)	-0.104407 (0.14468)	0.072665 (0.12054)	-0.206569 (0.15737)
5	0.121993 (0.16798)	0.114597 (0.22394)	0.203012 (0.22621)	-0.387222 (0.21052)	0.119201 (0.18832)	0.250734 (0.20223)	0.051492 (0.14987)	0.072550 (0.14154)	0.170432 (0.13459)	-0.128175 (0.14006)	-0.066423 (0.11736)	-0.093082 (0.15626)
6	0.139291 (0.16036)	0.031025 (0.19922)	0.140454 (0.21458)	-0.248391 (0.20845)	0.014944 (0.16429)	0.109149 (0.18815)	-0.017203 (0.12769)	0.128764 (0.12421)	0.110361 (0.12948)	-0.181635 (0.14243)	0.003502 (0.09744)	-0.078165 (0.14003)
7	0.100185 (0.14459)	0.067128 (0.16408)	0.075585 (0.19015)	-0.237610 (0.20656)	-0.038648 (0.14864)	0.007320 (0.17438)	-0.081060 (0.10304)	0.051606 (0.09774)	0.055362 (0.11515)	-0.161161 (0.13615)	0.037022 (0.08309)	-0.003780 (0.12614)
8	0.125785 (0.13614)	0.138855 (0.14615)	0.038885 (0.16761)	-0.209258 (0.19919)	-0.081939 (0.13343)	-0.078794 (0.14633)	-0.019013 (0.07823)	0.064023 (0.08147)	0.023464 (0.10070)	-0.155346 (0.13271)	0.022021 (0.07256)	-0.050674 (0.10458)
9	0.113003 (0.12422)	0.167619 (0.13777)	0.030322 (0.14810)	-0.197798 (0.19574)	-0.085904 (0.12818)	-0.019032 (0.12974)	0.011174 (0.06744)	0.007980 (0.07196)	0.039359 (0.09088)	-0.107368 (0.12884)	-0.004458 (0.06813)	-0.035931 (0.09597)
10	0.145802 (0.11786)	0.171635 (0.13025)	0.001472 (0.13728)	-0.159464 (0.19233)	-0.071187 (0.12492)	-0.003047 (0.11155)	0.032307 (0.06394)	-0.007561 (0.07099)	0.059016 (0.08465)	-0.074616 (0.12562)	-0.022006 (0.06673)	-0.077621 (0.086658)

Cholesky Ordering: LBE LCE LEN LEC SO CO JU TR LINF LPR WE SU
 Standard Errors: Analytic

7.2. Sustainable Marketing with Customer Equity Approach and Organizational Performance

In this part of the Research, sustainable marketing with customer equity and organizational performance was evaluated using the PVAR model. In this model, the response to the organization's performance stimulus as a standard deviation for ten periods was investigated by factors identified in sustainable marketing and customer value in the qualitative section. The stimulation reaction graph in Figure 4 and Table 10 showed that similar to consumer behavior, organizational performance was not affected by factors expressed in sustainable marketing and customer equity in the first period. Nevertheless, it was affected by sustainable marketing with customer equity in the following periods. Customer equity negatively affected consumer behavior in the second and fourth periods while positively impacting the following periods. This could be due to a need for more customer equity in the short term. Also, the environmental dimension of sustainable marketing hurt organizational performance in all periods except the seventh, ninth, and tenth periods.

Moreover, the economic dimension of sustainable marketing positively affected organizational performance in all periods except the tenth period. The social dimension of sustainable marketing positively affected organizational performance in all periods except for the third, fifth, and sixth periods. According to the results, the causal conditions or dimensions of sustainable marketing in detergent companies were more successful for organizational performance in the economic dimension. Based on the results, companies were attracted by companies from the environmental dimension of sustainable marketing, whereas producers improved their performance from sustainable marketing's economic dimension. The commitment hurt organizational performance in all periods except the tenth round.

On the other hand, while justice hurt organizational performance in the second and fourth rounds, it positively affected other periods. Trust negatively affected consumer behavior in all periods except for the third and sixth periods. The results showed that none of the intervening conditions in the present Research were implemented in such a way that they could improve organizational performance. Government conditions (i.e., inflation rate) negatively affected organizational performance in all periods except the fourth, sixth, seventh, and tenth periods. This result indicated that inflation could have a better effect on producers and organizational performance due to increased raw materials and other problems. Customer protection positively affected organizational performance in all periods except for the fourth round.

Moreover, customer welfare positively impacted organizational performance in all periods except the third, fifth, and sixth periods. On the other hand, providing sustainable products hurt organizational performance in all periods except for the fourth and seventh periods. According to the results, sustainable marketing with customer equity succeeded in the performance of detergent companies regarding customer protection and welfare while having an insignificant effect on sustainable marketing.

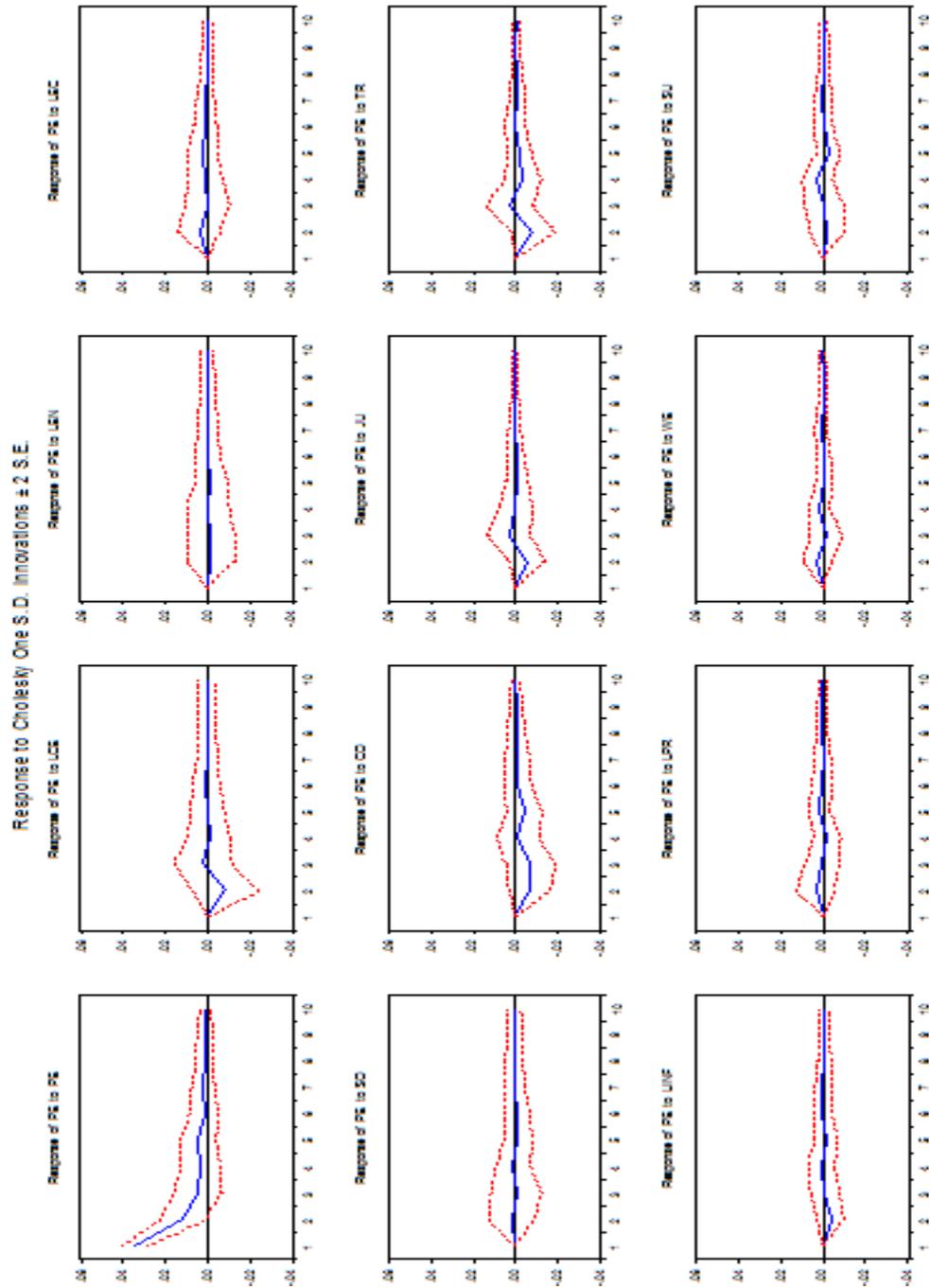


Figure (4). Stimulation reaction functions of sustainable marketing with customer equity approach on organizational performance (blue lines are the function of stimulation reaction, and dotted red lines indicate standard deviation)

Table (10). Stimulation reaction results of sustainable marketing with customer equity on organizational performance

Period	PE	LCE	LEN	LEC	SO	CO	JU	TR	LINF	LPR	WE	SU
1	0.035050 (0.00301)	0.000000 (0.00000)										
2	0.011925 (0.00547)	-0.008415 (0.00775)	-0.001460 (0.00555)	0.003880 (0.00501)	0.001675 (0.00542)	-0.006830 (0.00496)	-0.005483 (0.00427)	-0.008528 (0.00502)	-0.003504 (0.00309)	0.003608 (0.00457)	0.002870 (0.00344)	-0.002002 (0.00411)
3	0.004519 (0.00559)	0.002117 (0.00689)	-0.001558 (0.00564)	3.26E-05 (0.00532)	-0.000356 (0.00600)	-0.007242 (0.00590)	0.003086 (0.00497)	0.002744 (0.00553)	-0.000873 (0.00346)	0.000468 (0.00397)	-0.001536 (0.00385)	-0.000714 (0.00471)
4	0.003607 (0.00474)	-0.000665 (0.00491)	-0.000232 (0.00500)	0.001005 (0.00409)	0.000962 (0.00401)	-0.001199 (0.00496)	-8.79E-05 (0.00398)	-0.003677 (0.00424)	0.000747 (0.00320)	-0.002109 (0.00316)	0.002163 (0.00248)	0.002767 (0.00360)
5	0.004362 (0.00414)	6.49E-05 (0.00403)	-0.001760 (0.00387)	0.002721 (0.00349)	-0.001111 (0.00332)	-0.004367 (0.00421)	-0.000796 (0.00263)	-0.001867 (0.00273)	-0.001506 (0.00269)	0.001749 (0.00253)	-0.000998 (0.00190)	-0.002748 (0.00280)
6	0.001689 (0.00338)	0.000625 (0.00320)	-0.000116 (0.00291)	0.001143 (0.00272)	-0.001072 (0.00290)	-0.000901 (0.00327)	-0.000344 (0.00188)	0.000168 (0.00240)	0.000286 (0.00222)	0.000647 (0.00230)	-6.44E-05 (0.00162)	-3.84E-05 (0.00220)
7	0.002190 (0.00268)	0.000204 (0.00236)	0.000215 (0.00239)	0.001104 (0.00205)	0.000551 (0.00243)	-0.000845 (0.00286)	0.000461 (0.00139)	-0.000880 (0.00182)	0.000258 (0.00186)	0.000168 (0.00185)	0.000983 (0.00138)	0.000255 (0.00197)
8	0.001581 (0.00204)	0.000224 (0.00221)	-8.99E-05 (0.00202)	0.000250 (0.00151)	0.000550 (0.00204)	-0.000382 (0.00207)	0.000230 (0.00095)	-0.000741 (0.00130)	-0.000586 (0.00154)	0.000759 (0.00140)	4.93E-05 (0.00098)	-0.000461 (0.00143)
9	0.001374 (0.00175)	0.000240 (0.00217)	0.000411 (0.00181)	0.000147 (0.00128)	0.000500 (0.00182)	-0.000239 (0.00149)	0.000383 (0.00059)	-2.73E-05 (0.00092)	-0.000393 (0.00138)	0.000606 (0.00108)	0.000147 (0.00084)	-0.000533 (0.00116)
10	0.000958 (0.00132)	0.000401 (0.00206)	0.000430 (0.00155)	-5.53E-05 (0.00100)	0.000601 (0.00152)	2.61E-05 (0.00099)	1.12E-05 (0.00047)	-0.000537 (0.00074)	9.10E-06 (0.00122)	0.000326 (0.00080)	0.000378 (0.00063)	-0.000141 (0.00084)

Cholesky Ordering: PE LCE LEN LEC SO CO JU TR LINF LPR WE SU
 Standard Errors: Analytic

Figures (5) and (6) depict the regression lines for the independent variables and consumer behavior (Figure 5) and organizational performance (Figure 6), respectively. Accordingly, the figures indicate that the independent variables characterized by a greater slope can affect consumer behavior more than organizational performance. As can be observed from the regression lines in both figures, the slope of these lines for the impact of the independent variables on consumer behavior is more significant than that of organizational performance. Therefore, these independent variables shape consumer behavior more than organizational performance.

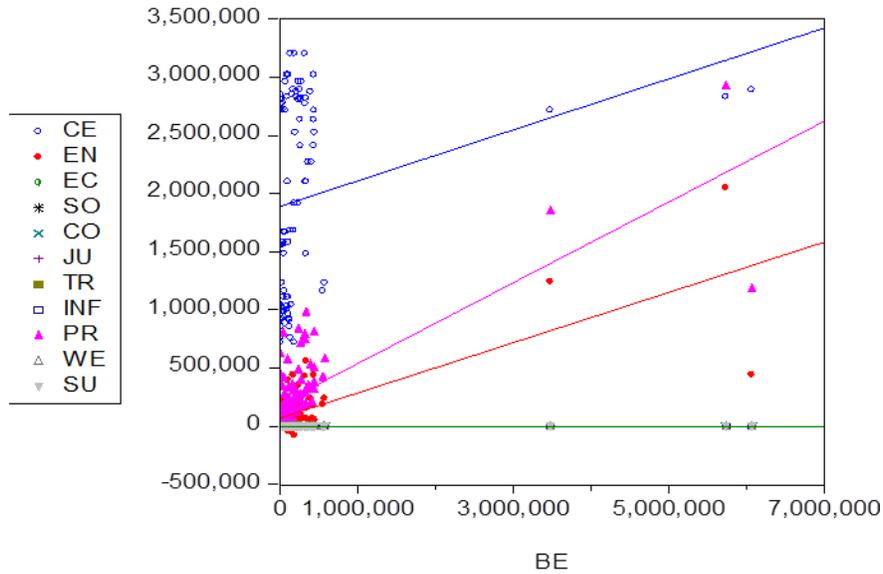


Figure (5). The regression line for independent variables and consumer behavior

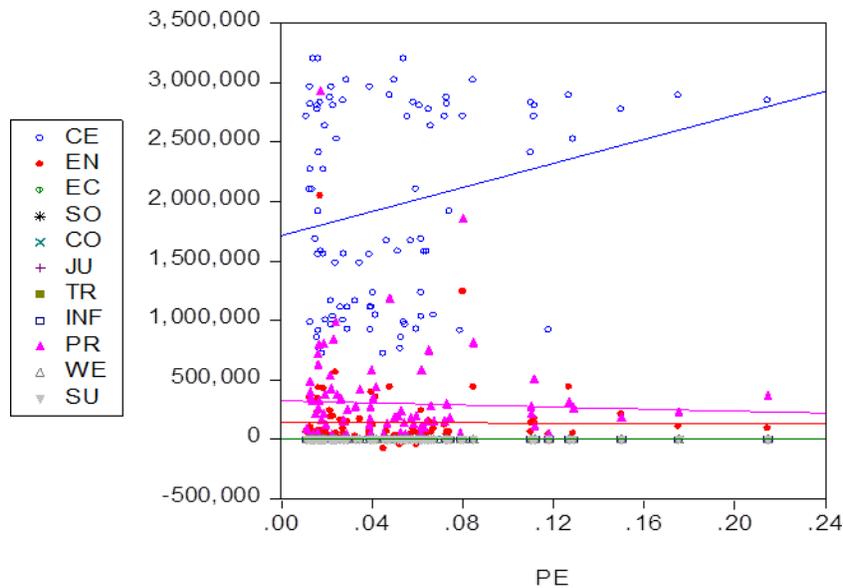


Figure (6). The regression line for independent variables and organizational performance

8. Discussion and Conclusion

The primary objective of the current study was to assess the impact of sustainable marketing on the customer equity approach concerning consumer behavior and organizational performance. In light of the Research's complexity and the imperative to delineate pertinent variables, a mixed-methods approach encompassing qualitative and quantitative methodologies was employed. Within the qualitative phase, an exhaustive exploration of the categories and constituents of sustainable marketing in conjunction with the customer equity approach, consumer behavior, and organizational performance was conducted utilizing grounded theory. This methodological framework entailed a meticulous execution of the open, axial, and selective coding processes, identifying six overarching categories: core phenomenon, causal conditions, intervening conditions, contextual conditions, strategies, and consequences. Furthermore, a total of 13 components were distributed among these six categories. After the grounded theory phase, the identified categories were validated by applying the fuzzy Delphi method, drawing upon insights from subject matter experts.

Consequently, the categories derived from the qualitative segment were integrated into the quantitative phase as the primary variables of interest. In the quantitative realm, the impact of sustainable marketing in conjunction with the customer equity approach on consumer behavior and organizational performance was scrutinized utilizing the PVAR model, incorporating the variables identified during the qualitative inquiry. According to the results, customer equity positively affected consumer behavior in long-term periods. Therefore, profitability and revenue generated from customer equity in detergent companies increased customer attraction after several periods. Among the dimensions of sustainable marketing, detergent companies could attract more customers from the environmental dimension but failed to attract customers from the economic and social dimensions. As such, detergent companies could reduce costs and increase customer attraction regarding recycling and reusing waste in the production cycle. These companies incur costs for the products to be green, which is not compensated for by attracting a proportional number of customers. Therefore, the economic dimension of sustainable marketing did not successfully attract customers. This article considered training programs for customer equity in the company. However, given the unstable effects of these programs on consumer behavior, educational programs related to customer equity have not been very coherent for the company's managers, employees, and experts and cannot favorably affect consumer behavior. Among the contextual factors, only the trust variable had a favorable effect on the customer, and commitment and justice had fluctuating impacts on consumer behavior. Therefore, detergent companies have yet to attract customers successfully regarding commitment and justice.

Nevertheless, since customers are more consumer-oriented, they trust detergent companies to use sustainable marketing by watching ads (whether in the media or word of mouth). The inflation rate is one of the most critical economic issues. According to the results, inflation positively affected consumer behavior in all periods. When faced with rising prices, people are more likely to buy goods and services. According to microeconomics, price, income, expectations, and taste affect

the demand for goods and services. If the price level rises, people's demand for goods and services is expected to decrease; meanwhile, the opposite is true for detergents. This is mainly due to the critical factor of price expectations in the demand function. Due to the sharp rise in inflation (especially in recent years), customers always think that prices will increase further, and therefore, they will buy more goods and services. Also, sustainable marketing with customer equity in detergent companies was only successful in customer welfare and failed in customer protection and providing sustainable products. Therefore, despite the significant importance of sustainable marketing in customer equity and behavior, it has yet to support detergent companies' customers. Customer equity positively affected organizational performance in long-term periods and would lead to organizational performance after several periods.

Among the sustainable marketing dimensions, detergent companies were successful in the economic dimension of organizational performance. Therefore, consumers were attracted to sustainable development's environmental dimension, and producers improved their performance from the economic dimension of sustainable marketing. The environmental and social dimensions cannot improve the organization's performance properly due to the high costs incurred for companies. None of the Confucian principles proposed in China were implemented in a way that could improve organizational performance. The detergent companies could not improve their performance favorably by factors such as trust, justice, and commitment. Even though most customers buy detergents, the inflation rate does not have a good effect on producers and organizational performance due to rising raw material prices and other problems. Finally, sustainable marketing with the customer equity approach was relatively successful in detergent companies' performance regarding customer protection and welfare and failed to provide sustainable products.

A general summary shows that sustainable marketing with customer equity had an insignificant effect on detergent companies' consumer behavior and organizational performance. The results indicated that only customer equity and sustainable marketing's environmental dimension positively impacted consumer behavior. Only customer equity and the economic dimension of sustainable marketing had a proper impact on organizational performance. These results confirmed hypotheses 1 and 2. Therefore, sustainable marketing with the customer equity approach can positively affect consumer behavior (Keller, 2003). Establishing sustainable marketing with the customer equity approach can significantly affect consumer behavior and increase customers' interest in sustainable products (Sun et al., 2016; Sun et al., 2018). Sustainable marketing with the customer equity approach improves organizational performance (Hunt, 2011), which will be in the form of financial performance improvement due to the economic dimension of sustainable marketing (Ajour El-Zein et al., 2020).

Concerning the study results, corporate executives are advised to find ways other than inflation and political and economic problems in the country to affect consumer behavior. This is mainly because the increase in inflation, although it leads to an increase in their purchases, affects the company's products and makes it challenging to improve organizational performance. Implementing sustainable marketing with the customer equity approach within the national context

is anticipated to result in heightened customer attraction and enhanced organizational performance, primarily driven by increased customer purchase rates. Nonetheless, it has been observed that the contextual conditions and strategies essential for effectively executing sustainable marketing practices need to be adequately adhered to within detergent companies. The findings suggest that solely the environmental dimension contributes to a rise in customer purchases, while only the economic dimension correlates with an enhancement in organizational performance.

Furthermore, detergent companies exhibit a notable lack of commitment to ethical considerations, fairness, and customer protection in providing sustainable products. Therefore, it is recommended that corporations align their actions more closely with customer-centric principles and assume responsibility for delivering sustainable offerings to bolster their performance and cultivate customer loyalty. Moreover, in light of the adverse impact of inflation on the operational efficacy of detergent companies, it is advised that anti-inflationary measures be implemented to mitigate the challenges associated with inflation, such as capital goods procurement and international trade disruptions. Given that the regression analysis indicates a more substantial influence of independent variables on consumer behavior than organizational performance, companies are urged to prioritize customer attraction and retention efforts to drive organizational success.

References

- Agyabeng-Mensah, Y., Afum, E. & Ahenkorah, E. (2020). Exploring financial performance and green logistics management practices: Examining the mediating influences of market, environmental and social performances, *Journal of Cleaner Production*, 258.
- Ajour El Zein, S., Consolacion-Segura, C. & Huertas-Garcia, R. (2020). The Role of Sustainability in Brand Equity Value in the Financial Sector, *Sustainability*, 12(254), 1-19.
- Arabiun, A., Dehkordi, A. M., Hosseini, E., & Brahmi, M. (2023). A framework for strategic analysis in dynamic and complex environments. In *Exploring Business Ecosystems and Innovation Capacity Building in Global Economics* (pp. 26-47). IGI Global.
- Ayman, U., & Choudhry, T. (2023). *A new era of consumer behavior: In and beyond the pandemic*. BoD—Books on Demand.
- Bansal, P. (2005). Evolving sustainability: A longitudinal study of sustainable corporate development. *Strategic Management Journal*, 26(3), 197–218.
- Bartlett, T. & Brian, D. (2012). The effect of corporate sustainability reporting on firm valuation. CMC Senior Theses. Paper 489.
- Belz, F.M. & Peattie, K. (2012). *Sustainability marketing: a global perspective*. 2. ed., Chichester: Wiley.
- Bilro, R. G., Loureiro, S. M. C., & Souto, P. (2023). A systematic review of customer behavior in business-to-business markets and agenda for future research. *Journal of Business & Industrial Marketing*, 38(13), 122-142.
- Boehe, D. M. & L. B. Cruz (2010). "Corporate Social Responsibility, Product Differentiation Strategy, and Export Performance," *Journal of Business Ethics*, 91 (2), 325–46.
- Charter, M., Peattie, K., Ottman, J. & Polonsky, M.J. (2002). *Marketing and sustainability*. <http://www.cfsd.org.uk/smart-know-net/links/smart-know-net.pdf>
- Cheng, C.H. & Lin, Y. (2002). Evaluating the best main battle tank using fuzzy decision theory with linguistic criteria evaluation, *European Journal of Operational Research*, 142, 147.
- Clement, K. (2023). *Economic development and environmental gain: European environmental integration and regional competitiveness*. Routledge.
- Creswell, (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions*. Sage, Thousand Oaks, CA.
- Elkington, J. (1994). Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90–100.
- Finney, S. L. (2014). Encouraging sustainable consumption: An exploration of consumer behavior. *The Marketing Review*, 14(2), 189–203.
- Fraj-Andre's, E., Martinez-Salinas, E. and Matute-Vallejo, J. (2008). A multidimensional approach to the influence of environmental marketing and orientation on the firm's organizational performance. *Journal of Business Ethics*, 88(2), 263-286.
- Garcí'a-Gallego, A. and Georgantzi's, N. (2011). Good and bad increases in ecological awareness: environmental differentiation revisited. *Strategic Behavior and the Environment*, 1, 71-88.
- Gigauri, I., Palazzo, M., & Ferri, M. A. (Eds.). (2023). *Handbook of Research on Achieving Sustainable Development Goals With Sustainable Marketing*. IGI Global.
- Hansotia, B. (2004). Company activities for managing customer equity, *Journal of Database Marketing & Customer Strategy Management*, 11, 319–332.
- Hawken, P., (1993). *The Ecology of Commerce: A Declaration of Sustainability*. Harper Collins, New York.

- Hawken, P. (2007). *Blessed Unrest: How the world's most significant movement came into being and why no one saw it coming*. New York: Viking.
- He, Y. & Shi, D. (2009). Study on Grounded Theory in Social Surveys, 5, 46-48.
- Heck, G. & Yidan, X. (2013). The effect of sustainable marketing on brand equity and consumer behavior, Master's Programme in International Marketing, Halmstad, Sweden.
- Hildebrand, B. (2004). Gemeinsames Ziel, verschiedene Wege: Grounded Theory und Objektive Hermeneutik im Vergleich. *Sozialer Sinn*, 4(2), 177–194.
- Hosseini, E., & Rajabipoor Meybodi, A. (2023). Proposing a Model for Sustainable Development of Creative Industries Based on Digital Transformation. *Sustainability*, 15(14), 11451.
- Hunt, S. (2011). Sustainable marketing, equity, and economic growth: A resource-advantage, economic freedom approach, *Journal of the Academy of Marketing Science*, 39(1), 7–20.
- Jha, M., (2012). Holistic rural marketing. *Int. J. Rural Manag.* 8 (1–2), pp. 121–132.
- Jung, J., Kim, S.J. & Kim, K.H. (2020). Sustainable marketing activities of traditional fashion market and brand loyalty, *Journal of Business Research*.
- Keller, K. L. (2003). *Strategic Brand Management* (2nd ed.). New Jersey, USA: Prentice-Hall.
- Kemper, J.A., Ballantine, P.W. & Hall, C.M. (2020). Marketing academics play a role in advancing sustainability education and Research, *Journal of Cleaner Production*, 248.
- Lages, L. F., Jap, S.D. & Griffith, D.A (2008), “The Role of Past Performance in Export Ventures: A Short-Term Reactive Approach,” *Journal of International Business Studies*, 39 (2), 304–325.
- Liu, C. R., Ge, L. F., Lin, W. R., Kuo, M. L., & Tsui, C. H. (2014). Customer equity models for mainland China and Taiwan's economy hotels. *Asia Pacific Journal of Tourism Research*, 19(12), 1463–1480.
- Löbler, H. (2017). Humans' relationship to nature- framing sustainable marketing. *Journal of Services Marketing*, 31(1), 73–82.
- Markey, K., Tilki, M. & Taylor, G. (2020). Practicalities in doctorate research using grounded theory methodology in understanding nurses' behaviors when caring for culturally diverse patients, *Nurse Education in Practice*, 44.
- Marshall, S., Vaiman, V., Napier, N., Taylor, S., Haslberger, A. & Andersen, T. (2010). "The End of a 'Period': Sustainability and the Questioning Attitude," *Academy of Management Learning & Education*, 9 (3), 477–87.
- Martin, D; Schouten, J. (2012). *Sustainable Marketing*. New Jersey: Pearson.
- Martín-Tapia, Inmaculada, J. Alberto Aragón-Correa, and Antonio Rueda-Manzanares (2010), “Environmental Strategy and Exports in Medium, Small and Micro-Enterprises,” *Journal of World Business*, 45 (3), 266–75
- McKinsey & Company. (2012). *The business of sustainability: McKinsey Global Survey Results*.
- Miles, M.P. and Covin, J.G. (2000). Environmental marketing: a source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, 23(3), 299–311.
- Miles, M.P. and Munilla, L.S. (1993). The eco-orientation: an emerging business philosophy. *Marketing Theory and Practices*, 1(2), 43-51.
- Oliveira, P. And Sullivan, A. (2008). Sustainability and its impact on brand value. *Environmental leader*.
- Pantelic, D., Sakal, M., Zehetner, A., (2016). Marketing and sustainability from the perspective of future decision-makers [Article] *South Afr. J. Bus. Manag.* 47 (1), 37–47.
- Pereira Heath, M.T., Chatzidakis, A., (2012). The transformative potential of marketing from the consumers’ point of view. *J. Cons. Behav.* 11 (4), 283–291.

- Porter, M.E. & Kramer, M.R. (2011). Creating Shared Value. Harvard Business Review. <https://hbr.org/2011/01/the-big-idea-creating-shared-value>[2018-04-04]
- Portney, K.E. (2015). Sustainability. Cambridge, Massachusetts: London, England. pp. 4-5. ISBN: 9780262528504.
- Proszowska, A., Prymon-Rys, E., Dubel, A., Kondak, A., & Wilk, A. (2024). *Sustainable Marketing and the Circular Economy in Poland: Key Concepts and Strategies*. Taylor & Francis.
- Pujari, D., Wright, G. and Peattie, K. (2003). Green and competitive. Influences on environmental new product development performance. *Journal of Business Research*, 56(8), 657-671.
- Rajabipoor Meybodi A. R, Tajpour M, Hosseini E, Agheli M.(2023). Marketing Communication and Mobile Advertising for Sustainability: An Analysis of Consumer Attitudes and Motivations. *Journal of Business Strategy Finance and Management*, 5(2).
- Rajesh, R. (2020). Exploring firms' sustainability performances using environmental, social, and governance scores, *Journal of Cleaner Production*, 247.
- Reutlinger, J. (2012). Sustainable marketing - The importance of being a sustainable business. Published theses, Lahti University of Applied Sciences.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: Using customer equity to focus marketing strategy. *Journal of Marketing*, 68, 109–127.
- Sanders, N. R., & Wood, J. D. (2024). *Foundations of Sustainable Business*. John Wiley & Sons.
- Shrivastava, P. (1995). Environmental technologies and competitive advantage. *Strategic Management Journal*, 16(3), 183-200.
- Song, S., & Ko, E. (2017). Perceptions, attitudes, and behaviors toward sustainable fashion: Application of Q and Q-R methodologies. *International Journal of Consumer Studies*, 41(3), 264–273.
- Stahl, H. K., Matzler, K., & Hinterhuber, H. H. (2003). Linking customer lifetime value with shareholder value. *Industrial Marketing Management*, 32, 267–279.
- Sulaymon, T. (2016). A marketing strategy for sustainable business. Bachelor thesis. JAMK University of Applied Science.
- Sun, X. (2011). Grounded theory: theory-development in in-depth interview research. *J. Xi'an Jiao. Univ.* 31(6), 87-92.
- Sun, Y., Garrett, T.C., Phau, I. & Zheng, B. (2018). Case-based models of customer-perceived sustainable marketing and its effect on perceived customer equity, *Journal of Business Research*.
- Sun, Y., Kim, K.H., & Kim, J. (2014). Examining relationships among sustainable orientation, perceived sustainable marketing performance, and customer equity in the fast fashion industry. *Journal of Global Fashion Marketing*, 5(1), 74–86.
- Sun, Y., Tony, C.G. & Kim, K.H. (2016). Do Confucian principles enhance sustainable marketing and customer equity? *Journal of Business Research*, 69(9), 3772-3779.
- Sun, Y., & Ko, E. (2016). Influence of sustainable marketing activities on customer equity. *Journal of Global Scholars of Marketing Science*, 26(3), 270–283.
- Ting, P. (2020). Do large firms talk about corporate social responsibility? - The evidence from CSR report disclosure, *Finance Research Letters*.
- Trivedi, K., Trivedi, P. & Goswami, V. (2018). Sustainable Marketing Strategies: Creating Business Value by Meeting Consumer Expectation, *International Journal of Management, Economics, and Social Sciences*, Vol. 7(2), pp. 186–205.

- Trivedi, A. K., Gupta, M. K., & Singh, H. (2023). PLA based biocomposites for sustainable products: A review. *Advanced Industrial and Engineering Polymer Research*, 6(4), 382-395.
- Van Dam, Y.K., Apeldoorn, P.A.C., (1996). Sustainable marketing. *J. Micromarketing* 16 (2), 45–56.
- Veisten, K. (2007). Willingness to pay for eco-labeled wood furniture: choice-based conjoint analysis versus open-ended contingent valuation. *Journal of Forest Economics*, 13(1), 29–48.
- Vesal, M., Siahtiri, V. & O`Cass, A. (2020). We strengthen B2B brands by signaling environmental sustainability, managing customer relationships, and industrial Marketing Management.
- Wagner, S.M., Lukassen, P. & Mahlendorf, M. (2010). Misused and missed use — Grounded Theory and Objective Hermeneutics as methods for Research in industrial marketing, *Industrial Marketing Management*, 39(1), 5-15.
- Wen, H. & Lee, C. (2020). Impact of environmental labeling certification on firm performance: Empirical evidence from China, *Journal of Cleaner Production*, 255.
- Yilmaz, A.K., & Flouris, T. (2010). Managing corporate sustainability: Risk management process-based perspective. *African Journal of Business Management*, 4, 162–171.
- York, J. (2009). Pragmatic sustainability: translating environmental ethics into a competitive advantage. *Journal of Business Ethics*, 85(1), 97–100.
- Zhang, J. Ma, D. (2009). Application of Grounded Theory Method in Management, pp. 115–117, 2.