

# The role of industries' environmental reputation and competitive intensity on sustainability marketing strategy

## Customers' environmental concern approach

Customers' environmental concern approach

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# El papel de la reputación ambiental e intensidad competitiva en la estrategia de marketing sostenible

## Acercamiento a la preocupación ambiental del cliente

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### Abstract

**Purpose** – This paper aims to highlight a model of industry drivers (industries' environmental reputation and competitive intensity) that affect the sustainability marketing strategy segmentation, targeting and positioning based on customers' environmental concern and explore the circumstances under which such a strategy affects performance.

**Design/methodology/approach** – The authors examined 64 Iranian export companies, which adopted sustainability marketing strategies across seven different industries. Achieved data are analyzed using a structural equation model methodology.

**Findings** – The results indicate that industries' environmental reputation is positively related to the sustainability marketing strategies based on customers' environmental concern and leads to superior financial and market performance. They also posit that competitive intensity has no significant effect on sustainability marketing strategies.

**Research limitations/implications** – This study specifically examines the impact of industry drivers on sustainability marketing strategy and performance. Logically, there might be other factors affecting the sustainability or other value dimensions that are not addressed in this study.

**Practical implications** – This paper provides some understanding of how organizations strength their sustainability marketing strategy, and they have to consider what factors to adopt such



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strategy. This paper also facilitates a better understanding of the customers' needs and concern as a factor influencing sustainability marketing strategy adoption and implementation. Identifying the customer segmentation and market targeting based on the industry's environmental can lead to the business will normally tailor the marketing mix (4Ps) with the needs and expectations of the target in mind.

**Originality/value** – This paper strengthens the effect of environmental concern of customer to understand what influences the success of the sustainability marketing adoption and implementation by investigating the most influential factors such as industries' environmental reputation and competitive intensity.

**Keywords** Sustainability, Marketing strategy, Industry, Environmental impact, Customers, Environmental concern, Competition intensity, Export, Financial performance, Market performance

**Paper type** Case study

## Resumen

**Propósito** – Este artículo pretende poner de manifiesto un modelo de impulsores de la industria (reputación ambiental e intensidad competitiva de las industrias) que afecta a la segmentación, orientación y posicionamiento de la estrategia de marketing de sostenibilidad basada en la preocupación ambiental de los clientes y explora las circunstancias en las que dicha estrategia afecta al rendimiento.

**Diseño/metodología/enfoque** – Se han examinado 64 empresas exportadoras iraníes que adoptaron estrategias de marketing sostenible en siete industrias diferentes. Los datos obtenidos se analizan utilizando SEM.

**Resultados** – Los resultados indican que la reputación ambiental de las industrias se relaciona positivamente con las estrategias de marketing sostenibles basadas en la preocupación ambiental de los clientes y conlleva un rendimiento financiero y de mercado superior. También se afirma que la intensidad competitiva no tiene un efecto significativo en las estrategias de marketing sostenible.

**Limitaciones/implicaciones de investigación** – Este estudio examina específicamente el impacto de los impulsores de la industria en la estrategia y el rendimiento de marketing sostenible. Lógicamente, podría haber otros factores que afecten a la sostenibilidad u otras dimensiones de valor que no se abordan en este estudio.

**Implicaciones prácticas** – Se analiza cómo las organizaciones fortalecen su estrategia de marketing sostenible y tienen que considerar qué factores adoptar en dicha estrategia. Este artículo facilita también una mejor comprensión de las necesidades y preocupaciones de los clientes como un factor que influye en la adopción e implementación de la estrategia de marketing sostenible. La identificación de la segmentación de clientes y el mercado basado en el entorno ambiental de la industria puede llevar a que el negocio adapte su marketing mix (4Ps) teniendo en cuenta las necesidades y expectativas del público objetivo.

**Originalidad/valor** – Esta investigación refuerza el efecto de la preocupación ambiental del cliente para comprender qué influye en el éxito de la adopción e implementación del marketing sostenible al investigar los factores más influyentes, como la reputación ambiental y la intensidad competitiva de las industrias.

**Palabras clave** – Sostenibilidad, Estrategia de marketing, Industria, Impacto medioambiental, Clientes, Preocupación ambiental, Intensidad de la competencia, Exportación, Rendimiento financiero, Rendimiento de mercado.

**Tipo de artículo** – Estudio de caso

## 1. Introduction

Sustainability has become strategically important due to the dramatic growth of environmental problems and public awareness of these crises at the global level (Leonidou *et al.*, 2013). The term sustainability refers to development that meets current

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needs without undermining the ability of future generations to meet their needs (UNGA, 1987). Companies are especially more willing to explore the possibility of environmental issues in their business practices, as the adverse effects of their activities on the environment are deniable. The importance of this topic has given rise to an enormous amount of research in the past, which has shown companies must adopt sustainability in their marketing strategy to survive (Leonidou and Leonidou, 2011). Integrating marketing strategies with customer needs and demands is one important principle that has been addressed in previous research (Crittenden *et al.*, 2011). Another principle goes beyond specifying the needs of customers and shows that companies should create a relationship with customers in their marketing strategies, which is beneficial to the companies, society and the environment (Kumar *et al.*, 2013). This is difficult, however, as there are many different customers with specific needs and demands. Companies are likely to encounter problems in integrating marketing strategy (Kotler and Armstrong, 2001).

To address this issue, a common theme across many marketing studies is to define the characteristics of environmentally conscious (“green”) customers for segmentation purposes. There are two problems with this theme. First, although most companies adopt sustainability to engage green customers, Kardash (1974) stated that all customers are potentially green customers, arguing that if two products are identical in every way, but one is less damaging to the environment, most customers would select the green one. Second, multiple studies have concluded that companies must focus on the perceptions of customers about green issues, rather than their identifiable characteristics, when adopting a sustainability marketing strategy (SMS). Companies adopting sustainability measures should focus on the elements of marketing strategy (segmentation, targeting and positioning) based on the green perceptions of their customers.

While a few marketing studies have explored the drivers of marketing strategy elements, they focused mainly on the factors that encourage companies to enter adopt SMS (Leonidou *et al.*, 2013; Zeriti *et al.*, 2014; Leonidou *et al.*, 2015). In a broader view, marketing strategy involves using the marketing programs as a basis for a business to segment the market, target customers and develop a positioning strategy. Unfortunately, there is no shortcut to understanding customers and knowing how to serve them better. To tackle this issue, Belz and Peattie (2012) suggested that by screening sustainability actors and issues, companies can better understand sustainability situations. These companies are then able to identify when certain sustainability problems interest the public and how it will affect the behavior of their customers. To the best of our knowledge, understanding the forces that help companies adopt and plan SMS (in line with customer perceptions) is limited. Hence, we strive to provide answers to the following research questions to help fill these voids in the literature:

- RQ1. How and under what conditions can companies fulfill customer expectations in adopting SMS?
- RQ2. What are the effects of implementing SMS on financial performance and the market?

By providing answers to these questions, we aim to contribute to the marketing strategy literature in the several ways. With the recent rise of SMS research, several studies have reviewed the role of customers in marketing strategy with a focus on customer

environmental sensitivity and concern (Rivera-Camino, 2007). According to this study, customers may have a strong influence on adopting SMS, but not all customers have the same influence (Henriques and Sadorsky, 1996). Consequently, the heterogeneity within customer groups has not been well studied in previous research (Wu and Ma, 2016). A few studies, especially that by Banerjee *et al.* (2003), studied whether environmental impact and competitive intensity in one industry where moderated by the influence of the environmental concerns of customers. They explained that many customers across markets are sensitive to sustainability issues and their sensitivity is altered by the impact of different industry activities on the natural environment. Thus, our study first tries to extend previous environmental strategy research and by evaluating the environmental reputation of industries as a factor that influence companies SMS adoption.

Another factor that influences the input of customers is competitive intensity and the activities of rivals over sustainability issues (Leonidou *et al.*, 2013). Despite the environmental reputation of certain industries, the sustainability practices of competitors can change customer expectations, mandating companies to adopt further resources and capabilities to address these concerns (Banerjee *et al.*, 2003). Companies in high competitive intensity industries are more likely to face many different customer groups (Leonidou *et al.*, 2010). This study is novel in assessing the industry drivers that can lead to better outcomes, related to the behavior of different customers in segmentation, targeting and positioning of company strategy. According to performance literature that indicate both market targeting and marketing program elements directly affect performance (Menguc *et al.*, 2010), we also posit that correctly recognizing customers and markets that contribute to a better implementation of marketing strategy elements, particularly in the sustainability context, lead to better performance. Hence, this study provides insightful views for companies to reach appropriate outcomes by further developing existing performance research results.

In this article, we will first review the literature covering SMS. We will tend present a conceptual model and a set of research hypotheses. These hypotheses will be examined through the data analysis. Finally, we will discuss the conclusion and present recommendations for further work.

## 2. Literature review

### 2.1 Contingency theory

Contingency theories have been a significant part of the management literature for the past 20 years. These theories were developed and accepted because they responded to criticisms that the classical theories advocated for “one best way” of organizing and managing. Contingency theories proposed that the appropriate organizational structure and management style were dependent upon a set of “contingency” factors, usually the uncertainty and instability of the environment. Contingency theories were developed from the sociological functionalist theories of organization structure, such as the structural approaches to organizational studies by Chenhall (2003).

Contingency theory studies postulate that organizational performance is the consequence of a relation between two or more factors. As the integration of corporate sustainability into strategic management is dependent upon internal and external drivers (Engert *et al.*, 2016), not all companies can effectively adopt SMS through a single best method. Factors that drive sustainability can change the process and organizational structure of marketing strategies. Effective marketing strategies should be developed in accordance with internal and external factors (Maletić *et al.*, 2018; Zeriti *et al.*, 2014). Previous studies have merely used variables such as industry type and company size as moderating factors to explain the relationship

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between sustainability-related practices and performance. We therefore studied the relationship between an industry's driving factors (as an external factor, e.g. environmental reputation and competition intensity) and a company's capabilities marketing strategy (e.g. targeting and segmentation based on the background research and contingency theory). The environmental reputation and competitive intensity of an industry are two contingency factors that will have an impact on the environmental concerns of customers. These two factors can lead to the development of an appropriate marketing strategy (with regard to segmentation and targeting) and ultimately affect the performance of marketing strategies.

### 2.2 Sustainability marketing strategy

Marketing is about satisfying and building profitable relationships with customers. A marketing strategy, however, should reflect its corporate strategy and objectives (i.e. vision, mission and values) (Varadarajan, 2010). The market in which a company operates influences their marketing strategy, but a company also depends on the relationships that exist with their customers (Ansary, 2006). According to Slater and Olson (2001), marketing strategy is aimed at segmenting, targeting and positioning depends on markets and customers to develop an appropriate marketing mix, which allows companies to reach their goals.

The scope of marketing strategy research is divided into domestic and international sections. Domestic research has featured corporate environmental strategies (Menguc *et al.*, 2010), corporate social responsibility strategies (Torugsa *et al.*, 2012), environmental culture and orientation (Menguc and Ozanne, 2005) and green marketing strategies (Fraj *et al.*, 2009). Domestic sustainability research has established valuable new concepts such as "enviropreneurial" marketing (Menon and Menon, 1997) and market-oriented sustainability (Crittenden *et al.*, 2011). Such research has examined the macro and micro environmental differences between home and export markets, along with their effects on SMS adoption (Katsikeas *et al.*, 2006; Crittenden *et al.*, 2011; Zeriti *et al.*, 2014; Leonidou *et al.*, 2015).

### 2.3 Antecedents of the sustainability marketing strategy

Sustainability literature has focused more on external and internal factors that obliged companies to adopt sustainability in their strategies. The external factors that were found to encourage such eco-friendly behavior include customer environmental sensitivity, competitive pressures, regulatory intensity (Langerak *et al.*, 1998), market turbulence (Baker and Sinkula, 2005) and customer stakeholders (Kirchoff *et al.*, 2011). Internal precursors of the environmental marketing behavior emphasized environmental consciousness of markets, business sensitivity toward environmentalism (Langerak *et al.*, 1998), integration of enterprise functions and top management support (Pujari *et al.*, 2004). An effective method mentioned in most studies is the importance of market and customer segmentation, as well as the role of competition in SMS. Our study focuses on the importance of adopting a marketing strategy (segmentation, targeting and positioning) about customers' perceptions. Extending this logic, we posit that holistic SMS decisions include market-targeting aspects, given that the process of identifying and selecting customers can be critical to successfully developing groups of customers prone to sustainability-related marketing appeals (Menon *et al.*, 1999). Recently, Garay *et al.* (2017) noted that sustainability approaches might be more successful in achieving behavior change when they are adapted to the absorptive capacity and learning styles of their target audiences. The few studies have also captured targeting elements, such as market and customer segmentation (Diamantopoulos *et al.*, 2014), as well as the role of competitive intensity relationship to performance (Leonidou *et al.*, 2002).

In segmentation, understanding the different categories of customers and their behavior helps identify their orientation toward sustainability and the style of their sustainable

actions. When people are informed about social, ethical and environmental issues, they consume products in a manner that compliments those views. Moreover, every customer has a unique orientation about each product. However, in business, positioning is the orientation a customer has about a product in his/her mind and when compared to alternatives from competitors on the market. Sustainable business commonly finds unique positions such as sustainable, green, ecological or ethical products that in essence give an image to their customers about who they are. These strategies are used by sustainable marketers to gain a competitive advantage in the mind of customers in different situations, depending on the industry or the kind of sustainable products being offered.

The approach of different customers toward sustainability issues has led to the failure of sustainability projects or the imposition of higher costs on companies, which eventually lead to poor performance (Menon *et al.*, 1999). Prothero (1990) stated that the environmental reputation of an industry plays a vital role in creating and changing the environmental preferences of customers. Thus, our model generalizes industries' environmental reputation by segmenting customers to adopt an appropriate SMS, which should lead to superior performance. The environmental impact of industry educates the public and creates awareness about sustainable consumption, effectively promoting the interest of the public in environmental issues and social justice. This is done by having a dual focus, whereby a company communicates about itself to involved customers while presenting a sustainable solution as an alternative to conventional ones (Belz, 2006). In this situation, companies can gain the trust and credibility of customers (Ottman, 2001).

Moreover, with the development and expansion of sustainability around the world through globalization, significant competition among companies has emerged to enter the sustainability concept. As a result, companies are motivated to address sustainability issues or increase their degree of involvement to increase market share (Jaworski and Kohli, 1993; Leonidou *et al.*, 2017). Menon and Menon (1997) stated that high competition intensity leads to the tendency of companies to enter the sustainability debate. In explaining their findings, Menon and Menon (1997) expressed that the intensity of competition is signified by a larger number of suppliers and therefore a larger number of options for customers. For companies to operate in these highly competitive markets, innovative strategies such as SMS are necessary for success (Tsai and Liao, 2017). Furthermore, Leonidou *et al.* (2010) have shown that in this situation, customers increase their monitoring and have more concerns. The sustainability activities of companies must respond to these concerns so that their sustainability activities are more likely to be accepted by the growing number of customers. For example, customers who were more sensitive to environmental issues were more willing to accept companies' sustainability activities (e.g. high prices for eco-friendly products) and as a result, contributed to the growth of sales and profits of the companies (Leonidou *et al.*, 2010).

#### *2.4 Consequences of the sustainability marketing strategy*

Performance of SMS adoption has been investigated (Hultman *et al.*, 2009; Katsikeas *et al.*, 2006; Zeriti *et al.*, 2014) from two aspects: financial and market. The results have shown that superior market and financial performance have always been dependent on the compatibility between SMS and competitive advantage. Specifically, companies oriented toward sustainability should identify and develop specific capabilities to implement practices that are a source of competitive advantage in a market increasingly conscious and attentive to sustainability issues (Annunziata *et al.*, 2018).

Prior studies have also focused on the link between competitive intensity and SMS performance (Menon and Menon, 1997; Katsikeas *et al.*, 2006; Zeriti *et al.*, 2014; Leonidou *et al.*, 2015). Obtained results indicate there is no consensus in this regard. On the one hand,

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the competitive intensity is a motivating factor for companies to enter sustainability issues (Jaworski and Kohli, 1993), and has a positive outcome for the companies' sustainability activities (Leonidou, 2017). Companies have to try to overtake their competitors and address customers' environmental demands by investing in sustainability issues. On the other hand, the competitive intensity has imposed more costs on companies since they need to increase sustainability activities (Menon *et al.*, 1999). This issue serves as a barrier to companies, even though studies indicate a positive correlation between the competitive intensity and SMS (Leonidou *et al.*, 2015; Grewatsch and Kleindienst, 2017). Both approaches identified number, features and activities of competitors, as well as the level of customers' environmental awareness, as factors affecting the SMS outcome.

### 3. Hypotheses

SMS is discussed within the environmental consequences framework. This process includes segmentation, targeting and positioning of customers and competitors with respect to the well-being of the natural environment and society, to provide outcomes that satisfy organizational and individual objectives (Leonidou *et al.*, 2013). Prior research shows that SMS involves engaging a company in sustainability segmentation procedures (e.g. using customer attitudes toward sustainability as a criterion for market analysis), sustainability targeting practices (e.g. launching products in markets that cater to the needs of environmentally and societally conscious customers), and sustainability positioning policies (e.g. positioning the company as sustainable in the market) (Zeriti *et al.*, 2014). From the literature review and the importance of customer's environmental approach in SMS elements, we hypothesize that two sets of contingency factors influence the degree of customer's environmental concern: industries' environmental reputation and industries' competitive intensity.

#### *3.1 Industries' environmental reputation and sustainability marketing strategy*

Environmental reputation of industries refers to the effect they have on the natural environment. Subsequently, the public concern of customers is different due to the environmental impact of such industries (Prothero, 1990; Banerjee *et al.*, 2003). Actually, industry's reputations for environmental responsibility are based on information available to customers. According to this information, customers are demanding more environmentally friendly corporate behaviors in industries with high environmental impact, rather than others. In this respect, groups have been formed to act on environmental issues, which have had a significant effect on companies' sustainability activities (Kotler and Armstrong, 2001). Companies are required to implement environmental activities according to the concern and needs of customers to survive and be profitable (Kotler and Armstrong, 2001).

The sustainability literature has suggested that low adaptation approaches fail when companies neglect to identify clearly defined and delineated customer segments (Henriques and Sadorsky, 1996; Wu and Ma, 2016). Sustainable market segmentation is considered one way companies can evaluate the intensity of environmental concern individuals have (Ansary, 2006). By identifying sustainable market segments, factors such as the environmental awareness of customers, their ideas and feelings, and their living practices must be taken into consideration (Wu and Ma, 2016; Weinstein, 1997). In essence, customers are likely to focus on environmental impact of industries as a basis for their conclusions (Christmann, 2004). Differences in customer tastes and preferences among industries necessitate the deployment of marketing strategy segmentation and targeting. Extending this logic, as the environmental approach of the customer is highly related to the level of natural resource consumption of specific industries and their potential the irreparable damage to the environment, companies

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can segment and target customers by considering the environmental reputation of their industry. Thus, we put forward the following hypothesis:

- H1.* The environmental reputation of an industry has a positive relation to the adoption of SMS by export companies.

### *3.2 Industries' competitive intensity and sustainability marketing strategy*

Competitive intensity is another factor that plays an important role in SMS adoption. This is the degree to which a company faces competition and the intensity of the sustainability-related moves they employ (within a specific industry) (Leonidou *et al.*, 2013; Jaworski and Kohli, 1993). Under conditions of high competitive intensity, customers have the opportunity to choose products from a large number of companies, some of which can be differentiated by environmental marketing aspects (Menon and Menon, 1997). Customers can also easily switch from one company to another with a more environmental-friendly perspective (Tsai *et al.*, 2008). In this regard, studies show that intense competitive pressures will increase the amount of sustainability marketing, while low competition will create a state of complacency toward environmental matters (Leonidou *et al.*, 2013; Menon *et al.*, 1999).

Other studies, however, have argued that competition intensity acts as a barrier to the sustainability activities of companies (Christmann, 2004). One issue occurs when sustainability activities are imitated by competitors, so that the sustainability efforts of the original company do not make a significant difference (Christmann, 2004). On the other hand, competitive intensity imposes more costs on companies due to more competitive activities (Menon *et al.*, 1999). Therefore, companies should allocate more resources and capabilities in their sustainability strategies to address the needs and wants of customers.

Unlike the results of previous research, which have focused on the role of competitive intensity on companies entering the sustainability field, we posit a new theory related to the role of competitive intensity when adopting SMS. Companies face distinct groups of customers that are sensitive and more aware of environmental problems. These conditions provide an opportunity for companies to increase their market share by segmenting and targeting them. Therefore, we put forward the following hypothesis:

- H2.* Industries' competitive intensity has a positive relation to the adoption of SMS by export companies.

### *3.3 Sustainability marketing strategy performance*

Performance is a multi-functional concept and includes effectiveness and adaptability dimensions (Walker and Ruekert, 1987). Company performance refers to achieving the goals in competitive and financial fields. Two important measurements of performance are through market and financial thresholds. Market performance refers to the results of investment, number of customers, return on sales, and market share in target markets. Financial performance refers to the financial results of costs, and profits in the investment market reflecting return on capital (Morgan *et al.*, 2004). SMS can minimize waste, eliminate sustainability-related risks and promote cost savings; help strengthen relationships with customers and improve company's image and reputation among them (Fraj *et al.*, 2009); and enable the company to target new market segments,



customer satisfaction, encourage repeat purchase of goods and attract new buyers (Banerjee *et al.*, 2003), which can contribute to a higher market share (Baker and Sinkula, 2005).

The results of the study have shown that enhancing the benefit side of customer value and improving companies' image and reputation in the markets are the benefits of adopting SMS, which increases market share (Miles and Covin, 2000). Financial results are also obtained through higher sales and profits. Miles and Covin (2000) stated that superior market and financial performance are obtained under certain circumstances, when effective customer segmenting and targeting complies with the needs of customer and wants in the market.

Industries' environmental reputation provides valuable information about customers, which is beneficial when adopting an effective SMS. Marketing strategy literature has suggested that managing and implementing marketing strategies compatible with customers' needs and preferences has a substantial impact on the survival and growth outcomes of companies (Ansary, 2006). Hence, we posit that the industries' environmental reputation as a decisive factor to adopt SMS might provide higher sales, market share and profits from better exploitation of different customer requirements. Industries' competitive intensity also enhances the customer enthusiasm toward the environmental activities of companies (Menon and Menon, 1997). The number of customers who care about environmental issues will be increased, and they are more willing to pay for the eco-friendly products and accordingly companies have better opportunities to segment customers (Leonidou *et al.*, 2013). In summary, depending on the industry, companies can recognize customers and markets, which contribute to better planning and implementing of a marketing strategy's elements, and obtaining better performance. Thus:

- H3. Adopting SMS based on customer and market environmental concern improves the company's financial performance.
- H4. Adopting SMS based on customer and market environmental concern improves the company's market performance.

#### 4. Conceptual framework

Figure 1 presents the conceptual framework of this study, which includes impressive factors (industries' environmental reputation and competitive intensity), SMS (segmentation, targeting and positioning) and performance (financial and market performance). We presented four hypotheses related to the proposed structure. This model identifies the

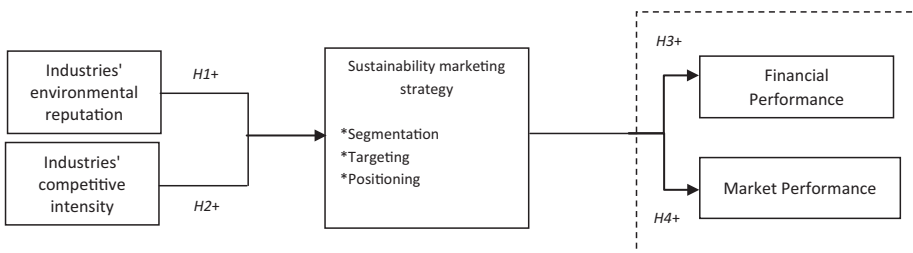


Figure 1. Conceptual model

relationships between industries' environmental reputation and SMS (*H1*), the relationships between industries' competitive intensity and SMS (*H2*), the positive relationship between SMS adoption and financial performance (*H3*) and the positive relationship between SMS adoption and market performance (*H4*).

### 5. Background interviews and measurement approach

We arranged seven interviews of 60 to 90 min with export managers of each selected industries who were familiar with sustainability marketing practices of their companies and industries. The aim of the interviews was to investigate the studied factors and to evaluate the concepts and activities of the exporters. These interviews complemented our literature review and helped us develop a comprehensive set of measures covering critical dimensions of SMS. The interviews indicated that companies do not implement similar marketing strategies across markets and that inter-market variation was common, even among companies that tended to adopt more SMS. They also confirmed that related export managers were better positioned to provide information on SMS practices and performance and have sufficient knowledge of the company's market conditions and strategies. The interviews also helped us reinforce the assumptions and relationships discussed in our conceptual model, and to make them meaningful as well as the measures used by respondents were understandable. Hence, we used multi-item measurements for the entire study structure, which is visible in [Appendix](#).

In this empirical study, we extracted scales and prepared modified scales based on the literature review and field interviews to prove research hypotheses and evaluate questions from relevant literature (SMS indexes are listed in [Table I](#)). We modified the three-item scale by [Banerjee et al. \(2003\)](#) research to evaluate the role of industry's environmental reputation on customers' environmental concern. The impact of industry's activities on the environment, the opinion of customers about the industry, and the effect of industry's activities on the level of customers' environmental demands are explored. The three-item scale was also used to evaluate the role of industry's competitive intensity on customers' environmental concern ([Leonidou et al., 2013](#); [Banerjee et al., 2003](#)). We examined the number of competitors and their sustainability activities as a consequence of the customers' environmental needs in the industry. To create an appropriate scale for evaluating SMS based on customer and market concern, we used strategy elements to examine the impact of industry action. We examined the

**Table I.**  
Sustainability  
marketing strategy  
indexes

| Variables                            | Description   |
|--------------------------------------|---|
| Sustainability marketing strategy    | Sustainability marketing strategy involves engaging a company in sustainability segmentation procedures, sustainability targeting practices and sustainability positioning policies |
| Industries' environmental reputation | Industries' environmental reputation refer to the effect they have on the natural environment   |
| Industries' competitive intensity    | Industries' competitive intensity is the degree to which a company faces competition and the intensity of the sustainability-related moves they use within a specific industry      |
| Market performance                   | Market performance refers to the results of investment, number of customers, return on sales and market share in target markets   |
| Financial performance                | Financial performance refers to the financial results of costs, and profits in the investment market reflecting return on capital   |

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target market, market positioning and market segmentation. Finally, we used a three-item scale from *Zeriti et al. (2014)*, which was achieved selectively and according to the connection rate with the research subject.

To review each financial and market performance, a five-item scale was used. In this regard, we examined the company's profit, sales, investment, and investment return for financial performance. To measure market performance, we evaluated the number of customers, customer retention, customer satisfaction and sales growth that has come from new customers. These scales came from *Leonidou et al. (2015)*.

The questionnaire is made up of a seven-point Likert scale (1 = very low, 7 = very high). The questionnaire measures the involvement of companies in export as well as the level of individuals' awareness about companies' participation in investment activities and their knowledge about companies' sustainability activities. To handle this, we ask about two topics to determine the level of their involvement and awareness: 1. a company's participation in investment activities of the market; and 2. their knowledge about the company's sustainability activities. We ignored the questionnaires with a score of less than four per question. After removing those questionnaires, the specific score was obtained for the quality of conscious individuals in our study that were equal to  $n = 178$ . An acceptable rate of 86 per cent reflects the validity of key individuals' information.

## 6. Method

Data were collected by distributing a survey to targeted people by human resource (HR) managers in each company. To test these hypotheses, a target population of Iranian export companies within seven manufacturing industries where SMS was applied were consulted. We chose these industries because they were experienced in SMS and because conditions were present that allowed the level of the industries' environmental reputation and competitive intensity to be investigated. The included industries include food products, beverages, textiles, chemicals, petrochemicals, rubber and plastic products, and household equipment. Various industries and multi-industry research projects increased the diversity of responses, so that we could examine different views for assessing the impact of an industry's role in the SMS. With large and sufficient sample sizes, we are able to analyze and increase our empirical findings. To make our goals comparable, we disregarded exporters in service industries, state exporters and exporters who had no active operations in exports investment within the past three years.

The questionnaire was introduced with a phone call to inform the participant about the study and its objectives. In implementing this process, sampling was done based on a series of steps. First, all 64 export companies were contacted through phone calls. The phone calls revealed that 64 companies were qualified and the key person to help implement the questionnaire in each company was their respective HR manager. It was stated that the names and identities of the participants and their organizations would remain confidential and would never be revealed. It was also explained that participation was voluntary, and participants could stop participating in the study at any time. Then, the survey package was sent by mail to each company's HR manager, and who distributed questionnaires among the participants (export managers, marketing managers and sales directors) who have participated in export SMS. Then, three weeks after mailing the first package, they received a second phone call and package containing a reminder and a thanks letter was sent to those who had not responded through HR managers. Two weeks later, a final letter was sent to those who had not responded. After receiving the gathered questionnaires by the key person of

each companies, we encoded and filed them according to the date of their receipt. Finally, 234 people from 64 companies were chosen as participants. Among the 234 returned questionnaires, the number of usable responses was 178, and 56 questionnaires were dropped because of considerable missing data. Therefore, the effective response rate was approximately 76 per cent. In addition, we tested for nonresponse bias. The use of [Armstrong and Overton's \(1977\)](#) nonresponse test, in which answers of early respondents are compared with those who responded late, revealed no statistically significant difference between the two groups regarding the study variables.

In the final sample, the accountability of the export sales managers was 34 per cent, executives 12 per cent, marketing managers 16 per cent, financial controller's/support manager's/quality managers 9 per cent and directors of sales was 29 per cent. In addition, the average year of the individuals' activities in export companies was 14 years, while 64 per cent worked in their respective companies for more than five years ([Table II](#)). The range of 64 sample companies in seven manufacturing industries is largely comparable to the relative size of these industries in the whole sampling template. In these industries, 71 per cent of the responding exporters focused on the industrial products category, and 29 per cent of the exporters focused on customer end products. Most of the market of exports investment countries are in Europe (26 per cent), Asia (48 per cent), America (8 per cent) and Africa (17 per cent). The mean duration of exports investment was 14.7 years ([Table III](#)). The samples were mainly from small and medium-sized companies, with an average number of full-time staff of 50 people.

### 7. Results

In this research, a structural equation model within EQS software based on elliptical reweighted least-squares (ERLS) was used for assessing the validity and relevance of

**Table II.**  
The response rate of participants

| Respondents  | Response rates % |
|--|------------------|
| Export Sales Managers                                  | 34               |
| Sales Managers   | 29               |
| Marketing Managers                                     | 16               |
| Executives   | 12               |
| Financial Controller/Support Managers/Quality Managers | 9                |

**Note:** The average year of activities in export companies was 14 years, 64% worked for more than 5 years

**Table III.**  
Participation rate of different areas

| Continents | Export investment countries rates % |
|------------|-------------------------------------|
| Asia       | 48                                  |
| Europe     | 26                                  |
| Africa     | 17                                  |
| America    | 8                                   |

**Note:** The average year of exports investment was 14.7 years

the measures in the conceptual model (Stump and Heide, 1996). ERLS is an evaluation method that assumes multivariate elliptical distribution. Multivariate normal distribution was also evaluated with maximum likelihood (ML). The ML estimation procedure assumes multivariate normal distribution, while the ERLS technique adopts a multivariate elliptical distribution (Mohr and Sohi, 1996). The main reason for applying this method was to assess the structural models and to validate measurements to recognize normal data and abnormal data. In general, ML provides more reliable results than ERLS across normal and non-normal data, and for this reason, it was preferred (Sharma *et al.*, 1989).

Due to a large number of structural and estimated parameters related to the sample size, a computational model was applied (Hair *et al.*, 2011) (Table IV). In the confirmatory factor analysis, we restricted each item to load a priori specified factor, while allowing the underlying factors to correlate. This revealed that all factors loaded highly on their assigned constructs (Anderson and Gerbing, 1988). Also, the goodness-of-fit estimation of the proposed model was acceptable.

Fit statistics:  $\chi^2 = 127.87$ ,  $p = 0.00$ ,  $\chi^2/\text{df} = 1.64$ , NFI = 0.97, NNFI = 0.99, CFI = 0.99, RMSEA = 0.07.

All factors have composite reliability values and Cronbach's alphas constants of larger than 0.70. This indicates the reliability of the theoretical structure as an element in the structural model (Bagozzi and Yi, 1988). In addition, the convergence validation is acceptable. The T-value is larger than 4.0 for each parameter, the standard loading value is approximately 0.5, and all the estimated standard errors of the coefficients are very low (Hair *et al.*, 2011).

The validation or the breakdown value, which is a confidence interval of convergence evaluation for each pair of studied structures, was observable and never 1.0. The difference between finite and infinite models of existing  $\Delta\chi^2$  for each joint structure was considerable ( $\Delta\chi^2_{(1)} \bullet 3.84$ ;  $\rho \bullet 0.05$ ) (Anderson and Gerbing, 1988). Fornell and Larcker (1981) showed that focusing attention to assess the discriminant value; the AVE was compared by the shared variance for each structure. The AVE value is between 0.63 and 0.81 and a composite reliability (CR) of at least 0.60 is considered desirable (Bagozzi and Yi, 1988; Fornell and Larcker, 1981) (Table IV). The maximum-shared variance is 0.64. This value is between the financial performance and environmental reputation and also between market performance and environmental reputation. Table V shows a criterion for discriminant values between study structures.

In this study, the possibility of common method bias was evaluated from two perspectives. First, a single factor Harman test (Podsakoff and Organ, 1986) was applied to each item of the questionnaire, which included analysis of the main components with varimax rotation. Twelve factors with a specific value greater than 1.0 were produced by non-rotational factors, revealing 68 per cent of the variance. Second, a factor authentication method was applied in loading a single-factor test. The model fit indices revealed poor values, well below the commonly acceptable cutoff points ( $\chi^2 = 276.38$ ,  $p = 0.00$ ,  $\chi^2/\text{df} = 1.98$ , NFI = 0.98, NNFI = 0.99, CFI = 0.99, RMSEA = 0.08). The results of the two examinations showed common method bias, but this is not a concern in this study.

We also estimated a computational method to test the assumed connections between the structures. Due to sample size limitations, we applied a cost-effective approach with composite scores as an indicator of any hidden variables (Bagozzi and Heatherton, 1994). A suitable structural model was then defined. The path coefficients as well as the T-values corresponding to the structural model are shown in Table VI.

**Table IV.**  
Measurement models  
and summary  
statistics

| Constructs                           | Scale items | Standardized loadings | t-value | $\alpha$ | p    | AVE  | Mean score | SD   | Mean score of items | SD of items | Composite reliability (CR) |
|--------------------------------------|-------------|-----------------------|---------|----------|------|------|------------|------|---------------------|-------------|----------------------------|
| Industries' environmental reputation | IEN1        | 0.88                  | *       | 0.92     | 0.89 | 0.81 | 5.11       | 1.18 | 5.21                | 1.12        | 0.82                       |
|                                      | IEN2        | 0.62                  | 5.02    |          |      |      |            |      | 4.16                | 1.64        |                            |
|                                      | IEN3        | 0.68                  | 5.27    |          |      |      |            |      | 4.25                | 1.57        |                            |
| Industries' competition intensity    | ICI1        | 0.76                  | 5.39    |          |      |      |            |      | 4.61                | 1.42        |                            |
|                                      | ICI2        | 0.91                  | *       | 0.91     | 0.91 | 0.78 | 5.06       | 1.23 | 5.17                | 1.29        | 0.93                       |
|                                      | ICI3        | 0.87                  | 6.11    |          |      |      |            |      | 4.98                | 1.33        |                            |
| SMS                                  | SMS1        | 0.89                  | 6.27    |          |      |      |            |      | 5.02                | 1.33        |                            |
|                                      | SMS2        | 0.84                  | 5.94    |          |      |      |            |      | 4.93                | 1.36        |                            |
|                                      | SMS3        | 0.79                  | *       | 0.91     | 0.91 | 0.77 | 5.24       | 1.32 | 4.66                | 1.34        | 0.92                       |
| Financial performance                | SMS1        | 0.83                  | 7.01    |          |      |      |            |      | 5.59                | 1.22        |                            |
|                                      | SMS2        | 0.87                  | 7.26    |          |      |      |            |      | 5.62                | 1.23        |                            |
|                                      | SMS3        | 0.96                  | 8.12    |          |      |      |            |      | 5.81                | 1.12        |                            |
|                                      | EFP1        | 0.67                  | *       | 0.91     | 0.87 | 0.63 | 4.71       | 1.12 | 4.59                | 1.21        | 0.94                       |
|                                      | EFP2        | 0.62                  | 5.79    |          |      |      |            |      | 4.64                | 1.25        |                            |
| Market performance                   | EFP2        | 0.84                  | 7.03    |          |      |      |            |      | 4.63                | 1.28        |                            |
|                                      | EFP3        | 0.98                  | 7.68    |          |      |      |            |      | 4.38                | 1.19        |                            |
|                                      | EFP4        | 0.98                  | 7.71    |          |      |      |            |      | 4.41                | 1.24        |                            |
|                                      | EFP5        | 0.96                  | 7.48    |          |      |      |            |      | 4.38                | 1.18        |                            |
|                                      | EMP1        | 0.71                  | *       | 0.91     | 0.89 | 0.68 | 5.76       | 1.41 | 5.93                | 1.02        | 0.91                       |
| EMP2                                 | 0.84        | 7.18                  |         |          |      |      |            | 4.87 | 1.31                |             |                            |
| EMP3                                 | 0.63        | 6.12                  |         |          |      |      |            | 5.32 | 1.26                |             |                            |
| EMP4                                 | 0.89        | 7.26                  |         |          |      |      |            | 5.54 | 1.06                |             |                            |
| EMP5                                 | 0.92        | 7.46                  |         |          |      |      |            | 5.37 | 1.29                |             |                            |
|                                      | EMP5        | 0.82                  | 6.84    |          |      |      |            |      | 5.46                | 1.12        |                            |

**Notes:** Fit statistics:  $\chi^2 = 127.87, p = 0.00, \chi^2/df = 1.64, NFI = 0.97, NNFI = 0.99, CFI = 0.99, RMSEA = 0.07$

In relation to industries' environmental reputation (*H1*), a positive relationship between industries' environmental reputation and SMS adoption based on customers' environmental concern was obtained ( $b = 0.36, t = 3.74, p = 0.01$ ). Previous studies emphasized that customer concern has an important role in planning the SMS (Leonidou *et al.*, 2013; Wu and Ma, 2016) and Prothero (1990) stated that customers' environmental sensitivity is changed by industries' actions. Therefore, companies can achieve an effective SMS by segmenting and targeting customers related to industries' environmental reputation. A positive relationship industries' competitive intensity with SMS adoption based on customers' environmental concern is not significant (*H2*), ( $b = 0.37, t = 1.74, p = 0.07$ ). Although previous studies showed that when the competition is fierce, companies are more successful than their competitors having adopted a sustainability business practices (Menon and Menon, 1997), our finding shows that this relation does not exist directly. An acceptable reason is that this serves as a barrier to companies by imposing more costs for developing more activities. In addition, sustainability activities imitating could be done by competitors in the competitive markets (Menon *et al.*, 1999).

Consistent with previous studies (Baker and Sinkula, 2005; Leonidou *et al.*, 2013), in *H3*, we found an improvement of financial performance due to the selection and adoption of SMS based on customer and market environmental concern ( $b = 0.31, t = 3.27, p = 0.04$ ). Moreover, Menon *et al.* (1999) and Leonidou *et al.* (2015) showed that an appropriate SMS could lead to the creation of good economic results for companies.

We found that the selection and adoption of SMS based on customer and market environmental concern (*H4*) leads to the improvement and development of companies' market performance ( $b = 0.32, t = 3.36, p = 0.00$ ). Previous studies also showed the positive impact of the selection and adoption of SMS on market performance (Baker and Sinkula, 2005; Leonidou *et al.*, 2013). Due to the global public concerns, companies create publicity and increase their market share by applying environmental issues to their marketing strategies, thereby surpassing their competitors and improving their market performance.

| Constructs                             | AVE  | 1    | 2    | 3    | 4    | 5 |
|--|------|------|------|------|------|---|
| 1 Industries' environmental reputation | 0.81 | 1    |      |      |      |   |
| 2 Industries' competition intensity    | 0.78 | 0.57 | 1    |      |      |   |
| 3 SMS                                  | 0.77 | 0.37 | 0.36 | 1    |      |   |
| 4 Financial performance                | 0.63 | 0.64 | 0.48 | 0.33 | 1    |   |
| 5 Market performance                   | 0.68 | 0.64 | 0.48 | 0.33 | 0.22 | 1 |

**Notes:** Correlations greater than 0.18 are significant at the 0.01 level; Correlations greater than 0.15 are significant at the 0.05 level

**Table V.**  
Correlation matrix

| Hypothesis | Hypothesized path                                     | Standardized path coefficient (B) | t-value | p-value |
|------------|---|-----------------------------------|---------|---------|
| <i>H1</i>  | Industries' environmental reputation → SMS adaptation | 0.36                              | 3.74    | 0.01    |
| <i>H2</i>  | Industries' competitive intensity → SMS adaptation    | 0.37                              | 1.74    | 0.07    |
| <i>H3</i>  | Adopting SMS → Financial performance                  | 0.31                              | 3.27    | 0.04    |
| <i>H4</i>  | Adopting SMS → Market performance                     | 0.32                              | 3.36    | 0.00    |

**Notes:** Fit statistics:  $\chi^2 = 127.87, p = 0.00, \chi^2/df = 1.64, NFI = 0.97, NNFI = 0.99, CFI = 0.99, RMSEA = 0.07$

**Table VI.**  
Structural model results

## 8. Discussion and conclusion

This study highlights the instrumental role of industry (environmental reputation and competitive intensity) forces in sensitizing companies to the deployment of a proper SMS. Exploring the factors that encourage companies to enter the sustainability field has been widely discussed in the literature. Simply put, a growing number of different external and internal factors have given companies many different ways to adopt proper SMS. Recently, the contingency approach and fit between the sustainability activities and different factors have been highlighted in the field of sustainability (Pryshlakivsky and Searcy, 2017). This raises the question of whether companies should use different sustainability practices depending on particular situational factor to achieve superior results. To answer this question previous studies explored drivers of marketing strategy's elements by focusing on the factors that encourage companies to adopt SMS (Leonidou *et al.*, 2013; Zeriti *et al.*, 2014; Leonidou *et al.*, 2015). However, understanding the forces that help companies plan and calibrate the marketing strategy's elements in line with customers' characteristics, needs and demands are limited.

The environmental effects of industry activity and the environmental act of companies are considered important factors that change the needs and wants of customers. So that industry's environmental reputation is a key issue that need to be taken into consideration when designing SMS because they can seriously affect companies' operations in related industry. This industry feature boosts the efficiency of classifying customers. We found that catering to the needs of customers about the natural environment and addressing people's environmental complaints all necessitate the adoption of SMS. In line with previous studies, we surprisingly found competitive intensity like responding to competitors' movements, and finding points of difference from competitors has not significant effect on marketing strategy adaptation (Hultman *et al.*, 2009; Katsikeas *et al.*, 2006). It would be interesting to investigate further this unexpected finding and consider competitive intensity as a moderator factor.

Although research has often cited that the effects of public concern on adopting SMS, our study reveals that industries forces such as environmental reputation change the customers' concern and preferences. Considering industries' environmental reputation leads to better segmenting, targeting and positioning to adopt SMS, and consequently companies can improve their market and financial performance. Assessing the industries drivers to recognize different customers' behavior in segmentation, targeting and positioning of companies' strategy leads to better outcomes.

This article has also shown that the market and financial performance of companies lead to better outcomes when they have been arriving at sustainability issues by Prothero (1990) customers' environmental concern. The positive effects to the market and financial performance by adopting these strategies are encouraging for companies that intend to be successful in the markets. Such an alternative strategy is a viable option to boost business in a very hostile and diverse environment. However, according to Leonidou *et al.* (2015), who found a negative effect on performance, there will be the opposite effect if SMS is not aligned with customers' needs and wants. This not only reduces the market and financial performance, but companies' sustainability activities will fail.

The evidence reported here reinforces the contingency theory that SMS adaptation is positively linked to performance. This study provides a contribution to the literature on corporate sustainability performance by confirming that industries' drivers such as environmental reputation, can shape the link between marketing strategy elements and performance. Even though prior literature has discussed the link between sustainability practices and economic performance (Schrettle *et al.*, 2014), this study further explores the



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role of contingency factors in the relationship between sustainability practices and wider organizational performance dimensions.

### **9. Managerial implications**

By considering the result of this study, managers should realize that the appropriateness of a particular sustainability export marketing strategy depends on significant knowledge of the customers. Also, we discovered industries' drivers that managers should take into account when they are trying to plan their SMS. Export companies need to be able to analyze the related industries' environmental reputation for targeting the customers based on their preferences. While the level of public concern could be different among customers and also could be changed by industries' behavior, companies need to broaden their focus by calculating the fit among customer concern, industries' environmental reputation and marketing strategy.

In customer segmentation, managers can divide consumer or business market, normally consisting of existing and potential customers, into groups of individuals that are similar in specific ways, which have been influenced by the industry's environmental reputation. Additionally, selecting the proper target market is a complex and difficult decision for managers. However, gaining deep insights into the typical consumer's motivations and type of shared characteristics lead to assist with making this decision. In this case, companies and managers can identify the proper target market after segmenting customer by the available information about the industry's environmental reputation. Once the target market has been identified, the business will normally tailor the marketing mix (4Ps) with the needs and expectations of the target in mind. Finally, they can place a brand occupies in the mind of the customer and make their products different from competitors.

The results confirm the positive relationship between SMS based on customer and market environmental concern and companies' performance. We wish to emphasize to managers the need to implement sustainability practices as a way to foster both the market and financial performances of such strategies. Companies' long-term success depends on efficiency and adaptability of their strategies. Concerning the goals, we suggest that managers consider the way that customers act about environmental issues, so that they can manage such goals and perform better.

### **10. Limitations and future work**

The findings of this study confirm the results of other research in the area of sustainability and marketing strategies, but this study also suffers from limitations. This study specifically examines the impact of industry on SMS and performance. Logically, there might be other factors affecting the sustainability or other value dimensions that are not addressed in this study. This limitation can be due to the lack of sufficient studies in the field of sustainability and the developmental nature of this phenomenon. This is a complex issue and covers the cognitive aspects of the corporate decision-making process. In this study, primary evidence related to the relationship between the factors affecting sustainability and SMS was presented, but understanding the growing issue require examination of companies, which are responsible to economic and social issues. It is necessary to investigate the interaction between industries' and companies' activities and SMS in the economic and social context.

It should be noted that our samples were limited to a certain group of the population in a specific geographic location. Testing the external validity of the findings will be of particular importance when the studies are conducted in other countries with different economic, cultural, social, political and legal conditions. Another limitation of this study is

due to the studied samples. Among 2,500 participants who were considered to have attended the study, only 208 surveys were presented. Non-respondents might have a different sense of the sustainability values than the respondents. Therefore, the findings of this research cannot be generalized to other cases because different results might be achieved.

Finally, the data were analyzed using a repeated measures design, which could have its disadvantages. Subjects might get better performance in doing a specific task over time, or their performance might worsen because of fatigue and malaise. Some subjects may leave the research before the end of the sequence of interventions, and the sample group may become smaller. Data collection nature could also influence the data generalization.

Other potential effects of external factors (such as the legal context) and internal factors (such as market orientation) are to create at SMS that reinforces our model. In addition, the compatibility of the companies in moderating the relationship between the creation of a strategy and national strategies should be examined. Moreover, each of the markets should be examined as the adaptation rate of the strategies or based on their adoption idiosyncrasies (Christmann, 2004).

Studies should also investigate the moderating role of customers' and markets' characteristics in the relationship between SMS and performance. The possible role of different options of strategy that are available for each company such as the focus on the market versus the expansion of sustainability business strategies formation should also be considered. Finally, it is suggested that futures studies examine the possible role of factors related to the characteristics of the company and management and their potential effect on the structures and the relationship between our models.

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| Constructs                           | Items | Item description   |
|--------------------------------------|-------|--|
| Industries' environmental reputation | IEN1  | Our industry is famous for polluting the environment   |
|                                      | IEN2  | Our customers expect our industry to be environmentally friendly   |
|                                      | IEN3  | Our customers are increasingly demanding environmentally friendly products due to the environmental industry's activities        |
| Industries' competition intensity    | ICI1  | The number of competitors in our industry is high  |
|                                      | ICI2  | Competition in relation to sustainability issues is very high among competitors in our industry                                  |
|                                      | ICI3  | Our customers are increasingly demanding environmentally friendly products due to the high environmental competitors' activities |
| Sustainability marketing strategy    | SMS1  | Customers' environmental considerations in our market segmentation procedures  |
|                                      | SMS2  | Customers' environmental considerations in our market targeting approach   |
|                                      | SMS3  | Customers' environmental considerations in our market positioning approach   |
| Financial performance                | EFP1  | Corporate profit through sustainability marketing strategy   |
|                                      | EFP2  | Corporate sales through sustainability marketing strategy  |
|                                      | EFP3  | Corporate return on sales through sustainability marketing strategy  |
|                                      | EFP4  | Corporate return on investment through sustainability marketing strategy   |
|                                      | EFP5  | Corporate return on capital through sustainability marketing strategy  |
| Market performance                   | EMP1  | Rate of acquiring customers through sustainability marketing strategy  |
|                                      | EMP2  | Rate of maintaining customers through sustainability marketing strategy  |
|                                      | EMP3  | Rate of sales increase by customers through sustainability marketing strategy  |
|                                      | EMP4  | Customer satisfaction through sustainability marketing strategy  |
|                                      | EMP5  | Customer loyalty through sustainability marketing strategy   |

**Table AI.**  
Scales of constructs

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