

## Article

# Green Marketing as the Source of the Competitive Advantage of the Business

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Received: 26 October 2017; Accepted: 28 November 2017; Published: 30 November 2017

**Abstract:** In this work we focused on summarizing the principles of green marketing and the concepts related to it. The aim of this contribution was to prove the relationship between the implementation of green marketing principles and sustainable competitive company position on the market. In order to prove the relationship between the implementation of green marketing principles and the competitive market position of companies, we used a multiple regression method to reveal the relationship, despite many variables. This was preceded by a factor analysis that helped us to select the main factors of influence. In order to meet this goal, we have drawn from the surveys conducted by PwC (Bratislava, Slovakia), the Automobile Industry Association and the Slovak Automobile Institute to identify key factors and future expected development in the auto industry supplier segment and our marketing research, conducted from December 2015 to February 2016. Based on the results of marketing surveys, research responses and the study of available resources, we concluded that there is no comprehensive green marketing implementation model linking environmental consumer behavior with a link to the company's marketing strategy. The contribution could help the Automotive Industry Union to present requirements to the government and help create incentives for the alternative vehicle market, and our findings could be incorporated into the creation of companies' strategy.

**Keywords:** green marketing; sustainable competitive advantage; corporate social responsibility

## 1. Introduction

The current period is characterized by the destructive waste of natural resources, unstable economic development and, in particular, climate change. This is a state that shows changes in consumer behavior changing the responses of business entities. This is the art of marketing [1]. Surveys show that six out of 10 enterprises would invest in sustainable initiatives even if there were to be an initial increase in costs. Some businesses have very quickly adopted the Environmental Management System (EMS) and have begun to apply an eco-friendly approach to all corporate activities. Many businesses have begun to take sustainable initiatives to take on a win-win approach that saves on the costs of the enterprise while demonstrating awareness among customers who are increasingly looking for promises from responsible businesses because they are aware that environmental themes affect all activities relating to human existence [2]. Incorporating the principles of green marketing into business systems is increasingly being mentioned in the globalization process of the economy, given the enormous potential in obtaining a viable competitive advantage [3].

### 1.1. Corporate Social Responsibility

The environment has become a part of a company's responsible approach to business activity and, at the same time, an opportunity for entrepreneurial growth [4]. These ideas combine the concept

of corporate social responsibility, which has been and is the main topic discussed at several annual meetings of the World Economic Forum. Environmental activities in the framework of enterprise strategy development provide the European Union with a Green Paper in which CSR defines the voluntary integration of social and environmental aspects into day-to-day business activities and interactions with stakeholders (stakeholders). Under this concept, companies voluntarily decide to contribute to a better society and a cleaner environment [5]. This definition is based on so-called the principle of triple-bottom-line (people, profit, planet), that is, the measurement of positive and negative impacts of the enterprise on the social, economic and environmental spheres of society as a whole, taking into account other CSR principles, such as sustainable development and volunteering [6].

### *1.2. Defining Green Marketing as a CSR Tool*

At present, concepts such as green, sustainable or organic marketing are becoming more widely used, reflecting the growing interest of society in the impact of growing consumption on the environment [7]. Organic marketing is the study of the positive and negative aspects of marketing activities on pollution, energy consumption and non-energy consumption [8]. This definition includes the following features: green marketing as a subset of the overall marketing activity examines positive and negative activities, and only a limited range of environmental issues. It follows that green marketing is based on the CSR of the triple-bottom-line principle, which characterizes green marketing as the marketing of products that are supposed to be environmentally friendly and environmentally sound [9]. Social marketing is geared towards developing a supply of products that mitigate and provide minimal negative environmental impacts while increasing their quality. From an environmental point of view, it is defined as the effort of an enterprise to produce, promote, package, innovate and reuse the product so as to responsibly address environmental issues [10].

Green marketing consists of multiple activities designed to ensure the key aspect of marketing-product exchange with minimal negative environmental impact [11]. Peattie defines green marketing as a holistic management process responsible for identifying, anticipating and meeting the needs of consumers and companies in an efficient and sustainable way [12]. However, several sources point out that a more complete definition of green marketing is based on the process of planning, implementing and managing the development, pricing, promotion and distribution of products in a way that meets the criteria of meeting customer needs, achieving organizational goals of the business, and linking these processes to the ecosystem [13]. The absence of a generally recognized definition thus gives businesses the ability to create their own, based on their goals, risks and opportunities, competencies.

The main goal of green marketing is to present consumers with the importance of protecting the environment in the context of product consumption, placing an emphasis on building long-term relationships based on both sides of communication, not only with customers but also with other stakeholders and creating the natural need to be environmentally responsible.

#### *1.2.1. Green Marketing and Business Competitiveness*

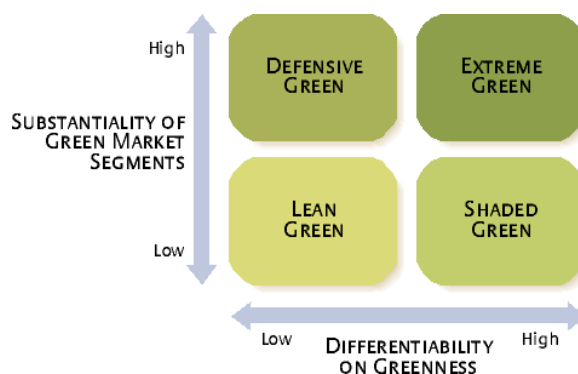
Competitive business environments vary depending on the requirements and demands of customers, regulations and opportunities to gain a truism advantage [14]. Businesses face positive pressure to become environmentally efficient, contributing to their higher profitability, but also their overall economic stability [15]. Many businesses implement green marketing, especially for reasons of opportunity, social and environmental responsibility, pressure from government and competition, and cost reduction. Getting a competitive advantage can be achieved through seven green marketing strategies for understanding the deeper connections between customer and stakeholder, environmental and social values, branding, and proactive business [16].

Once the business wants to gain a sustainable competitive advantage, it must integrate environmental thinking into all aspects of marketing [17]. This will only be achieved through the implementation of the green marketing strategy, as the basic prerequisite for future competitive

struggle has become the solution of environmental issues and the level of implementation of the principles of green marketing, which will benefit from higher profitability, competitive advantage, improved stakeholder relations and better environmental performance [18].

### 1.2.2. Green Marketing Strategy and Its Appropriate Choice

A holistically conceived strategy must also implementation of green marketing goals into business plans [19]. Green marketing, as well as traditional marketing, carries two great themes—marketing mix and marketing strategy. Marketing strategy is a continuous cycle in which individual STP process sequences—demand measurement, segmentation, target market selection, and positioning—are conducive to competitive advantage [20]. Based on the STP process, an enterprise approaches the creation and selection of an appropriate strategy. According to Ginsberg and Bloom, a company has the ability to ecologize products and the overall economy of green market segments by choosing from the four strategies outlined in Figure 1. The vertical axis illustrates the ability of the green market segments to absorb and on the horizontal axis the ability of an enterprise to differentiate the product by greening [21].



**Figure 1.** Green Marketing Strategies by Ginsberg and Bloom [21].

Lean green—an enterprise tries to be responsible for society, but does not focus on informing about these initiatives. It focuses on reducing costs and increasing efficiency through environmental activities, thereby building a competitive advantage based on low cost.

Defensive green—an enterprise uses green marketing as a prevention in times of crisis or protection from competition. Although environmental activities are promising and sustainable, the effort to promote them is sporadic and temporary, because the intention is not to differ from competition through green activities.

Shared green—an enterprise invests in environmentally sustainable processes over a long-term basis, requiring significant financial and non-financial resources. The company sees green marketing as the opportunity to build innovative products and technologies that meet customer needs, which gives it a competitive advantage. In the first place, it promotes the direct and tangible benefits provided to the consumer; the second is environmental activity [22].

Extreme green—environmental issues are fully integrated into the business processes and product life cycle. The company often serves special markets (market gaps) through dedicated outlets and distribution channels.

### 1.2.3. Brand in Green Marketing

Today, branding is taken as a separate marketing tool and is a very important product attribute. It is the symbol and identifier of the product that differs from the competition. Several programs using trade rules based on the principle of volunteering are currently being successfully implemented. These include eco-labeling, that is, the labeling of products and services that are more environmentally friendly than

their substitutes. However, in the context of green marketing, we need to distinguish between the brand of the company and its green image and internationally certified product designation.

Environmental labels are labels submitted to the customer to help distinguish the environmentally friendly product from conventional [23]. They help to overcome the lack of knowledge—by knowing all the essential details about the product and the circumstances of its production, environmental labeling would be unnecessary. However, it relies on an authority that explored environmental favors instead of confirming it with a label [24].

The brand value increases with the implementation of green marketing principles for the following reasons: The company increases the value of its products, gains a competitive advantage, improves the image of the business, gets new markets and is ready to cope with the environmental pressures of stakeholders. The concept of building a brand on values related to environmental and social performance is linked to three factors, specifically, the image of the green mark, the fulfillment of the expectation of green promises, and credibility. It follows that the green mark meets the criteria “3E”, namely, it is ecological (minimizes negative environmental impacts), is transparent (does not support unfair practices and social injustice), and is economic (supports long-term economic sustainable development) [25].

As we have already mentioned, developments in the world economy are geared towards integrated environmental protection, which means, from the environmental point of view, that we are not only measuring the product, but also the overproduction and post-production processes. Research study The 2016 State of Green Business Index, conducted on the 1600 largest global businesses, uses three indicators as the key indicators of the company’s environmental sustainability initiatives: greenhouse gas emissions; water consumption, and; waste generated [26]. The study also deals with total investments in workable solutions and declares a number of enterprises that influence the supply chain with a selection criterion based on eligible procurement. All of these indicators are closely related to the goals and principles of green marketing. Research has shown that the companies surveyed set measurable targets for reducing greenhouse gas, water and waste. Furthermore, research shows that in all three categories there is an increase in the number of enterprises that try to confirm their initiatives by a third party and patented technologies that have the character of clean technologies [27].

The main objective of the contribution is to assess the relationship between the implementation of a green marketing strategy for companies operating in the supply chain of the automotive industry in the Slovak Republic, taking into account the conditions of the Slovak economy and legislation in order to increase their competitiveness. The reason for choosing this sample of companies is that almost 40% of the Slovak Republic’s gross domestic product (GDP) is linked to the value chains created within the automotive industry.

## 2. Materials and Methods

The presented contribution focuses on the strategy of green marketing as a source of competitive advantage for companies operating in the value-supply chain of the automotive industry in Slovakia. As the most important strategic decisions of the business in the field of marketing include the selection of the target segment, the correct determination of the marketing mix and the selection of the position within the market segment, we used the method of querying using the anonymous questionnaire tool to determine the level of implementation of green marketing principles in Slovak Republic (SR) enterprises. The goal of exploring green marketing strategies is the process of their creation and the realization of the implementation of green marketing principles in enterprises and survey objects are companies operating in the supply chain of the automotive industry in Slovakia. We have carried out a content analysis of their activities related to the implementation of green marketing principles in automotive companies operating in Slovakia (KIA Slovakia, Volkswagen Slovakia and PSA). In order to prove the relationship between the implementation of green marketing principles and the competitive market position of a business, we used a multiple regression method to reveal the relationship despite many variables. This was preceded by a factor analysis that helped us to select the main factories because we worked with a great deal of data. We have also looked at the differences

between enterprises with different ownership structures because the level of implementation of the green marketing principles is not adequately reviewed in the Slovak Republic, and no available resources provide such information. In order to meet this goal, we used data from secondary and primary sources. The secondary data source was a survey conducted by PwC, the Automobile Industry Association and the Slovak Automobile Institute, in order to identify key factors and future expected developments in the automotive supplier segment. The survey was conducted in March–April 2015 and partly formed the basis for the content analysis and the compilation of our questionnaire, which was our source of primary data.

The questionnaire was distributed electronically via email between 15 December 2015 and 29 February 2016. The objects of the survey were companies operating in the supply chain of the automotive industry in Slovakia, mainly due to the significant share of the automotive sector in the GDP of Slovakia, and also due to the fact that automobile transport is one of the biggest polluters of the environment. As there is no up-to-date database of enterprises in the Slovak Republic's automotive supply chain in the Slovak Republic, we had to create such a database and look for business contacts (the Statistical Office of the Slovak Republic does not provide such structured information and, also, the SK NACE classification does not meet the characteristics of the basic set). We drew from publicly available information on the Union of Automotive Industry of the Slovak Republic (ZAP SR) (Bratislava, Slovakia) and Social network of companies (IPAP SR) (Banska Bystrica, Slovakia) websites. The questionnaire consisted of two sections. The first section focused on the general profile (size of business, type of ownership, legal form, and origin of top managers). The second section dealt with the principle of green marketing and its application in business.

The size of the research sample was determined by the exact statistical calculation quantified based on the relationship:

$$n \geq (z^2 \times p \times q) / \Delta^2, \quad (1)$$

where  $n$ —minimum number of respondents,  $z$ —critical value of normal distribution at significance level  $\alpha = 0.05$  (95% estimation reliability),  $p$ ,  $q$ —the percentage of respondents who know or do not know the issue, optionally being tilted to one ( $p$ ) or second variation ( $q$ ),  $\Delta$ —the maximum error specified by us.

The population size of the base population was 403, the level of significance  $\alpha$  was set to 0.05, which corresponds to 95% confidence interval and admissible gauge margin to 5%. A sufficient sample should be 283 business entities.

In order to meet the information needs of the marketing survey, we identified the owners of the companies, or the top managers, employees of the marketing department, who should have relevant data. The questionnaire was sent to 283 enterprises (the population size of the basic set) operating within the automotive supply chains in electronic form. A total of 163 valid questionnaires returned, representing a return of 89.07%.

### 3. Results

Using the theoretical knowledge and the results of the green marketing marketing survey, companies operating in the automotive industry in Slovakia recognize important areas in the development and implementation of a green marketing strategy where businesses should respond to the environmental demands of consumers.

In order to verify the stated scientific goal, we formulated and concretized the research questions as the information needs that are based on the stated objectives are general.

#### 3.1. Research Question No. 1

*Is there a significant difference in the strategy of green marketing and the implementation of its principles among companies in Slovakia that are subsidiaries of foreign companies and companies based in Slovakia?*

To respond to this research issue, we have compiled a contingency table that divides the two categories of variable variables into eight issues relating to the main principles of green marketing, such as: energy saving; waste reduction; product life cycle prolongation; effective and manageable procurement styles, and; relationship-interested groups. We have analyzed the following questions from the questionnaire:

1. Does your company analyze the life cycle of the products or services you provide?
2. Do you have measurable targets in your business for economic, social and environmental performance?
3. Do you have a map (list) of stakeholders influencing your business, or is it affected by them?
4. Are you applying the principles of prudent procurement in your company by taking into account environmental aspects when purchasing materials, goods and services?
5. Does your business consider optimizing reverse logistics and waste disposal?
6. Is the strategy for reducing negative environmental impacts part of the overall business strategy?
7. Would you be able to prove the documentation of processes that are related to activities in the areas of quality, environment, ethics, safety?
8. Do you have a formal statement on Corporate Social Responsibility in your business?

Since questions require yes-no responses, it is a specific case of categorical variables, binary. Therefore, we have customized the contingency table where line profiles represent success rates, that is, the number of enterprises applying the principles of green marketing and the success stories, that is, enterprises that do not apply these principles answered “no”, following their owner’s capital structure.

Table 1 shows that businesses are more distinct in responding to issues related to the map of stakeholders, setting measurable targets in the environmental, social and economic spheres, and targeting the reduction of negative impacts on the environment into the overall business strategy. On the other hand, however, it should be noted that a very low percentage of foreign companies, as well as Slovak ones, analyzes the life cycle of products. Also, only 44% of the surveyed enterprises with a foreign ownership structure have a map of stakeholders, and only 14% of domestic enterprises. The third indicator with a very low percentage is the formalized declaration of corporate social responsibility. The concept of corporate social responsibility is very closely linked to green marketing as it links to economic, environmental and social areas. Within the research question, we have set the following hypotheses:

1. Is there a statistically significant difference between Slovak enterprises and foreign-owned enterprises in the performance of product lifecycle analysis?
2. Is there a statistically significant difference between Slovak enterprises and enterprises with a foreign ownership structure that have set measurable objectives in the economic, social and environmental spheres?
3. Is there a statistically significant difference between Slovak businesses and foreign-owned enterprises that have a map of stakeholders?
4. Is there a statistically significant difference between Slovak enterprises and foreign-owned enterprises that apply the principles of sustainable procurement?
5. Is there a statistically significant difference between Slovak enterprises and foreign-owned enterprises that are engaged in optimizing reverse logistics and waste disposal?
6. Is there a statistically significant difference between Slovak businesses and foreign-owned enterprises that have a negative environmental impact reduction strategy as part of the overall business strategy?
7. Is there a statistically significant difference between Slovak enterprises and foreign-owned enterprises that can document processes with activities in the areas of quality, environment, ethics and security?
8. Is there a statistically significant difference between Slovak enterprises and foreign-owned enterprises that have a formalized declaration on Corporate Social Responsibility? [19].
9. As half of the statistical tests of the research question 1 was not acceptable, we used the Fisher test (Table 2).

**Table 1.** The results of the comparison of the differences in occurrence of taking into account the principles of green marketing in the process of strategy development.

	Question 1.	Question 2.	Question 3.	Question 4.	Question 5.	Question 6.	Question 7.	Question 8.
Foreign companies (50)	14% (7%)	62%	44%	82%	88%	76%	56%	20%
Slovak companies (22)	27% (6%)	86%	14%	68%	86%	45%	59%	0%
Difference in shares	(−) 13%	(−) 24%	30%	14%	2%	31%	(−) 3%	20%
Total	13 18.05%	50 69.44%	25 34.7%	56 77.7%	63 87.5%	48 66.6%	41 56.9%	10 13.8%

**Table 2.** Fisher's test results.

Question	p-Value	Significance Level	Reliability Interval	Acceptance/Rejection of the Hypothesis	Interpretation
1.	0.1974	0.01 0.05 0.1	99% 95% 90%	Acceptance	There is no statistically significant difference between Slovak and foreign companies in the use of life cycle analysis (LCA).
2.	0.049	0.01 0.05 0.1	99% 95% 90%	Acceptance Rejection Rejection	There is a statistically significant difference between Slovak and foreign enterprises in setting measurable targets in 3P.
3.	0.00156	0.01 0.05 0.1	99% 95% 90%	Rejection	There is a statistically significant difference between Slovak and foreign enterprises that have a developed stakeholder map.
4.	0.2263	0.01 0.05 0.1	99% 95% 90%	Acceptance	There is no statistically significant difference between Slovak and foreign enterprises in the application of prudent procurement.
5.	1.00	0.01 0.05 0.1	99% 95% 90%	Acceptance	There is no statistically significant difference between Slovak and foreign enterprises in the optimization of reverse logistics and waste management.
6.	0.0156	0.01 0.05 0.1	99% 95% 90%	Acceptance Rejection Rejection	There is a statistically significant difference between Slovak and foreign enterprises that have a negative impact on the environment as part of the overall business strategy.
7.	1.00	0.01 0.05 0.1	99% 95% 90%	Acceptance	There is no statistically significant difference between Slovak and foreign enterprises that have certified processes in terms of safety, ethics and environmental issues.
8.	0.0262	0.01 0.05 0.1	99% 95% 90%	Acceptance Rejection Rejection	There is a statistically significant difference between Slovak and foreign enterprises that have a formal declaration of CSR.

Note: 3P indicated Tripple-bottom line (economic, social and environmental spheres).

### 3.2. Research Question No. 2

Do enterprises that apply the principles of green marketing have a better competitive position in the market?

To answer this research question, we have determined the hypothesis:

Is there a statistically significant relationship between the application of green marketing principles and the competitive position of the firm and the overall competitiveness of the company?

In order to preserve all the green marketing roots, we have identified the main areas that include specific factors related to the implementation of green marketing. The areas are market position, business performance (production process productivity), and corporate responsibility. As we explore the linear relationship between the dependent explanatory variable (principles of green marketing) and the independent variables (market position, production efficiency and social responsibility), we will use the method of multidimensional descriptive statistics. Since the goal is to reveal the causal relationship between variables, it is desirable to use the experimental data we obtained from the questionnaire survey.

Table 3 shows us the correlations between the variables and the factors, factor charge.

Choosing the main components has ensured the least loss of file variability so we can perform multiple regression analysis. The results are shown in Table 4, all of which were tested at a significance level of  $\alpha = 0.05$ .

The correlation coefficient reached 0.82, the R-square value 0.71, and the F value 18.74 at significance level 0.00, indicating the relationship between green marketing and competitive business, so we accept the hypothesis of the research question 2, and that there is a statistically significant relationship between the implementation of the principles green marketing and the competitive position of the business on the market and its overall competitiveness. There is a strong correlation between the studied variables, which implies a linear relationship between them. Nevertheless, there are likely to be other variables that indirectly affect the studied variables, power gap, individualism vs. collectivism, masculine vs. feminine society, prevention of the risk of change impacts, long-term orientation or benefit. Based on the results of our marketing surveys, research responses, and studies of available resources, we have come to the conclusion that there is currently no comprehensive green marketing implementation model linking environmental consumer behavior with a link to the company's marketing strategy. It is worth highlighting that even though we have investigated companies operating in the supply chain of the automotive industry in Slovakia, the results and the implementation process can be used, taking into account certain specificities, within any industry.

If businesses are not trying to be sustainable, it is very likely they will be overtaken by competitors. Transparent information designed for customers must meet their expectations and businesses must be able to prove their environmental performance. This gives the answer to the question of why businesses should implement the concept of green marketing into business processes.

Prior to implementing the green marketing principles, an enterprise needs to consider areas for measuring the environmental impacts of an enterprise, an environmental design, and an enterprise culture. The cycle of obtaining a comprehensive eco-competitive beneficial advantage begins with a change in product design, enterprise culture, and environmental impact analysis of enterprises, and ends with the analysis of the competitive environment. The cycle identifies all processes and values while analyzing the overall environmental impact of the business by using the correct information from the overall logistics chain and the competitive environment.

**Table 3.** Factor charges between variables.

Market Position Competitiveness Factor Factor Charge		Business Performance Competitiveness Factor Factor Charge		Social Responsibility Competitiveness Factor Factor Charge	
Market share	0.58	Flexibility of adapting the production process	0.68	Transparent and responsible behavior	0.75
Export Structure	0.13	Cost-Orientation	0.75	Productivity of employees	0.70
The number of carmakers taking the company's products	0.76	Setting measurable goals	0.36	Membership in international automobile organizations	0.80
ROA	0.70	Adequately educated workforce	0.30	Building long-term good relationships within the value supply chain	0.82
ROE	0.24	Innovative ability	0.76	Content-based and education-based communication policy	0.25
ROS	0.78	Determination of measurable goals	0.76	Community support	0.35

Note: ROA is Return on Assets; ROE is Return on Equity; ROS is Return on Sales.

**Table 4.** Multiple regression analysis results.

Independent Variables	B (Parameter Estimate)	T-Value	Sig ( <i>p</i> -Value)	R	R-Square	F-Value	Sig ( <i>p</i> -Value)
Market position	0.72	9.47	0.00	0.82	0.79	18.74	0.00
Business performance	0.58	9.10	0.00				
Social Responsibility	0.21	2.29	0.031				

#### 4. Discussion

Accepting the principles of green marketing increases the value of the company's products, the company gains a competitive edge, improves its image, gets to new markets and is prepared to cope with the environmental pressures of stakeholders.

The theoretical part of the contribution was devoted to the characteristics of green marketing in the context of gaining competitive advantage for the enterprise. We have outlined ways to achieve it within the overall enterprise strategy, the benefits of its implementation. As part of the analysis of the current state of the examined issue, we pointed out the current trends of the development of green marketing and responsible business in foreign companies as well as in Slovakia, based on secondary sources, statistical data and realized global surveys. The aim was to demonstrate the potential for gaining competitive advantage and to unequivocally confirm the significance of the implementation impact of the green marketing principles on corporate practice.

A global study of the state of green marketing principles implementation has shown that nearly 50% of those surveyed have set global targets for reducing energy, water and material consumption. In positive terms, among the companies surveyed in Slovakia, 69% of enterprises have set measurable targets in these areas, and up to 47% of enterprises said that if costs were to be reduced, it would be in the areas of costs of material and energy consumption. This is linked to low car weight trends, material innovation and a total reduction in CO<sub>2</sub> emissions. According to the GreenBiz Global Survey, the percentage of businesses that try to confirm their activities and commitments by a third party for consumer confidence is 40%. We can also be positive about the fact that these businesses are trying to influence the entire supply chain and require responsible access from their practitioners as well. In the name survey conducted, positive trends have been confirmed by us and, in total, up to 78% of enterprises have indicated that they apply the principles of sustainable procurement when purchasing materials. Furthermore, in our primary survey, we asked about the optimization of reverse logistics in the company and the effort to eliminate waste. Up to 63 of the 72 enterprises surveyed indicated that they are doing many activities to optimize reverse logistics and produce the smallest amount of waste.

A comprehensive environmental impact assessment of the enterprise is carried out using product life cycle analysis (LCA analysis). We have not found any study to provide information on how many businesses perform this analysis, but we know that its principles are based on the ISO 14000 certification and its related systems EMS and EMAS management systems, whose deployment rate in Slovakia is very low. According to our survey, only 10 of the 72 observed businesses use LCA analysis. We consider this to be a weakening fact, as the process of change to an environmentally friendly business and adherence to the principles of green marketing requires a change in overall strategy in planning, processes, product policy, and promotion.

Also, no study has definitely confirmed the direct link between the company's competitive ability, its better position and the implementation of green marketing. This opinion is also confirmed by the questionnaire question in which we asked whether the environmental activity of the company is related to greater competitiveness. Up to 56% of managers have answered unequivocally that they are not. The risks that managers can associate with the implementation of the green marketing strategy can be summarized in the following categories: time consuming; investment demand and skilled workforce; conventional product design has long been tested; customers do not have to accept new products. However, when we asked for a particular plant related to the implementation of green marketing with a link to competitive ability, which we dealt with in research question 2, we can see that the relationship between these business categories was confirmed. Thus, we can avoid the most important benefits that are related to the implementation of green marketing principles within companies operating in the automotive supply chain in Slovakia:

- the benefits of new product solutions, reduced volume and weight, and reduced energy performance,
- the added value of adding value in the end-of-life cycle, as the materials can be reused or recycled,
- the benefits of valuable, transparent and transparent backgrounds for marketing communications,

- increasing motivation and loyalty of employees,
- proactive business, generating cost savings.

Despite the high correlation in research question 2, it should be noted that there may be other variables indirectly enhancing this relationship. We would propose to address this in future research.

From the point of view of future research, there are several possibilities for further theoretical work in this area. First, focusing on the non-linear path between sustainable behavior and the competitive advantages of Slovak business entities by identifying the relationship between cultural values and the degree of environmental management of business subjects or consumer behavior. In the case of future research, this can be of particular benefit in considering subjects, since understanding the relationship between Hofstede's dissatisfaction and consumer behavior is important from the point of view of the market reaction, and the acceptance of product-related changes whose properties will have to change under the pressure of legislation or of its own sustainable solutions. Ultimately, research should also focus on the nature of green marketing, because there are inconsistencies (some of them describe it as a philosophy, strategy, managerial process or environmental management tool).

## 5. Conclusions

A key area in each business is the right choice of strategy on which the further development of the business and its position in the market depends. The present is characterized by hyper-competition. On the other hand, it should be noted that there is a combination of phenomena that have a negative impact on the environment with production and consumption itself. Sustainability implies that we now have to use all the resources so that we do not rely on the same conditions for future generations.

In the present paper, we focused on summarizing the green marketing principles of green marketing, the concepts related to it, and on establishing the relationship between the implementation of the green marketing principles and the competitive position of the company on the market. To prove relationship, we used a multiple regression method to reveal the relationship, despite many variables. This was preceded by a factor analysis that helped us to select the main factors of influence as we worked with a great deal of data. We also looked at the differences between businesses with different ownership structures as the extent of implementation of green marketing principles is not sufficiently scrutinized in Slovakia, and no available resources provide such information. The objects of the survey were companies operating in the supply chain of the automotive industry in Slovakia, mainly due to the significant share of the automotive sector in the GDP of Slovakia, and also because of the fact that automobile transport contributes to the biggest environmental polluters.

The aim of the contribution was to prove the relationship between the implementation of the principles of green marketing and the competitive market position of the company, which we also found by analyzing the statistical hypotheses in the research questions that there is a statistically significant relationship between the application of green market principles and the competitiveness of enterprises. This relationship is indirectly influenced by other factors that may be the subject of further research. In addition, we consider the benefits:

- analysis of the principles of the green marketing strategy and marketing, supplemented by an indication of the current state of their use in the world and in Slovakia.
- finding a measure of the implementation of green marketing principles and differences between enterprises with different ownership structures in companies operating in the supply chain of the automotive industry in Slovakia, based on the conducted marketing survey.
- establishing the relationship between the implementation of green marketing principles and the competitive position of the enterprise.

The results of any findings made could be incorporated into corporate strategy, as well as the entire automotive industry for the coming years, and not only in Slovakia. Moreover, the contribution could help the Automotive Industry Union to present the requirements to the government and help to influence the creation of incentives for the market for alternative propulsion vehicles.

**Acknowledgments:** This contribution is a partial output of the project APVV-15-0505: Integrated Model of Management Support for Building and Managing the Brand Value in the Specific Conditions of the Slovak Republic.

**Author Contributions:** Anna Krizanova and Martina Rypakova conceived and designed the experiments; Dominika Moravcikova and Jana Kliestikova performed the experiments and analyzed the data; Martina Rypakova materials and analysis tools; Dominika Moravcikova and Anna Krizanova wrote the paper.

**Conflicts of Interest:** The authors declare no conflict of interest.

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