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Designing Green Marketing Pattern in Iran's Oil Industry

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ABSTRACT

To be in line with the new environmental paradigms, the present study aims to design an Eco-friendly marketing pattern in Iran's oil industry. The methodology is a sequential exploratory one. In the qualitative section, grounded theory is used. The creative data were gathered through a theoretical sampling of in-depth, semi-structured interviews of 15 experts from the oil industry. The initial model of the research was achieved with 19 (major) factors which were divided into 6 aspects according to the experts' views: causal circumstances, the major factor, background circumstances, interveners, strategies and consequences. Next, in the quantitative section, the validity of the research was investigated through a surveying method and the questionnaire tool. The statistical population includes a limited number of managers and experts from the oil industry in research and planning fields, counting up to 170 people from whom 118 were selected through random sampling. After evaluating the reliability of the questionnaire, the questions themselves were validated and their number was narrowed down. Carrying out an explanatory factor analysis, the components were reduced to 14 and the dimensions to 5. The relationship between the dimensions was assessed through the correlation test and then the final pattern was designed. Eventually, the theory of the study was developed under the supervision of experts. The significant results of this study were finding the interveners, including productivity, governmental support, social institutions, and sustainable development along with the strategies, including reviewing the energy section structure, improving the managers' perspectives and developing the green investments.

1. Introduction

Marketing means detecting the potential and actual needs of the customers, identifying target markets, speculating the number of the customers and the income from the sales, and finally providing the needs of the customers and valuing them. Not only does green marketing pay attention to the requirements of the customers, but also it considers the needs of the society one of the most important of which is environmental concerns. Accordingly, the related activities are in line with the company's social responsibility and sustainable development. One of the crucial reasons to why green

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marketing is used in businesses is the incremental increase of environmental awareness and concern in both the customers and their preference over buying green or eco-friendly products. In the global energy market, with the introduction of various sources, significant development of technologies, and international contracts to reduce the environmental pollutants, the markets have been evolved and new paradigms are created. The advent of renewable energy, unconventional gas and oil resources (Shale), electrical and hybrid cars, and saving renewable energies with budget prices are a few examples of how the global market has changed for energy. These changes have caused the introduction of a variety of energies and thus, the customers have a wider range of options to choose from. Since Iran is a country rich with fossil energies of gas and oil and the oil industry distributes them. This industry takes up a noticeable share of the country's income and also produces a major part of the pollutants. While preserving the environment and people's health is highly dependent on the emission of the pollutants, the importance of green marketing is further highlighted in the oil industry.

If there is not proper attention given to green marketing in the country, especially major industries like oil industry, in addition to losing economic benefits, natural resources and people's health is also lost. Wasting underground resources, water, air and soil pollution, death of aquatic creatures, loss of the ecosystem are some of the casualties of the major industries and once there is not adequate attention, irreparable loss of life and property will occur. This study aims to answer the following questions:

1. Why should oil industry move towards green marketing?

2. What are the background circumstances needed for green marketing in oil industry?

3. What factors are influential in green marketing in oil industry?

4. What strategies are required to fulfill the green marketing goal in oil industry?

5. What consequences will be brought by implementing the green marketing strategies?

2. Literature review

According to the definition of social marketing, green marketing is the development of new products and their marketing to minimize the negative impacts on the environment. Green marketing includes all these activities: consumption, production, distribution, and packaging of the products that are responsible against the environmental concerns. Green products are recognized through licenses and labels that reads as eco-friendly (Norouzi and Mohammadi, 2016). Green marketing is a social procedure where individuals and groups fulfill their needs and requirements through exchanging the products and values in a way that is ethical and minimizes negative impacts on the environment (Kai et. al, 2015). In other words, green marketing includes all activities to generate and facilitate the exchanges to fulfill human needs and desires, while minding how these desires have least destructive effects on the environment. Rarely does the environment fit in all the aspects of one company. In addition to this, in many companies, the traditional criteria are being reviewed in terms of success for green innovations. Each company has its own specific marketing (Elena et. al, 2013). One of the reasons for green products demand and increasing commercial activities friendly with the environment is increasing awareness regarding the environmental issues and adding strict rules by the related international institutions which has led to a movement for monitoring the performance of the companies (Gurau, 2005).

Green marketing is known for its competitive advantage, low costs due to increasing the productivity, recycling the production wastes and developing new products in accordance with the environment by the organizations and the institutions (Aren and Yilmaz, 2008). Environmental concerns have not only demanded for new products, but also caused reconsideration in the current ones and in some cases, have evolved the formula or the production procedure of a product. Currently, to reduce the negative effects of production on the environment and the society, most efforts are done for designing new products instead of improving what already exists (Souplico, 2016). Success in the development and expansion of green products requires procedures with high levels of homogeneity, communications, good information, careful attention to environmental concepts, support for top management and the use of a clear approach to measurement and modeling (Shamra and Ryler, 2014). Price is a defining factor integrated with green marketing. Most of the consumers are willing to pay more if only they grasp the importance of the product (Shamra and Ryler, 2014).

Focusing on the spread of information locally is a proper approach that should be taken into consideration in promotional activities, but doing so requires real changes in activities. A company should investigate what the customers would consider important and who should be informed before actually beginning the spread of

information (Kumar et. al, 2013). Choosing available time and location will have an impact on the customers. Many of the green consumers have stated that they have to go a long way to buy the required green products. Fuel consumption and fossil energies to get the products to the customers is truly an environmental challenge in many businesses. Levying heavy taxes on the use of fossil fuels can have a major influence on the economy of transportation and companies are encouraged to use the inner-distribution services of giving products to companies and local networks. Achieving optimal performance in transportation and distribution is a very difficult task (Hekmat Nejad, 2011).

Green marketing seeks to find ways of meeting the customer needs, both the individuals and the industries, using marketing activities and using limited resources so that the sales goals of the organization is also met (Kai et. al, 2015).

Optimal and effective use of limited resources is one of the purposes of marketing and if the environmental goals are also taken into consideration, green marketing occurs (Elena et. al, 2013).

Green marketing measurements appear in three stages in any company. These stages are: strategic level-semi-strategic level and tactical level (Shamra, A., & R.Iyer, 2014). Green activity in the tactical level causes a drastic change in the operations and the evolvements take place at the operational level; for instance, changes in promotions and advertisements (Kumar et. al, 2013). In the semi-strategic level, being green is an equivalent for changes in institutional approaches and changes the behaviors. In the strategic level, fundamental changes occur in the philosophy of the organization (vision, mission, major goals and strategies). Strategic greenness is often in need of a change in the mentality of people (Polonsky & Rosenberg, 2001).

Table 1: Green marketing various levels (Shamra and Lyer, 2014)

Green marketing levels	Advantages	Effects
Strategic	• More effective communication with customers • More profit • Reaching company goals • Achieving competitive advantages • Lowering the costs • Increasing the brand credibility	Commercial development
Political	• Effective use of the resources • Lowering the emission of greenhouse gases • Lowering the air pollution	Improving the environment
Operational	• Increasing environmental awareness • Improving general health of people • Increasing life expectancy	Social welfare (increasing life quality)

3. Green marketing in oil industry

Oil industry: this industry includes the following procedures: discovery, development, production, processing, transportation of raw oil and oil products, and marketing for oil products. It plays a significant role in global economy, because in addition to providing the energy of the countries, it causes them to develop and expand.

This industry is divided into three main sections: upstream, midstream and downstream. The upstream

section involves discovering, developing and producing activities. The midstream is related to the transportation of oil, gas and oil products to export terminals, refineries and petrochemical units. The downstream is engaged with refineries and petrochemical units that convert oil and gas or petroleum products into those with higher values.

Green marketing mix generally includes: green product, green price, green place and green promotion. The following will explain about them in oil industry considering the experts' opinions:

Green product: it refers to a product in whose process of production, environmental concerns are observed, or the emissions of pollutants are minimized, or new eco-friendly products are produced. In oil industry, increasing efficiency, reducing and storing carbon, reducing waste and scrap or producing new products from them, and altering fuels with high pollution can be mentioned during the production procedures.

Green distribution: it refers to taking into consideration the environmental concerns during the process of distribution of products. In oil industry, using distribution channels with appropriate delivery time and price and the lowest emission of pollution is crucial.

Green price: it pertains to pricing which increases the efficiency of materials and energy in production sections and it can leave a considerable impact in improving the environment. In oil industry, decision-making regarding on subsidized or free pricing will have a noticeable impact on the performance of production units in up and down streams.

Green promotion: educating the customers on the activities of green organization and providing explanations on their benefits for both the society and the environment and encouraging them to buy green products. Informing can occur through ads, public relations, media and social networks.

A summary of the most important studies which have already been done on green marketing and their most significant results are presented in table 2.

Table 1: Most important domestic and international studies regarding green marketing and the findings of each study

Name of the researcher	Topic of the research	year	Important findings
Elhuni and Ahmad	Key Factors in Evaluating the Sustained Development in Oil and Gas Fields	2017	Introduction of key factors in three categories of economy, environment and society and evaluating them based on surveying the journalists
Moravcikova et. al	Green marketing as a benefit for competitive advantage for businesses	2017	Innovation, achieving competitive advantage, promoting the environmental performance, increasing the awareness of the customers regarding environmental concerns and reducing the negative environmental impacts in services and products
Sedaghat et al.	Assessment of the Relation between Different Aspects of Social Responsibility of Companies and Customer Loyalty	2017	The relationship between customer satisfaction and preserving the environment, minding the society's health, the positive relationship between customer satisfaction and their performance.
Haghighi et. al	The Influence of Management's Support from the Green Activities on the Green Marketing Strategy and the Environmental Function of Industrial Business in Iran	2016	The environmental culture in industrial business has a significant, positive impact on green marketing strategy and the manager's support from green activities can strengthen the environmental culture in these industries in Iran. Adopting a green marketing strategy in Iranian businesses improves the economic performance. However, since environmental issues are not

			considered as strategic and the businesses do not pursue the updated standards, environmental performance is in a poor condition.
Azar et. al	Evaluating the Provision of Green Chain in Asalouyeh Refineries, Using a Mixture of Fuzzy and Nonlinear Modeling	2016	National and international pressures, presence in the green chain provision, public opinion pressure, incremental increase of public demand for eco-friendly products, increased number of NGOs supporting the environment, the increased number of insitutions improving the environmental performance, achieving the competitive advantage.
Omidvar et al.	Analysis of Green Supply Chain Management Barriers Using Interpretive Structural Modeling Case Study: Pars Khodro Company	2015	lack of support from chief managers, lack of presence and competition in international markets, lack of technical infrastructure, lack of knowledge and training for environmental issues, lack of sufficient legal leverage to implement environmental laws, lack of environmental purposes and strategies in the company
Rood Poshti et al.	Designing a Sustainable Model of Marketing in Automobile Industry of Iran	2014	Standardization, improving the processes of design and production, reducing the costs, acquiring export markets, being innovative, preserving the environment and increasing safety in addition to developing technologies, reducing effluents and waste which are of supreme importance in oil industry
Schneider et. al	Moving Towards a Sustained Development in Oil and Gas	2013	Introduction of environmental assessment indicators of oil industries such as: waste rate of hydrocarbons and the degree to which they are recycled, greenhouse gases emission rate, controlled disposal of hydrocarbons, collected amount of wastes harmful for the environment, water consumption rate and its treatment.
Menguc et al.	The Mutual Effects of Inner and Outer Factors on a Hyperactive Environmental Strategy and Its Impact on the Performance of the Company	2013	The impact of the attitude of the owners of the organization on adopting a green marketing strategy, improving the performance of the companies by green marketing strategies, balancing the relationship between the perspective of the founders and the green marketing strategies by governmental regulations.
Manafi et al.	The Relationship between Consumers' Environmental Awareness and Companies' Strategies	2011	The effect of the customers' environmental awareness on the companies' strategies, the significant impact of anthropological factors and the psychological characteristic of the customers on the strategies of the companies.
Mohammadian and Khataei	The Relationship between Psychological, Social and Behavior of the Green User	2011	The presence of a relation between environmental perspectives, individual norms, perceived effectiveness by the green users and social norms with the behavioral aspects of the users (shopping behaviour, support behavior of environmental practices)

4. Research methodology

The methodology is a sequential exploratory one and has a qualitative and quantitative section. In the exploratory, the qualitative section is prioritized. The studies which are carried out based on this method are usually categorized into two levels. In the first stage, the researcher uses the qualitative approach, gathers information and analyzes them. Then, it uses these data in the quantitative section. This method is often used when the researchers want to develop the criteria or have a better tool to investigate a variable of a finite sample, or aim to know whether the results of a small sample (the qualitative step) can be generalized to a larger community (quantitative step) or not. One of the features of this method is that data gathering and analysis in both qualitative and quantitative approaches happen linearly and not simultaneously. Data analysis in either of the approaches is done independently and in order, the results of which is used in the quantitative stage. Tables 3 and 4 present the summary of quantitative and qualitative methodologies.

As can be seen in table 3, 15 experts of the oil industry were chosen for interview using theoretical sampling. In theoretical sampling, sample selection (not only people, but also the required data) were identified considering the analysis of the previously collected data. Based on this type of sampling, the researcher has to call individuals who are aware of the aspects of research question to gather data (purposive sampling). Once theoretical saturation is reached, sampling finishes. That is, the stage when we realize that no new material is added to the subject under discussion.

The interviews continued up until we were saturated. Saturation level is a point from where no new data is added to the previous findings and only repetitive codes are achieved. Data gathering occurred through semi-structured deep interviews. The methodology was the grounded theory. Data analysis required open, axial and selective coding. These codes were generated by the content-creator software (Atlas.ti) and its reliability was confirmed by responsive validation method. In this method, the findings are double checked with a few experts.

Table 2: methodology in the qualitative section

Statistical population	15 members of oil industry experts
Sampling method	Theoretical
Methodology in qualitative section	Grounded theory
Data gathering tool	Semi-structured deep interview
Data gathering tool assessment	Responsive validation method
Data analysis method	Open, axial and selective coding with the help of experts and Atlas.ti software tool

Table 3: methodology in the quantitative section

Statistical population	170 members of oil industry experts
Sampling method	Simple stratified sampling
Sample size	Morgan table-118 samples
Data evaluation method	Surveying
Data evaluation tool	Questionnaire
Data evaluation tool assessment	Formal validity by the experts' ideas Structural validity (based on the confirmatory explanatory factor) Reliability based on Cronbach's alpha coefficient: 0.901
Data analysis method	Factor analyses and descriptive and inferential statistical analyses (investigating the normalcy of the data through Kolmogorov–Smirnov test, analyzing the relationship between the coefficients

	using Spearman correlation and structural equation tests, model fitting by structural equation test using SPSS and LISREL soft wares)

In the quantitative section, based on table 4, surveying method is used and the questionnaire tool in fact made it possible while it was validated itself, as well. The statistical population of the quantitative section includes managers and researchers of the oil industry in research and planning parts who have a vision of upstream, midstream and downstream sections of oil industry, counting up 170 people. Sample size was measured to be 118 according to Morgan table. Simple stratified sampling was used in distributing the online and paper questionnaires. Cronbach's alpha method and SPSS software was used to evaluate the reliability of the questionnaire. In the beginning, 30 questionnaires were pre-tested and after validation, all questionnaires were distributed. The reliability of for all 118 questionnaires were 0.901, meaning that it was reliable enough. The reliability for main variables is shown in table 5:

Table 5: reliability of main variable

Cronbach's alpha	Number of elements	Main variables
0/840	4	Strategies
0/776	3	Inventions
0/852	4	Background circumstances
0/875	2	Major topic
0/912	1	Causal circumstances

Once the validation and reliability of the questionnaire was confirmed, exploratory and confirmatory factor analysis along with descriptive and inferential statistical analysis was carried out using statistical soft wares[11].

5. Research findings

The initial model of the research was achieved with 19 (major) factors which were divided into 6 aspects according to the experts' views: causal circumstances, the major factor, background circumstances, interveners, strategies and consequences. How the central categories are divided in the aspects of the research is presented as follows:

Causal circumstances: the requirements and the effects of the environment, people's health. The major factor: green marketing. Background circumstances: environmental impacts on upstream, midstream and downstream sections of oil industry, the structure of oil industry, technical knowledge. Interveners: political, social and governmental elements. Strategies: macro energy policies, structure, energy efficiency, economics, technology, manager's attitude, human resources, investment, culture. Consequences: sustainable development.

Repetition rate of each aspect in the interviews is presented in table 6. As can be seen, the highest rate belongs to the major factor (57) and the lowest belongs to consequences (22). These numbers show that most of the interviewees pay more attention to the major factor (green marketing) than to the consequences (sustainable development). Other aspects to which the interviewees have paid attention are background circumstances (52), causal circumstances (39), and interveners (24).

[1] SPSS, LISREL

Table 6: Research code repetitions in the interviews

Dimensions	Interviews' number															Total Sum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Background circumstances	3	15	2	4	3	9	0	0	5	0	1	0	1	4	5	**52**
Causal circumstances	4	0	1	5	2	4	4	3	5	1	2	5	3	0	0	**39**
Major factor	2	3	3	11	4	4	2	5	1	2	1	2	9	4	4	**57**
Interveners	0	1	0	1	0	1	2	8	3	0	0	1	3	3	1	**24**
Consequences	0	0	2	0	8	3	0	0	1	0	0	4	0	2	2	**22**
Strategies	20	9	22	16	7	17	6	13	11	11	19	25	0	6	4	**186**
Total codes	29	28	30	37	24	38	14	29	26	14	23	37	16	19	16	
Total Sum	**380**															

Table 7 illustrates the dimensions, major factors and concepts. Analyzing this factor, it can be understood how research dimensions can relate to initial concepts which are yielded from open coding.

Table 7: the relationship between the concepts, major topics and the dimensions of the study

Initial coding	Major topics	Dimensions
Energy's impact on the environment, international laws about the environment	Environmental	Causal circumstances
The price of the fuel, green marketing, green products	Green marketing	Axial topic
Energy market, international relations, policy making, initial study, renewable energies, strategies	Macro policies	
Teaching human resources	Human resources	Background circumstances
Long-term planning, oil organization, oil policy making, oil laws, energy providing companies	Oil structure	
Clean energy, innovation, technology	Technology	
Indirect costs of the pollutants	Health	
Energy efficiency	Energy efficiency	Interveners
Immigration, NGOs, social costs	Social	
Taxes, standards, rewards, government	Governmental	

Resource diversification, development in three axes: economic, social and environmental	Sustainable development	
Environmental structure (health, safety, environment), structure, laws and regulations	Structure	strategies
People's attitudes, strategic management	Managers' attitudes	
Developing investments	Investment	

Up to this point, open and axial coding occurred as has been explained before. For selective coding which is the research theory, first the model was validated and then, based on the final model, research theory was presented.

In the quantitative section, to validate the achieved model from the qualitative section, first the measurement tool, i.e. the questionnaire, was designed according to the text of the interviews and the codes. Then, once the questionnaires were distributed and filled, the statistical analysis was carried out.

In the exploratory factor analysis, first the questions of the questionnaire were validated by software and their number reduced to 49 from 78. Next, the questions from the software were divided into 14 groups and accordingly, the factors which are the major topics, reduced to 14 from 19. In the final stage, the factors were grouped and diminished to 5 dimensions. In confirmatory factor analysis, the relationship of components with each other and with the questions was investigated and confirmed.

To determine the relationship between the variables and illustrating the final model, statistical tests were used to make sure the data were distributed normally and that coefficients were used properly.

Having determined the relationship between the variables, the final paradigm model (final axial coding) was depicted based on figure 1.

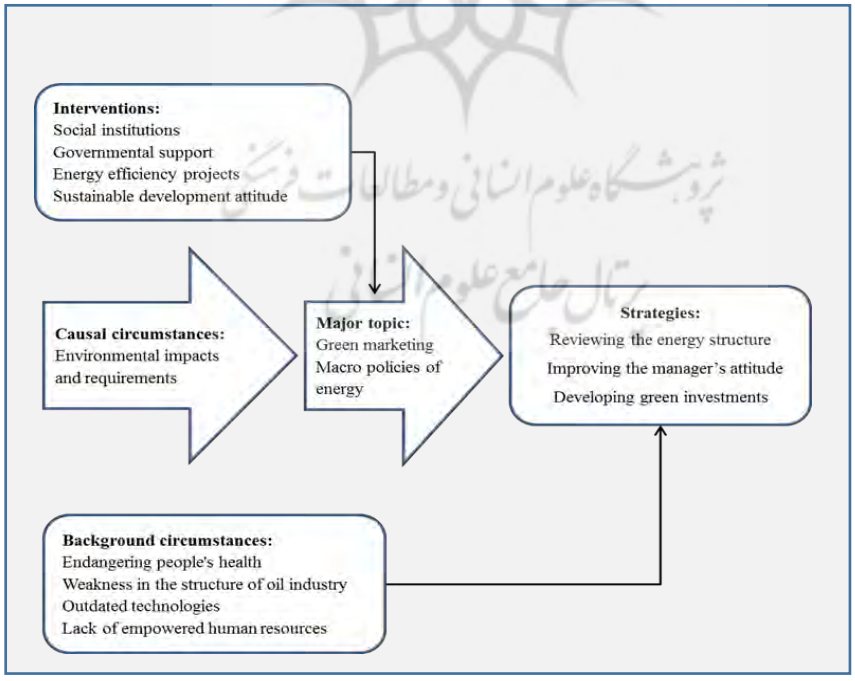

Figure 1: the final paradigm model of the research, the

According to this figure, the major variables (dimensions) are: causal circumstances, the major factor, background circumstances, interveners, and strategies for which there are different factors which will be explained here:

Causal circumstances: the requirements and the effects of the environment.

The major factor: green marketing and macro energy policies. Background circumstances: people's health, oil structure, technologies, human resources.

Interveners: social institutions, governmental support, energy production, sustainable development.

Strategies: energy section structure, manager's perspective, investment development.

According to the final model and the relevant concepts to each component achieved by open coding, the theory of this research (selective coding) was finalized with the help of experts as follows:

Theory of the research

Based on the green marketing pattern in today's oil industry of the country, paying attention to the environmental strategies which are in line with economic ones in order to meet the needs of the customers and environment activists in the international markets for energy, prevent jeopardizing people's health, and preserve the planet as well as observe the rules from international contracts on the environment which are growing in number due to the crises. Taking action briskly towards the sustainable development is obviously necessary in oil industry, accordingly.

Environmental impacts stemming from gas pollutants in the air in all three up, mid, and down streams and wastes in production units of oil industry, low production of energy, lack of updated technologies, lack of proper organization structure, all form background circumstances. An appropriate organizational structure should be designed to enable the monitoring of environmental impacts throughout the value chain while facilitating the interactions of marketing and environmental units. Low energy production should be compensated for by efficient projects and the technical knowledge should also be highly important due to its ability to influence research development, expanding and lowering environmental impacts in everywhere including flares, wastes and effluents.

Green marketing can hugely help the oil industry become green by identifying current markets, and predicting the future of energy, using tools such as standardization, green labeling, in production procedures and distribution along the value chain, substituting clean products with polluting ones, pricing the products and promoting green activities including promotion of knowledge and green culture.

The interveners play a significant role and should be taken into consideration when making decisions for implementing green marketing. The identified interveners in this model are social factors such as non-governmental institutions and associations to promote green culture and governmental support such as punishing and rewarding policies like carbon and energy taxes, tax exemptions, energy efficiency projects and attitudes towards sustainable development. Detecting these interveners and how they impact green marketing should be paid attention to.

Macro strategies to implement green marketing in Iran's oil industry are: designing a proper structure for the energy section, improving manager's attitude (now, the dominant attitude in oil industry is moving towards economic development and increasing production and sales of petroleum products and products which will keep the country from having a clean environment, healthy people, and obeying the international contracts), and developing the investments.

Some of the most important consequences of this model are efficient energy production, balanced development in economic, environmental and social development and a move towards sustainable development because of its optimal energy use.

Discussion

In this section, the findings of this study will be compared to the research done before (already mentioned in literature review section).

In Elhuni and Ahmad's study, key factors were identified in three categories of economy, environment and society and evaluated based on surveying the energy sector experts. In the same line, Schneider et al introduced environmental assessment indicators of oil industries and evaluated in important oil companies. The set of these indicators can be used in the implementation of green marketing in oil industry. In the study of Moravcikova et al., the advantages of green marketing proves to be: innovation, achieving competitive advantage, promoting the environmental performance, increasing the awareness of the customers regarding environmental concerns and reducing the negative environmental impacts in services and products while in this study, the relevant factors are parts of the advantages of green marketing pattern in oil industry which have been pertained to in the literature review section. In the study of Sedaghat et al, the relationship between customer satisfaction and preserving the environment as well as minding the collective health of the society was

approved, and in this study these two factors are considered in leading to green marketing in oil industry in the related pattern. Haghighi et al focused on the influence of management's support of the green activities on green marketing strategy and the environmental function of industrial business in Iran. The findings show that the environmental culture in industrial business has a significant, positive impact on green marketing strategy and the manager's support from green activities can strengthen the environmental culture in these industries in Iran. In this study, similarly, promoting the attitude of the managers is considered a strategy for implementing green marketing strategies which pertains to the spread of environmental culture and education in oil industry. In Azar et al's study, based on the findings, the factors that move the supply chain of petrochemical industry towards becoming green are: National and international pressures, incremental increase of public demand for eco-friendly products, increased number of NGOs supporting the environment, and achieving the competitive advantage. In this stydy, in addition to above mentioned factors, factors such as energy efficiency and technical knowledge are considered. Omidvar et al. analyzed the barriers to green supply chain management in Pars Khodro Company. Based on the findings, the most important factors are: lack of support from chief managers, lack of presence and competition in international markets, lack of technical infrastructure, lack of knowledge and training for environmental issues, lack of sufficient legal leverage to implement environmental laws, lack of environmental purposes and strategies in the company. In this study, the factors like lack of IT infrastructure and lack of sufficient legal leverage to enforce environmental laws are considered in the revision of organizational structure in strategy section. In Shafiei Rood Poshti's study, the tools for the application of green marketing are: standardization, improving the processes of design and production, reducing the costs, acquiring export markets, being innovative, preserving the environment and increasing safety, while in this study in addition to mentioned factors, environmental technologies for reducing effluents, waste and carbon emissions are considered which are of supreme importance in oil industry. Menguc et al, in a study named the Mutual Effects of Inner and Outer Factors on a Hyperactive Environmental Strategy and Its Impact on the Performance of the Company, showed that the attitude of the owners of the organization is effective in adopting a green marketing strategy and will improve the company's performance. Meanwhile, the findings revealed that the governmental rules can balance this relationship. In this study, improving the managers' perspectives is considered a strategy and also governmental support is one of the interveners in the final model. In the research done by Manafi et al., the relationship between consumers' environmental awareness and companies' strategies has been studied and confirmed. In the present study, too, the environmental knowledge and diffusion of its culture is taken into consideration in green marketing pattern and a new environmental paradigm is considered to be the conclusion to environmental awareness. Mohammadian and Khataei investigated the Relationship between psychological, social and behavior of the green user and confirmed it as true. In this study, the effect of consumer behavior and environmental awareness on the production processes and products in oil industry is described.

6. Conclusions

The results highlight the importance of moving organizations toward green marketing with an emphasis on environmental awareness, national and international environmental commitments, and environmentalist pressures. Some advantages are achieving competitive advantages, innovation creation, expanding environmental knowledge and culture, and pay attention to standards in production, transmission and distribution processes. Factors like attributes of senior managers, governmental rules, and environmental knowledge can highly effect on green marketing strategies. Important barriers to implement environmental marketing include: lack of vision and strategic goals, lack of environmental knowledge and training, lack of technical infrastructure and lack of legal leverages to implement environmental laws.

Suggestions for future studies

In this study, green marketing pattern has been demonstrated and the strategies are achieved. In line with this research, the following studies are suggested:

- Detailed studies of green marketing pattern and studying their sub-projects
- Reviewing the organizational structure of oil industry along with green marketing
- Reviewing the vision of energy and planning green marketing

- Implementing punishing and rewarding policies such as monetary and else to enlarge green marketing
- Studying the opportunity to create added value from pollutants and wastes of upstream and downstream sections
- Spreading the sustainable development culture in oil industry to grab the attention of senior managers to the economic, environmental and social components in development activities, simultaneously.
- Empowering NGOs to support environmental activities
- Supporting energy efficiency projects
- Analyzing the world's most recent technologies in oil industry and being able to implement them in the country

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