

DIMENSIONS OF GREEN QUALITY AND ITS ROLE IN ACCOUNTING INVESTIGATION GREEN MARKETING - A FIELD STUDY IN THE STATE COMPANY FOR ELECTRICAL AND ELECTRONIC INDUSTRIES IN IRAQ

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ABSTRACT

Customers want to obtain high-quality, environmentally friendly products, which has led to the organizations' fulfillment of that desire of customers through green quality that actively contributes to providing the production of a product of appropriate quality and suitable for environmental use, as well as contributing to the promotion of green marketing is another activity Which seeks to achieve environmental sustainability, and on the basis of the above, the main objective of the study is to clarify the role of the dimensions of green quality in promoting green marketing through a field study in the General Company for Electrical and Electronic Industries in Iraq, and after the researchers familiarized themselves with the work of the company and the personal interviews that they conducted with the managers in the company Members of the company were asked many questions related to the subject of the study, and they answered them through the questionnaire form designed for this purpose, and after data collection through the questionnaire was analyzed by the program (SPSS), and in light of the results of the analysis, the study reached a set of conclusions and proposals that fit With the nature of the study.

Keywords: Green Quality, Green Marketing.

INTRODUCTION

Green quality is a modern administrative, technical and environmental input whose goal is to set the environment standard within the quality standards and specifications in order to obtain a product free from defect and reduce pollutants on the natural environment, and to ensure that it reaches the customer using green marketing activities. Those activities are also working to achieve efficiency Marketing through the environmental dimension, in addition to that, the goal of green quality and green marketing is one goal because both of them preserve the customer and the natural environment equally, and from this point of view, the current study is divided into four axes, the first is related to the methodology of the study, while the second is related to the aspect The theoretical, while the third includes the field aspect, and the fourth deals with conclusions and proposals.

The First Axis: The Methodology of the Study

First: The problem of the study: Most of the organizations face the problem of the pollutants of their production processes that they put on the environment, which will reflect negatively on their products and marketing activities, and thus customers hesitate to buy the organization's products and will lose their market share and leave the field of competition,

then this problem made the organizations looking for solutions and came In the forefront of which is the green quality through which the organization can produce products compatible with the needs of the customer, environmental legislation and quality standards alike, as well as the green quality enhances the activities of the green marketing of the organization those activities responsible for delivering the product to the customer in a safe way, as the researched company suffers from the same The problem, the solution to this problem depends on asking the following questions:

1. Does the research sample company have capabilities to implement green quality?
2. What is the company's interest in the research sample in green marketing activities?
3. Is there a correlation and effect between green quality in green marketing?

Second: The importance of the study: The importance of the study depends on the benefits it achieves for the researched company, including:

1. Helping the company to use raw materials that are less harmful to workers and the environment by developing all its resources.
2. Enabling the company to provide environmentally friendly products that preserve the customer's health while using them.
3. Get the company to make products that can be recycled for further use.
4. The company benefits from production waste by selling it to other organizations.
5. Delivering the company the product to the customer in a safe way through practicing the green marketing mix.
6. Achieving sustainable development for the resources it uses by rationalizing its use or reducing its waste.

Third: The objective of the study: The main objective of the study is to demonstrate the role of the green dimensions of quality in promoting green marketing through a field study in the General Company for Electrical and Electronic Industries in Iraq, and from this goal we define the following sub-goals:

1. Identifying the obstacles that prevent the application of the green quality dimensions in the research sample company, as well as identifying the challenges facing the implementation of green marketing requirements.
2. Addressing these challenges and obstacles based on what is mentioned in both sides of the theoretical and practical study, and submitting proposals for the application of this topic in the company.

Fourth: Hypotheses of the study: The study is based on two main hypotheses:

1. The first hypothesis: There is a significant correlation between green quality and green marketing.
2. The second hypothesis: There is a significant effect relationship for green quality in green marketing.

Fifth: Methods of data collection: The study data were collected according to the following:

1. The theoretical aspect: To cover the theoretical side, we have relied on what is available from Arabic and foreign sources.
2. The field side: For the purpose of completing the field side, personal interviews in the company have been relied, as well as the questionnaire form designed for this purpose, as the questionnaire form was designed according to the five Likert scale.

Sixth: Study methodology: The study adopted the descriptive and analytical method.

Seventh: The limits of the study: The limits of the spatial study were represented in the Company for the Electrical and Electronic Industries in Iraq, while the limits of the temporal study extended from 9/1/2020 to 1/12/2020.

The First Axis: The Theoretical Side

The first: Green Quality: Most business organizations comply with environmental legislation that provides for the protection of humans and the natural environment from the pollutants of production processes, which necessitated them to take care of the environment by considering it in all its activities, including green quality, which refers to the production of a product that conforms to environmental quality standards, From this standpoint, this paragraph deals with the following steps:

First: The concept of green quality: the multiplicity of opinions about the concept of green quality, as (Putro, 2017) defined it as one of the dimensions that the organization relies on to prevent the production of a product that pollutes the environment in order to preserve the health of the customer and society in general. (Hung et al., 2018), is the organization's ability to make environmental considerations one of the criteria for the quality of its products to reduce its environmental impact on it, the customer and the natural environment alike, and (Khoiriyah & Toro, 2018) believes that the perceived quality in green products to protect the environment and increase customer confidence (Joshi & Bhargava, 2020) refers to the organization's translation of the customer's desire to obtain an environmentally friendly product through the environmental design of the product to make it more quality and durable, and explains (Zulkarnain et al., 2020) is to use resources efficiently and effectively to provide a product of high quality and in harmony with environmental functions, to achieve sustainable purchase by the customer.

Second: Green quality characteristics: Green quality possesses many characteristics that enable the organization to produce environmentally friendly products (Putro, 2017):

1. Increase the amount of products that use non-toxic materials.
2. Make the product not contain substances that harm the natural environment.
3. It enables the organization to produce that does not harm the environment and the customer when using it.
4. Designing environmentally friendly packages that can be recycled or refillable
5. Providing a product that is able to resist wear for a long time.
6. Recycle the product after use with ease

Third: Green Quality Dimensions: To ensure the provision of a product appropriate to green quality, many dimensions are required to be applied, namely:

1. **Performance:** It refers to the operational characteristics performed by the product that has been purchased by the customer, and the performance of the product must be environmentally friendly by analyzing the gap between the environmental performance and the environmentally friendly features associated with the product (Zulkarnain et al., 2020).
2. **Reliability:** It is to reduce the likelihood of product exposure to damage or failure during use, and thus if the product fails or stops, the work will stop and harm the environment, and in light of this, environmental measures must be taken when determining the reliability of the product for its reliability in terms of quality and environment (Hong et al., 2019).
3. **Conformity:** When designing a product, many standards are set, including environmental considerations. After the completion of production, the product is matched with the design and operating characteristics of the pre-defined standards to ensure that it complies with the standards and then delivered to the customer (Bazarli, 2012).
4. **Durability:** It means producing a product that is able to withstand all environmental conditions by taking care of the external product frame so that the product continues to work during its life span (Bazarli, 2012; Putro, 2017).

5. **Maintenance:** is the possibility of easy maintenance of the product in an efficient and safe manner that does not affect the safety of workers in that field, taking into account the green maintenance requirements (Hong et al., 2019; Joshi & Bhargava, 2020).
6. **Aesthetic features:** The design team is required to design a product that is environmentally friendly and has an attractive exterior appearance to the eyes of customers so that they rush to buy it, and this will positively affect the market share of the organization (Bazarli, 2012).
7. **Perceived quality:** The organization must assume its responsibility towards green perceived quality in order to make the customer aware that its products are environmentally friendly, and this improves its reputation in front of customers and distinguishes it over competitors (Khoiriyah & Toro, 2018).
8. **Environmental design:** It is one of the important dimensions that help the organization to make the quality of its products within the environmental conditions (Joshi & Bhargava, 2020).
9. **Safety:** The organization's product must enjoy a high degree of safety so that it does not have negative effects on the customer when using it or on the natural environment (Putro, 2017).

Second: Green Marketing: Green marketing is considered a strategic approach in establishing environmental and healthy businesses. Green marketing appeared at the end of the eighties and early nineties, and this paragraph addresses the following:

First: The concept of green marketing: Researchers disagreed about the concept of green marketing, as they defined it (Alam et al., 2012) as a set of marketing activities that prevent negative impacts on the natural environment and satisfy the needs and desires of customers. (Nasser, 2014) However, it is an integrated system approach that aims to influence the preferences of customers in a way that pushes them towards seeking products that are not harmful to the environment, so that the end result is preservation of the environment, protecting and satisfying customers, and achieving the goal of profitability of the organization. (Geap et al., 2018) He pointed out that it is the process of marketing products in an environmentally friendly way to influence the customer's intention to buy and pay for these products.

Second: The importance of green marketing: The importance of green marketing lies in achieving a set of benefits for organizations Steps: (Helou, 2016)

1. Improving the reputation of the organization: that the organization that adopts the philosophy of green marketing will be close to its current customers, and gain new customers in the future, and this will achieve a good reputation in the market that helps the marketing men to exploit the marketing opportunities and influence the behavior of the conscious customer. This leads to increased sales and increased market value.
2. Achieving competitive advantage: Green marketing opens new market opportunities for organizations, and this will help them achieve competitive advantage by creating specific environmental values for customers, and then creating environmentally friendly market sectors in the organization's market, thus encouraging the organization.
3. Profit realization: The use of production methods that rely on raw materials that have less impact on the environment or recycled or energy availability would achieve cost savings and thus achieve greater profits, and thus there is an opportunity for the organizations that adopt them. And achieving safety in the provision of products and the management of operations.

Third: The green marketing mix: The green marketing mix consists of several elements, namely:

1. **Green product:** It is the process of converting inputs (materials and machines) into outputs that are in the form of a product or service that meets the customer's need, as access to the green product requires the addition of an environmental component to all inputs, and a green product is defined as a product that uses materials and processes that are less harmful to Environment and society, and it is recyclable after the end of its useful life to benefit from it again (Nekmahmud & Farkas, 2020).
2. **Green price:** product pricing is closely related to product quality and must take into account customers' willingness to pay for the product, hence the green price is defined as setting prices for green products

that compensate customers' sensitivity to price in exchange for their willingness to pay more for environmental performance for products (Morel, 2012).

3. **Green promotion:** It is the activity that the organization uses to encourage customers to buy the offered products, where the promotion activity is used by the organization as a tool to present its products to customers and influence them to buy the product, and based on the environmental orientation, most organizations have implemented the promotion process in accordance with environmental principles through Using green advertisements to promote their products (Morel, 2012).
4. **Green packaging:** There are two types of packaging, the first cover contains the product, and the second cover is used during the transport of products. The materials used in the manufacture of the packaging are different, so these materials must be environmentally friendly, but packaging waste is in large quantities, so attention must be paid. In order to preserve the environment and ensure the safety of materials (Nasser, 2014).
5. **Green distribution:** It is the activity responsible for distributing and transporting products in a way that reduces emissions that affect the environment, as the products are transported in small batches of considerable quantity, which have economic and environmental benefits (Geap et al., 2018). The success of green distribution is achieved through the use of green logistics or green transport that would preserve the environment during the transfer and distribution of the product to and from the market (Nasser, 2014).

Fourth: Benefits of green marketing: Green marketing brings many benefits to business organizations that apply it in their marketing activities (Geap et al., 2018):

1. Producing environmentally friendly products.
2. Producers and advertisers develop products to meet the desires of people who care about the environment.
3. It helps the organization to innovate to be more creative in the field of green production and marketing.

The Third Axis: The Field Side

First: The company research sample brief overview: The General Company for Electrical and Electronic Industries was established in 1965, which is one of the formations of the Ministry of Industry and Minerals in Iraq, and is one of the main sectors that achieve growth for the country's economy due to its contribution to the manufacture of various types of electrical and electronic devices, and the company's products are divided into Two types are:

1. Products of industrial use: it includes (electrical generators, a box station of different capacities, and transformers of different capacities, industrial motors, and air conditioners of all kinds).
2. Home use products: including (electric fans, water pump, electric motors, electric heater, distribution panels, water cooler, electric lamps, air drawers, plasma TV, and others).

Second: Description and diagnosis of the dimensions of green quality: The results shown in Table 1 refer to the answers of the individuals working in the research sample company. The neutral answers were obtained (17.8%), and with a total mean of (3,598), and a standard deviation (1.102), and after the maintenance it was the one who contributed to enriching the agreement process by (71.9%). As for the degree of answers to the measurement area, it represents an estimated percentage (71%), and this result indicates the desire of working individuals to implement the dimensions of green quality in their company.

Dimensions green quality	Response scale					mean	St. Deviation	Degree response
	High agree	Agreed 4	Neutral 3	Disagree 2	Strongly Disagree			

		5				1			
1	Performance	18.1	33.1	16	24.9	7.8	3.288	1.241	0.65
2	Reliability	28.1	24.9	18.5	21.4	7.1	3.455	1.292	0.69
3	Conformity	28.8	40.9	13.9	12.1	4.3	3.779	1.118	0.75
4	Durability	29.2	34.2	17.1	17.1	2.5	3.704	1.134	0.74
5	Maintenance	18.9	53	17.8	8.5	1.8	3.786	0.908	0.75
6	Aesthetic features	30.2	38.8	16	11.7	3.2	3.811	1.090	0.76
7	Perceived Quality	16.4	42.3	20.6	18.1	2.5	3.519	1.045	0.70
8	Environmental design	20.6	46.6	17.1	13.5	2.1	3.701	1.012	0.74
9	Safety	11.7	40.6	23.5	18.9	5.3	3.345	1.078	0.66
	average	22.4	39.3	17.8	16.2	4.0	3.598	1.102	0.71
	Total	61.7		17.8	20.2				

Third: Description and diagnosis of the elements of the green marketing mix:

The results presented in Table 2 show that the responses of individuals were taken in the direction of agreement with a rate of (54.8%), and answers for disagreement were obtained on a percentage (21.3%), while neutral answers formed a percentage of (23.6%). As for the mean, my total arithmetic was (3.441), and a standard deviation (1.064), as the green distribution element contributed to the enrichment of the agreement percentage by (59.4%), while the degree of answers to the measurement area represents an estimated percentage (68%), and this The result indicates the company's humble ability to implement the green marketing mix.

	Green marketing mix	Response scale					mean	St, deviation	Degree response
		High agree	Agreed	neutral	Disagree	Strongly Disagree			
1	Green product	17.4	39.1	23.5	16.7	3.2	3.508	1.062	0.70
2	Green price	8.2	46.3	21.7	19.2	4.6	3.341	1.026	0.66
3	Green promotion	18.1	33.5	23.1	20.6	4.6	3.398	1.139	0.67
4	Green packaging	13.2	39.5	23.8	18.9	4.6	3.377	1.075	0.67
5	Green distribution	17.4	42	26	10.7	3.9	3.583	1.021	0.71
	average	14.8	40.0	23.6	17.2	4.1	3.441	1.064	0.68
	Total	54.8		23.6	21.3				

Fourth: The correlation relationship between green quality and green marketing: The results of Table 3 show that there is a significant correlation between green quality and green marketing at a rate of (85.1%) at a significant level (0.05), and this indicates that the more the company applies the dimensions of green quality In its operations, whenever this contributes to enhancing the implementation of green marketing activities in it, thus we accept the first hypothesis.

Variables	Green Marketing
Green quality	0.851

N	181
P	0.05

Fifth: The impact relationship of the dimensions of green quality in green marketing: The value of (T) test of (4.7), as well as the value of (F) estimated (5.4), and test (R^2) whose value is (67.3%), at a significant level (0.05) And the two degrees of freedom (1.180), shown in Table 4, indicates that there is a significant relationship to the dimensions of green quality (as a whole) in green marketing. From producing an environmentally friendly product and improving its green marketing activities equally and in light of this we accept the second hypothesis.

Table 4 RESULTS OF THE IMPACT RELATIONSHIP OF THE DIMENSIONS OF GREEN QUALITY IN GREEN MARKETING					
Variables	Green Marketing	R^2	T test	F	DF
Green quality	67.3%		4.7	5.4	1.180

The Fourth Axis: Conclusions and Proposals

First: Conclusions: Based on the theoretical and field frameworks, the study reached many conclusions, the most important of which are:

1. The answers of individuals in the company indicate the company's desire to implement the green dimensions of quality, but the reason for poor planning and financing makes its implementation difficult.
2. The study revealed the company's modest ability to implement the requirements of green marketing due to the limited financial allocations and the deficiency of the technical side.
3. The company incurs high costs as a result of not treating the pollutants in its production processes.
4. There is a correlation and moral effect between green quality and green marketing, which indicates helping the company to make all green and preserve the environment, which led to the acceptance of the first and second hypothesis.

Second: Proposals: In light of the conclusions, we propose the following:

1. The need to provide the necessary funds and technologies to implement the green dimensions of quality so that the organization can produce environmentally friendly products and achieve a greater market share for it.
2. Providing all the requirements of green marketing and achieving integration between them so that the organization is able to promote, transport and distribute the product in an environmentally safe manner.
3. Working on holding training courses for workers on green quality and green marketing to develop their skills and increase their environmental awareness to be able to preserve the work environment and the natural environment together.
4. The company must prevent the waste of its production processes to avoid the legal issue about that.

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