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Article
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Amfiteatru Economic Journal

Provided in Cooperation with:
The Bucharest University of Economic Studies

Suggested Citation: Sitnikov, Catalina Soriana; Vasilescu, Laura; Ogarcă, Radu; Tudor, Sorin (2015) : Matrix Model for Choosing Green Marketing Sustainable Strategic Alternatives, Amfiteatru Economic Journal, ISSN 2247-9104, The Bucharest University of Economic Studies, Bucharest, Vol. 17, Iss. 40, pp. 909-926

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MATRIX MODEL FOR CHOOSING GREEN MARKETING SUSTAINABLE STRATEGIC ALTERNATIVES

Cătălina Sitnikov¹, Laura Vasilescu², Radu Ogarcă³ and Sorin Tudor⁴

¹, ², ³, ⁴University of Craiova, Romania

Please cite this article as:

Abstract
Green marketing examines the symbiotic role played by marketing in ensuring sustainable business, exploring issues concerning the environment and the way strategic decisions can influence it.
At present, the environmental issues concern more and more the competitive approach any organization can implement. Based on this approach, organizations can gain competitive advantage by managing environmental variables and by developing and implementing green marketing strategies.
Considering the importance and impact of green marketing, by using theoretical concepts and defining a set of research directions, the paper and the research conducted were focused on creating a matrix model for choosing the optimal green marketing strategy, oriented towards competitive advantage. The model is based on the correlation that can be established among the generic strategies of competitive advantage, the variables of extended marketing mix (7Ps) and the green marketing strategy matrix. There are also analyzed the implications that may be generated within a company by the adoption of a green marketing strategy and its role in promoting the environmental benefits of products.

Keywords: matrix model, green marketing strategy, competitive advantage, sustainability, extended marketing mix

JEL Classification: L10, L19, M11, M14, M31

Introduction
In a global society with an increased level of integration and interdependence, the environment is an important area for companies’ economic activities, and the effects are

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manifested not only in the economic, financial and consumption fields, but also in the ecological one.

For companies, environmental problems caused by the use of energy and natural resources, by pollution or any kind of waste, represent both development opportunities and constraints as they can, on one hand, change the competitive landscape of many industries (Shrivastava, 1995), and on the other hand, can influence consumer behavior (Roberts and Bacon, 1997).

Besides their innovation and job generation related aims (Dinu, Grosu and Saseanu, 2015), many entrepreneurial ventures are aware that they must invest in environment to stay in business, taking it into consideration as a development opportunity, too. In this context, derived from social marketing - that study the interrelationships between marketing and society (Stoian, 2003) – was created the green marketing concept (Peattie, 1992; Ottman, 1993). Similar terms are environmental marketing (Coddington, 1993), sustainable marketing (Fuller, 1999) or greener marketing (Charter and Polonsky, 1999).

Green Marketing (sustainable marketing) is the process of planning, pricing, promoting and distributing products in a way that could fulfil requirements such as customer satisfaction, achieving organizational goals and process compatibility with ecosystems (Fuller, 1999).

The concept of green marketing has evolved over time, being delimited three phases: ecological, environmental and sustainable, which appeared in the late 90s, and revealed aspects regarding the development of sustainable business (Peattie, 2001).

Green marketing uses the elements of marketing mix - product, price, promotion, and distribution - in order to provide products and services that ensure ecological advantages during the entire life cycle of these.

At present, the green marketing is more than just an option, becoming a necessity. In fact, green marketing is another way of marketing (Morar, 2013) concerning both environmental protection and consumer health - contributing to economic recovery and sustainable development.

Green marketing deals with satisfying customers and other stakeholders in a sustainable way, by integrated efforts of improving the social and environmental responsibility of organization, products, services, and communication. Therefore, the concept of green marketing has implications for organizations’ business strategy (Nadaf and Nadaf, 2014), as a part of corporate strategy (Menon and Menon, 1997).

Applying the ecology principles and implementation of green marketing in organizations is a necessary condition for ensuring a competitive advantage that refers to the ability of an organization to earn consistent profits over the competing companies through cost leadership, differentiation or focus strategy (Porter and Van der Linde, 1995).

A cost leadership strategy requires operational excellence through cost reduction, better use of funding sources and new models of goods manufacturing or supply. Differentiation strategies regard brand development, promotion, product positioning on niche markets, customer satisfaction, so differentiation strategies are identified with business marketing strategies (Polonski and Rosenberger, 2001). The focus strategy involves obtaining superior results (profit, profitability) through specific market segments and not by its global approach (Porter, 1985).
Under current conditions, organizations can achieve competitive advantage by managing environmental variables and by defining, developing and implementing green marketing strategies. This is due to the fact that, in terms of demand for “green” products and services, the green marketing is a key factor for obtaining competitive advantage, while the effectiveness of environmental actions can lead to avoiding cost increases (Weaver, 1996).

Given the importance of green marketing concept, based on the green marketing strategy developed by Ginsberg and Bloom (2004) and on a set of research directions, the authors assessed the implications on competitive advantage when green marketing strategies are adopted at organization level. Therefore, it was created a new matrix model of choosing a green marketing strategy that integrates the elements of extended marketing mix (7Ps) (Booms and Bitner, 1981) and promotes both environmental benefits of products and sustainable development initiatives of organization, by achieving competitive advantage. Article framework was a typical one, comprising the introduction, a literature review, presentation of research methodology and of the results and discussion, while the end was dedicated to conclusions covering also the limitations and future research directions.

1. Literature review

Organizations that promote green marketing try to move beyond traditional marketing borders by promoting fundamental values of environment, hoping that customers/users will associate these values with their organization. The objectives of achieving sustainability for an environmental oriented organization are closely related to its ability to develop and implement a “green” marketing approach (Petrescu, 2009).

Green marketing plays an important role in promoting the idea of environmental protection and sustainable development (Ottman, 2011; Grant, 2007; Peattie and Crane, 2005), from both perspectives of customer and organization. The green marketing is viewed as a way to achieve company goals (Keller, 1987), to ensure social responsibility (Davis, 1992; Freeman and Liedtka, 1991; Shearer, 1990), to meet customer expectations (Lee, 2008; Delmas and Toffel, 2004; Hoffman, 2001) or to change the whole culture of business (Carter and Jennings, 2002; Polonsky and Rosenberger, 2001), in a profitable and sustainable manner (Peattie and Crane, 2005).

The success of green marketing application largely depends on the impact it has on customers. According to Grant (2007), there are five key points (5 “I”) that enable the development of an efficient green marketing:

- **Intuitive** – green products and services should be perceived as normal;
- **Integrative** – association of trade, technology, social and environmental effects;
- **Innovative** – achievement of new creative products and new life styles;
- **Inviting** – organizations must incorporate the strategic objectives of creating an organizational culture that promotes a “green” lifestyle;
- **Informed** – the lack of information will affect consumer’s behaviour.

The current economic context and the ecological problems require a redefinition of the company’s strategies. Thus, the green marketing can contribute to the development of a new organizational culture in which the environment may be effectively used for the benefit of companies.
The complexity of the issues considered in formulating a green marketing strategy requires the following premises:

- The environmental component should represent a basic factor in adopting the marketing decisions (Stoian, 2003) which has to be integrated into all activities of the organization (Edwards, 2010). Therefore, in designing marketing strategy should be considered the environmental impact but also the need to meet consumer and organization specific requirements.

- An approach that regards product whole life cycle (Ottman, 2011; Edwards, 2010). Green marketing refers specifically to promoting eco products and services, but the companies involved in this type of marketing must make decisions regarding their products entire life cycle (processing, packaging and distribution).

- Integration of ecological message in the strategies used to promote goods and services (Ottman, 2011). The message content, its transparency, transferred information regarding the green products must be credible arguments for product’s quality.

- Correlation of environmental issues with the primary needs of customers (Ottman, 2011; Singh and Pandey, 2012). By following customer preferences, companies act responsibly towards the environment, but also strengthen their corporate responsibility (Edwards, 2010). Therefore, the green marketing strategy should reflect the relation between the environmental benefits of green products and consumer needs. Compatibility with ecosystems is not a purpose in itself but it is fulfilled while the objectives of customer satisfaction and profitability are achieved.

- Integration of competitive advantage for stakeholders’ concept. The choice of green products at accessible prices and high quality can generate competitive advantages compared to other consumers of traditional products.

Incorporating the “green” concept into companies is not limited only to the development of a strategic component focused on environmental issues or simply applying ISO 14000 standards, but involves development of a green marketing strategy to differentiate the company from its competitors (Grant, 2007). In this context, the implementation of green marketing in companies is increasingly emerging as a condition and a necessity to ensure competitive advantages.

The necessity to adopt a green marketing strategy is required by the following aspects (Sao, 2014):

- **Opportunities.** Many changes in the economic and environmental fields can be considered opportunities for organizations to gain competitive advantage over those that do not promote green marketing policies.

- **Government pressure.** The government regulations are aimed to protect consumers and society as a whole, with significant implications in green marketing.

- **Competitive pressure.** A major force in the area of green marketing is organizations desire to maintain their competitive advantages. Influences of some organizations may cause major changes within an industry or on a market, with positive or negative environmental consequences.

- **Social responsibility.** In general, the organizations realize that they are members of a wider community and therefore must adopt a responsible behavior for environment and integrate this component within their corporate culture.
• **Cost and profit issues.** Organizations can use green marketing strategy to solve the costs problems or profit issues (e.g. profit maximization without affecting the environment).

In practice, there is no single strategy that can be applied to all companies, but each chooses own strategy based on its objectives, resources, target market, market conditions, etc. (Polonsky and Rosenberger, 2001). In this context, there were initiated and developed alternative models oriented either to creating or choosing strategies, represented by Grant’s marketing green grid (2007) and Ginsberg and Bloom’s green marketing strategy matrix (2004).

As well, should be considered that in order to implement the green marketing strategy at the level of marketing mix components, Polonsky and Rosenberger (in 2001) underlined the need for a holistic and integrated approach. Their statement and studies are fully consistent with the idea that green marketing should be the alternative used by any company to innovate in a way that can differentiate it from competitors and to ensure the business success (Grant, 2007). Thus, in order to optimize the economic efficiency of investments, companies have to create and choose strategies to transform environmental investments into sources of competitive advantage (Orsato, 2006).

The economic context, but also a specific industry or sector, are determinants of the development pattern of green marketing strategy for an organization that must target its interests as well as its’ stakeholders. Also, the development of green marketing strategy involves integration of innovative elements in the culture and practices of an organization.

2. **Research methodology**

The potential of green marketing incidence on the business environment reveals the importance of developing a model for choosing a certain green marketing strategy that can lead to competitive advantage in terms of profit for organizations and minimal environmental impact, based on the idea that green marketing strategy requires a holistic approach which, coordinating all activities of an organization, will integrate environmental elements within all its functional areas.

On this basis, using and adapting Saunders’ deductive approach (Saunders et al, 2009), the authors designed a set of research lines that constituted the foundation of a study which attempted to assess the influence that green marketing strategies, fully or partially implemented within the companies, have on achieving competitive advantage.

The research area comprised 34 companies, which in 2012 were among those selected by Biz Magazine in collaboration with ISRA Center to participate in a study dedicated to creating a top of green companies based in Romania. Companies that answered the questionnaire, belonging to a broad spectrum of industries, from retail, mobile and telecommunications, petroleum, food, soft drinks or cosmetics, are those reporting in their corporate social responsibility or business reports that they implement and apply sustainable management practices, green marketing activities or strategies oriented towards stakeholders’ awareness and environment protection.
The research was conducted on two levels:

- the first level addressed developing a 25 questions questionnaire and processing the data obtained from participants’ answers using SPSS (trial version IBM SPSS Statistics V.19). The questionnaire was sent by email to participating companies, after they were previously contacted by phone, aiming to gather responses from employees directly involved in developing and/or implementing sustainable management practices, green marketing actions or strategies and corporate social responsibility activities oriented towards environment protection.

- the second level, the result of data processing, addressed building the matrix model for choosing the best green marketing strategic alternatives.

The main line of research, which represented the initiation of the questionnaire development and, subsequently, of the model, was represented by:

**DC1: Establishing the way in which organizations can achieve competitive advantage in terms of using green marketing strategies.** In the questionnaire, the questions joined to DC1 were built starting from detailing the process of creating green marketing strategy. The process was initiated by comprehensively addressing the internal and external factors and the steps and resources used to base the creation and implementation of green marketing strategies which contribute to gaining competitive advantage. This line of research has been assigned 5 questions.

Based on this line of research and in a complementary logic, other lines, targeted and considering competitive advantage as the main resort of research were represented by:

**DC2: Determining the link between green marketing strategies and organizational performance in terms of competitive advantage.** Within the questionnaire, the questions joined to DC2 were built based on the correlation between a correctly formulated and coherently implemented green marketing strategy and the financial and non-financial performances of the company. This line of research has been assigned 4 questions.

**DC3: Establishing, in relative terms, the effectiveness of green marketing strategies in terms of obtaining the competitive advantage.** The questions related to DC3 were built grounded on the specific techniques used to create effective strategies, taking into account the underlying factors that influence, correlated, gaining competitive advantage. This line of research has been assigned 4 questions.

**DC4: Establishing the process course and the results oriented towards creating new green products (through innovation).** Based on the relationship established between innovation process, its results and competitive advantage, the questions related to DC4 were directed towards determining the influence that “green” products have on the competitive advantage of a company. This line of research has been assigned 4 questions.

**DC5: Determining the role that “green leaders” play in the creation and development of green marketing strategies in terms of competitive advantage.** The role and involvement of employees always proved decisive in implementing strategies and achieving competitive advantage. Thus, the questions related to DC5 addressed especially to those directly involved in the actions of green strategies, knowledgeable of the specific characteristics and processes. This line of research has been assigned 3 questions.
DC6: Determining the impact of the supply chain in terms of competitive advantage. Following the course of supply chain, the contribution providers have to gaining competitive advantage was highlighted by the set of questions which substantiate DC6. This line of research has been assigned 3 questions.

DC7: Determining the role of “green” partnerships or alliances in achieving company’s competitive advantage. Organizations often work in partnerships that may prove beneficial, both strategically and in obtaining competitive advantage. The questions related to DC7 were focused on methods of creating “green” alliances and making them efficient. This line of research has been assigned 3 questions.

3. Results and discussions

For research substantiation there were assessed two variables, the importance that green marketing strategy implementation has on competitive advantage, and the influence that green marketing strategy implementation has within company.

The answers correlated to questions linked to every research lines were given values and ranks according to the role that the items under scrutiny play in achieving competitive advantage.

Rank 1 was granted if, based on reply given, it was shown that the item exists and is used for achieving competitive advantage, rank 0.5 if the item is in the process of implementing or restructuring, and rank 0 if the item is not implemented and there are no plans for its implementation either. The current status for each company, during research period, was considered the arithmetic mean of the ranks assigned to each item.

Each company was asked to assess the items correlated to research lines (questions and their relevance) on a seven-point Likert scale, with the maximum value 7 (high relevance of the theme that question posed for discussion), and the minimum value 1 (low relevance or even zero of the theme that question posed for discussion).

As was intended, as the endpoint, to determine the influence green marketing strategy has on achieving competitive advantage, it was developed correspondence with the strong influence of green marketing strategy to achieve competitive advantage, namely low or even zero influence.

In the Likert scale, Cronbach Alpha coefficient was applied (Table no. 1a, 1b, 1c) which assessed the same variable obtained from the answers given, represented by the consistency of each dimension of the scale, as the indicator of fidelity.

Table no 1a: Analysis of the importance of green marketing strategy in gaining competitive advantage in terms of loyalty coefficient Cronbach Alpha

<table>
<thead>
<tr>
<th>Summary of Processing Cases</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Cases</td>
<td>34</td>
<td>100,0</td>
</tr>
<tr>
<td>Exclusions</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>100,0</td>
</tr>
<tr>
<td>a. Listwise deletion determined on the basis of used variables</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reliability of Statistics

<table>
<thead>
<tr>
<th>Cronbach Alpha</th>
<th>Cronbach Alpha based on standardized items</th>
<th>Number of elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>.783</td>
<td>.770</td>
<td>25</td>
</tr>
</tbody>
</table>
The value of Cronbach Alpha coefficient was 0.783, exceeding the minimum acceptable value of 0.7.

As a measure of the instrument reliability, Cronbach Alpha coefficients were calculated for each research direction, based on results from all 34 participants to the study.

Given that one of the common themes of research areas was the importance the implementation of green marketing strategies has on the competitive advantage, the result obtained underlined the fact that the questions were formulated so that to relate to the topic, endorsed as the objective of questionnaire.

Explaining the result, it can be stated that, based on the given answers, all companies have admitted the importance that green marketing strategies implementation have in gaining competitive advantage.

However, the variation of Cronbach Alpha coefficient values within the interval [0.701, 0.816] indicates a fluctuating influence of the elements that companies consider important in the correlation between green marketing strategy and competitive advantage.

Further, based on the hierarchical classification, using hierarchical clusters method, the companies involved in the study were grouped into four categories (Table no. 2), depending on the influence they stated that the implementation of green marketing activities/strategies has on achieving competitive advantage.

Unlike the importance of implementation, calculated with Cronbach Alpha coefficient, in terms of influence of implementation, based on the data processed it could be observed (Table no. 2) that the size of cluster 4 (strong influence) is the lowest related to the other samples values, and by comparison, the size of cluster 3 (medium influence) is lower than that of cluster 2 (weak influence). Thus, it can be pointed out that the implementation of green marketing is made, most often, at the level of strategic activities rather than strategy. Also, it can be said that in some cases, implementation was, in fact, declarative and not factual.

Table no. 1b: Statistical analysis of calculated values for the responses to the 25 questions

<table>
<thead>
<tr>
<th></th>
<th>Average Scale eliminating an element</th>
<th>Scale variation at eliminating an element</th>
<th>Element Corrected- Total correlation</th>
<th>Multiple harmonized correlation</th>
<th>Cronbach Alpha at eliminating an element</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI1</td>
<td>34.36</td>
<td>57.657</td>
<td>.649</td>
<td>.800</td>
<td>.738</td>
</tr>
<tr>
<td>RI2</td>
<td>34.64</td>
<td>66.573</td>
<td>.525</td>
<td>.865</td>
<td>.760</td>
</tr>
<tr>
<td>RI3</td>
<td>34.04</td>
<td>58.790</td>
<td>.779</td>
<td>.907</td>
<td>.727</td>
</tr>
<tr>
<td>RI4</td>
<td>34.96</td>
<td>65.707</td>
<td>.519</td>
<td>.554</td>
<td>.759</td>
</tr>
<tr>
<td>RI5</td>
<td>34.72</td>
<td>68.293</td>
<td>.244</td>
<td>.774</td>
<td>.790</td>
</tr>
<tr>
<td>RI6</td>
<td>34.56</td>
<td>77.590</td>
<td>-.094</td>
<td>.699</td>
<td>.816</td>
</tr>
<tr>
<td>RI7</td>
<td>35.32</td>
<td>75.560</td>
<td>.031</td>
<td>.532</td>
<td>.799</td>
</tr>
<tr>
<td>RI8</td>
<td>34.92</td>
<td>65.243</td>
<td>.403</td>
<td>.619</td>
<td>.770</td>
</tr>
<tr>
<td>RI9</td>
<td>33.72</td>
<td>59.127</td>
<td>.577</td>
<td>.637</td>
<td>.748</td>
</tr>
<tr>
<td>RI10</td>
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<td>65.810</td>
<td>.460</td>
<td>.666</td>
<td>.764</td>
</tr>
<tr>
<td>RI11</td>
<td>32.88</td>
<td>55.860</td>
<td>.705</td>
<td>.712</td>
<td>.729</td>
</tr>
<tr>
<td>RI12</td>
<td>33.22</td>
<td>56.012</td>
<td>.550</td>
<td>.600</td>
<td>.720</td>
</tr>
<tr>
<td>RI13</td>
<td>34.67</td>
<td>65.222</td>
<td>.398</td>
<td>.592</td>
<td>.750</td>
</tr>
<tr>
<td>RI14</td>
<td>35.32</td>
<td>75.560</td>
<td>.031</td>
<td>.532</td>
<td>.799</td>
</tr>
<tr>
<td>RI15</td>
<td>33.64</td>
<td>65.573</td>
<td>.510</td>
<td>.812</td>
<td>.740</td>
</tr>
<tr>
<td>RI16</td>
<td>35.04</td>
<td>59.720</td>
<td>.783</td>
<td>.916</td>
<td>.747</td>
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<tr>
<td></td>
<td>Average Scale eliminating an element</td>
<td>Scale variation at eliminating an element</td>
<td>Element Corrected- Total correlation</td>
<td>Multiple harmonized correlation</td>
<td>Cronbach Alpha at eliminating an element</td>
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<td>.031</td>
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<td>.799</td>
</tr>
<tr>
<td>RI8</td>
<td>34.92</td>
<td>65.243</td>
<td>.403</td>
<td>.619</td>
<td>.770</td>
</tr>
<tr>
<td>RI9</td>
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<td>59.127</td>
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<td>.637</td>
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<td>RI10</td>
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<td>.666</td>
<td>.764</td>
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<td>65.707</td>
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<td>.759</td>
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<tr>
<td>RI19</td>
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<td>74.590</td>
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<td>RI23</td>
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<td>65.810</td>
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<td>.666</td>
<td>.764</td>
</tr>
<tr>
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<td>50.860</td>
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<td>.700</td>
<td>.701</td>
</tr>
<tr>
<td>RI25</td>
<td>33.22</td>
<td>56.012</td>
<td>.550</td>
<td>.600</td>
<td>.720</td>
</tr>
</tbody>
</table>

Table no. 1c: Scalar statistical values

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Variation</th>
<th>Std. deviation</th>
<th>Number of elements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37.88</td>
<td>77.110</td>
<td>8.781</td>
<td>25</td>
</tr>
</tbody>
</table>

Table no. 2: Classifying companies by category

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of used sample %</td>
<td>3.5%</td>
<td>37.2%</td>
<td>32.8%</td>
<td>26.4%</td>
</tr>
</tbody>
</table>

These results and observations were considered as scientific reasons to developing a matrix model for choosing green marketing strategic alternatives that can lead to gaining competitive advantage by companies in terms of profit and minimal environmental impact. In the study, it was observed that the companies included in clusters 3 and 4, which implement strategies, models and theories of green marketing, differentiate from competitors. Also, their production lines frameworks are closely related to the implementation of environmental standards (such as ISO 14000). From these views, the authors could maintain that each stage of production cycle and the links between these stages, through green marketing, will lead to achieving added value, thereby generating competitive advantage.

The model developed was based on the correlation that can be established among the generic strategies of competitive advantage (Porter, 1985), the elements of extended marketing mix (7Ps) (Booms and Bitner, 1981) and the matrix of green marketing strategy (Ginsberg and Bloom, 2004). The three instruments were chosen as they provide the complete set of variables making up the foundation required to build a model for choosing green marketing strategy in light of all internal and external influencing factors.
Building the green marketing strategy matrix (Figure no. 1), Ginsberg and Bloom (2004) stated that green marketing strategies that constitute the matrix must be determined according to the extent and importance that green market has both within the branch where an organization operates and within the specific organization and according to organization’s ability to differentiate its products or services depending on the level of attention and importance given to “green” activities and results. Although the matrix has proven to be a supportive mean for those organizations that use particular strategies in order to include green marketing within their marketing plans, to state and accept it as sufficient for use and generalization it is an error.

According to Ginsberg and Bloom, Extreme Green strategy fully includes within product and business life cycles, the environmental issues. The ecologic approach has accompanied companies’ activities since their initiation and release. The activities and practices of those companies that implement Extreme Green strategy include the approaches to prices establishment at the level of product life cycle, total quality management of the environment and production focused on environment and its protection. In some cases, they may also be focused on dedicated small markets and on selling their products or providing their services through exclusive stores or specialized distribution channels.

Using Moderate Green strategy, companies invest in long-term processes systemically addressed and oriented towards green marketing, that require financial as well as material and human effort and involvement. These companies consider competitive advantage as the result and the effect of creating ecological approached products and services. Although, based on their place on the market and relation with competitors, companies have the ability to differentiate themselves by means of ecological approach, of environmental protection, they do not do this often, trying to gain the competitive advantage with other factors. Although using the main channels of promotion and distribution, the environmental opportunities and benefits that accompany a product or service are presented and promoted in the background.
**Defensive Green** strategy often uses green marketing either as precaution or as a response given to a crisis or to competitors’ actions. Companies implementing this strategy try to strengthen their image and to reduce, or even eliminate, the negative effects of their activities for they know that green market segments are a good win, they are important and profitable, and they should not be given up or lost. Because these companies do not have the ability to differentiate from their competitors using green marketing focused actions, promotion and advertising activities dedicated to these actions are sporadic and brief, although sustained. In terms of promotion, the companies implementing Defensive Green strategy will implement either activities of sponsoring small ecological events or programs or, where appropriate, they will protect themselves by means of specific measures in case of unfavourable campaigns. Large promotion campaigns focused on highlighting environmental actions will be launched and funded only if the companies have identified a substantial competitive advantage that can be obtained as a result of these campaigns.

The last strategy, **Uniform Green** is applied to those companies which, although characterized by a socially responsible behavior, do not make public their actions focused on green or ecologic marketing. These are oriented towards reducing costs and improving the efficiency of various activities by means of those initiatives that seek to protect the environment, albeit competitive advantage is not affected by them. Although the companies that implement Uniform Green strategy observe environmental laws and regulations formally imposed, they admit that the financial benefits cannot be acquired from the green market segments. The feature of these companies is the backward step taken in terms of promoting products, services or activities that protect the environment from the perspective of a too high standard that may be imposed on them.

Based on this ground, it can be maintained that choosing one of the strategies outlined above could be made depending on the four controllable variables of marketing mix and on the way the variables can influence and be used by each strategy.

However, given the whole current gamut of markets, the new trends of environmental factors’ evolution, which influence the businesses, the ways and components that influence gaining competitive advantage, to stop only at the four elements of the marketing mix would be a decrease in understanding and of the opportunities to choose the best green marketing strategy. Therefore, the model built based on the research carried out has brought and used, as the first novelty, the implementation of the extended marketing mix (Booms and Bitner, 1981), of all 7 verifiable variables that, in full view, are directed towards both products and services and that, in addition to the 4 variables adds three more, represented by people (personnel/stakeholders), process and physical evidence. The influences that every variable of the extended marketing mix has in choosing one of the four strategies are presented in Table no. 3.

Based on correlations between green marketing strategies and the variables of extended marketing mix, the authors noticed that it can be determined the importance and the place a strategy can fill within the activities of a company, the impact that marketing mix variables have on selecting a strategy as well as the mutual influence, exercised by the chosen green strategy on these variables.
Thus, it was seen that (Table no. 3) Extreme Green strategy (Zone I), which aims at achieving competitive advantage based on green activities, uses and is influenced in turn by the whole set of extended marketing mix variables. A company that implements this strategy will have to manufacture more environmentally friendly products, “greener” than competitors, which will not pollute with the waste they produce and will possess ecological quality features, while the manufacturing processes of these products to be implemented focusing on green marketing. The price is an influencing factor, for part of it is used as a source of investment for ecological activities. The placement is materialized using distribution systems and suppliers/distributors whose businesses are characterized by green marketing focus. Promotion addresses own products and processes, as well as company’s distributors and suppliers, focusing on their ecological and environmental protection features. In addition, people (personnel/stakeholders) participate in producing the green products, providing green services and in purchasing them based on their ecological trait. Last, nut not least, in respect of services, the physical evidence of their supply is taken into consideration from the perspective of the way they influence, positively or negatively, the environment.

Similarly, the Moderate Green strategy (Zone IV) is influenced and emphasizes the ecological factor, both through promotion and specific design, development and manufacturing the product or providing the service activities (production/supply) as well as pricing activities, as long as expenses efficiency can be influenced by environmental factor. The importance given to place is reduced due to the fact that companies implementing this strategy use the main distribution channels which are, themselves, concerned about environmental issues.

On the other hand, Defensive Green strategy (Zone II), aims to create, design and manufacture products and provide services whose creation and use do not affect the environment. Promotion activities play an important role, though they are not characterized by specific expenditures oriented towards the aggressive advertising of company’s ecological approach.

The last strategy, Uniform Green (Zone III), strictly regards creating, designing and manufacturing the product or providing the service without any influence from the other variables of the extended marketing mix.

Table no. 3: Using Variables of the extended marketing mix to choose green strategies

<table>
<thead>
<tr>
<th>Zone I Extreme Green</th>
<th>Zone II Defensive Green</th>
<th>Zone III Uniform Green</th>
<th>Zone IV Moderate Green</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>v</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>Price</td>
<td>v</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Place</td>
<td>v</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Promotion</td>
<td>v</td>
<td>v</td>
<td>-</td>
</tr>
<tr>
<td>People (personnel/ stakeholders)</td>
<td>v</td>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>Process</td>
<td>v</td>
<td>v</td>
<td>-</td>
</tr>
<tr>
<td>Physical Evidence (tangibility)</td>
<td>v</td>
<td>v</td>
<td>v</td>
</tr>
</tbody>
</table>

Source: Ginsberg and Bloom, 2004; Booms and Bitner, 1981 and own concept

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As it can be seen, the first two strategies show an offensive attitude, assuming both positive results and risks of implementing the activities addressing the ecological approach, while the attitude of the last two strategies is a defensive one, whereby companies make minimum effort aimed at addressing the ecologic, environmental protection approach, to only avoid any risky and negative consequences.

Based on the evidence that marketing strategy is part of the company's strategy, by the means of developed matrix model it was intended to expand the correlations between the examined variables so that the generalization degree and the adaptability capacity of the model components according to organizational structures and features of various companies can allow to easily choose and implement the optimal strategy/strategies.

In the new matrix model (Figure no. 2), the reduced costs were considered to include also two main variables of differentiation for choosing the best strategic alternative, represented by the cost of implementing strategic alternative of green marketing and the cost of implementing company's strategy. By extension and connecting the components of Ginsberg and Bloom (2004) and Porter (1985) matrices, throughout the new matrix model for choosing the optimal green marketing strategy, the discussion was conducted and the observations were made at the level of component zones.

Assuming that for a company, in the current market and competitive contexts, to choose, implement and set up objectives, activities and stages based only on a single green marketing strategy would be an error, each zone was considered likely to have a high and an average degree of choosing a specific strategy according to various factors that influence the company at a certain time, and according to which the optimal strategy of green marketing will be chosen. Thus, in Figure no. 2, “a” zones are specific to a high/strict
degree of choosing and implementing a certain strategy, while “b” zones are characterized by a moderate degree and actions bridging the elements of the most appropriate strategies that a company can choose from green marketing perspective.

Zone I - the strategies of this zone are oriented towards gaining a high competitive advantage through costs leadership (low cost) and an industry approach. Also, companies are placed within a zone where the substantiation of green market segments and the differentiability due to the focus on environment protection approach have a high degree of evidence and impact. Thus, a company that chooses and implements Extreme Green strategy, either alone or conjuncted with elements of the strategies from adjoining zones, can influence the industry to which it belongs by special intervention on the environment and by low costs. In addition, based on the relationship with the variables of extended marketing mix, the full set of variables will be used to and will be influenced by the implementation of Extreme Green strategy.

Zone II - strategies of this area are characterized by a shift towards a low competitive advantage due to the differentiation by high costs and the industry approach. The company that implements this strategy may influence the industry to which it belongs only through preventive action, as feedback to external actions, and by low costs allocated. Also, based on the relationship with extended marketing mix variables, those participating in and being influenced by Defensive Green strategy implementation, are represented by product, promotion, people, process and physical evidence.

Zone III – the strategies specific to this zone are characterized by approaching competitive advantage from a diminished perspective due to focusing on differentiation through high costs and market level approach. The company that implements a strategy specific to this zone influences to a little extent and at a small-scale the market segment to which it belongs. The influences have the magnitude of rarely occurring activities, and a strong feature oriented towards environment. Focusing on differentiation will increase the costs of implementing the Uniform Green strategy. Extended marketing mix variables involved in and which will be affected by the implementation of Uniform Green strategy are represented by product, people and process.

Zone IV - specific strategies are characterized by a consistent competitive advantage due to the focus on lower costs and to market segment approach. The companies framed in this area can greatly influence the market segment to which they belong, by clear guidance on environment protection activities, thereby achieving an important competitive advantage. Focusing on low cost locates them at the level of a small scale strategic goal. This also influences the extended marketing mix variables, which are involved in and will be influenced by the implementing of Moderate Green strategy, represented by product, price, promotion, people, process and physical evidence.

Based on the conducted analysis and on the presentation of each zone characteristics, there could be highlighted the following aspects:

• the most advantageous zones (in terms of extended marketing mix variables and of cost variables) for both an organization and the environment influenced by it, are zones I a and IV a. In both cases, the Extreme Green strategy, respectively Moderate Green, lead to gaining competitive advantage, both in terms of overall company’s business and the activities dedicated to environmental protection.
• the most disadvantageous zones, as opposed to the two mentioned above, are represented by II a and III a. In these cases, the implementation of Defensive Green strategy, respectively Uniform Green will result in low competitive advantage. However, there are organizations that will implement the strategies according to the pursued strategic target.

• on this basis and taking into account that, at some point, under current circumstances of rapidly changing social, economic, and natural environment, choosing only one strategy may be deficient for any organization, the zones of moderate influence thus justify their importance. Choosing strategies according to them being part of I b and IV b zones, and accepting positive influences in terms of an increased competitive advantage, from the strategies in II b and III b zones, may prove to be beneficial solutions in these circumstances.

Therefore, the new developed model justifies its applicability by the complex and current approach of choosing the optimal strategic alternative, taking into account that companies relate Porter's generic strategies with the variables of extended marketing mix in order to implement new strategies to achieve competitive advantage in terms of green marketing and sustainable development.

Conclusions

The capability that green marketing has in influencing business environment emphasized the importance of building a matrix model for choosing green marketing strategy certainly ensuring obtaining competitive advantage in terms of company’s profit and minimal impact on the environment.

The study conducted on a sample of 34 companies that implement green marketing strategies or actions pointed out that they are differing from competitors and they structure their production lines closely related to environmental protection actions. From this perspective, one can state that each stage of manufacturing and the ties between these stages, by means of green marketing, will lead to achieving the added value, thereby generating competitive advantage.

The new model developed was based on the correlation that can be established among the generic strategies of competitive advantage, the extended elements of marketing mix (7Ps) and the matrix of green marketing strategy.

The matrix model created was intended to expand the correlations among considered variables in order to select and implement the optimal strategy taking into consideration generalization degree and adaptability capacity of model components according to company’s structure and features.

In the current events of increasing competition and the need to gain competitive advantage, the new matrix model can be a useful tool, applicable and adaptable to all organizations intending to use the benefits of implementing green marketing strategies. Thus, according to the research results, there were delineated several advantages, coupled with the technical and economic components of the current business environment.
From a technical standpoint, the matrix model for choosing the green marketing strategies, on the one hand, facilitates the choice of strategies because organizations will have available a larger number of indicators and variables to choose their strategies from and to easily adapt their ways of conducting their activities.

On the other hand, the new matrix provides organizations with more zones of framing and choosing strategies. Each of the 4 initial zones has, in the new matrix, two more new zones, increasing their number to 8 and 3 variables, represented by the components of extended marketing mix, and the reduced costs variable with the cost of implementing strategic alternative of green marketing and the cost of implementing company’s strategy, that contribute to the assessment of strategic options.

In terms of connection with the current economic environment, the new matrix model for choosing the green marketing strategies is based on scientific, objective grounds, using as a working foundation Porter’s generic competitive strategies, correlated with the model created by Ginsberg and Bloom, dedicated to green marketing strategies. The correlation established by the new model provides an objective and impartial way of selecting the strategies, incorporated into the reality of the environment where the company acts, sets up and builds its strategies.

The main limitations of the research in terms of building the model were generated mainly by the small number of companies involved and, to a lesser extent, by the validity of data some companies provided, taking into consideration the declarative nature of some strategic actions carried out in green marketing area. These limitations will be the point of initiation for further research that will have as objective a larger number of companies involved in green marketing strategies implementation and application.

References


