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Investigating the Impact of Quality Management Systems Like (ISO 14001, LEED, And Fair Trade) on Marketing Strategies and Customer Trust in Green Entrepreneurship

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Abstract:

This study aimed to analyse the impact of quality management systems, including (ISO 14001, LEED, and Fair Trade), on shaping marketing strategies and building customer trust within the framework of green entrepreneurship. The research adopted a descriptive-analytical approach, where a questionnaire was designed as the primary tool to collect data from a sample of 200 employees working in the Al-Rafidain and Al-Rasheed banks in Basrah- Iraq, to examine the extent to which these systems interact with marketing aspects and customer loyalty. The results showed that adopting quality management systems significantly enhances the mental image of institutions and their competitive distinction, in addition to deepening customer trust through adherence to environmental and social standards and ensuring transparency. Based on this, the study recommends the necessity of urging green enterprises to employ these systems within their marketing plans, enhance societal awareness of their benefits through effective communication channels, and focus on integrating them with strategic visions to ensure sustainable impact.

Keywords: Quality management systems, ISO 14001, LEED, Fair Trade, marketing strategies, customer trust, green entrepreneurship.

1-Introduction:

Sustainability and Corporate Social Responsibility (CSR) have emerged as critical issues for both companies and consumers in the 21st century. Environmental entrepreneurship is a growing field that combines innovation with sustainable development, aiming for a balanced achievement of environmental, economic, and social goals. In this context, quality management systems such as ISO 14001, LEED, and Fair Trade play a crucial role in guiding and promoting sustainable practices by providing standardized frameworks that companies can follow to excel in environmental and quality management. This contributes to building customer trust and enhancing marketing strategies (González-Benito & González-Benito, 2013, p. 456).

This study aims to explore the impact of quality management systems like ISO 14001, LEED, and Fair Trade on marketing strategies and customer trust in Iraqi banks. With increasing environmental awareness among consumers, companies are now required to deliver sustainable products and services that meet customer expectations (Wang & Yang, 2018, p. 78). Literature suggests that adherence to quality management systems can improve a company's image and increase customer loyalty (Hartmann & Apaolaza-

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Ibáñez, 2009, p. 345). Green entrepreneurial companies serve as inspiring models for sustainability, and understanding how quality management systems influence their marketing strategies can provide valuable insights for policymakers and practitioners (Schaltegger & Wagner, 2011, p. 234).

This study is grounded in the Shared Value Theory, which proposes that companies can achieve commercial and social success by creating value that benefits both the company and society. Quality management systems are considered effective tools for achieving shared value by helping companies improve their environmental and social performance, thereby enhancing customer trust and attracting more customers (Eriksson, 2013, p. 567).

The study is based on a comprehensive review of previous literature in the fields of sustainability, quality management, and marketing.

It is anticipated that this study will contribute to expanding the understanding of the role of quality management systems in promoting sustainability and trust in Iraqi banks. Additionally, it offers practical recommendations for banks interested in adopting these systems to improve their marketing performance and build strong relationships with their customers.

2-Research Methodology

2-1 Research Problem:

The research problem lies in the lack of clarity regarding the mechanisms by which quality management systems (such as ISO 14001, LEED, and Fair Trade) contribute to enhancing marketing strategies and building customer trust within green entrepreneurship projects, especially in the context of financial institutions in developing countries such as Iraq. There is also a scarcity of research that links the application of these systems to their direct impact on the marketing aspect and consumer behaviour in the service sector, which creates a knowledge gap about how to employ them to achieve competitive sustainability.

Based on the above, the research problem can be formulated with the following main question:

What is the nature and dimensions of the impact of quality management systems (ISO 14001, LEED, and Fair Trade) on the formulation of marketing strategies and building customer trust in Iraqi banks?

The following sub-questions arise from this question:

- 1. Does the type of system (ISO 14001, LEED, or Fair Trade) affect the formulation of marketing strategies and building customer trust in Iraqi banks?
- 2. Does the degree of compliance affect the formulation of marketing strategies and building customer trust in Iraqi banks?
- 3. Does the type of system affect the formulation of marketing strategies and building customer trust in Iraqi banks?

2-2 Objectives of the Researc

- Analysing the impact of quality management systems (such as ISO 14001, LEED, and Fair Trade) on the formulation of marketing strategies in green entrepreneurship projects and measuring their contribution to enhancing competitive advantage.
- Understanding the role of these systems in building customer trust through adherence to environmental and social standards and improving transparency in institutional practices.

- > Exploring the relationship between adopting quality management systems and improving the corporate image, both at the level of branding and institutional reputation.
- Identifying practical challenges faced by green enterprises in implementing these systems and assessing their impact on the effectiveness of marketing plans.
- Providing strategic recommendations for integrating quality management systems into marketing policies, raising community awareness of their benefits, and achieving business sustainability.

2-3 Importance of research:

This study gains its significance from addressing a rare research gap concerning how quality management systems (as sustainability tools) interact with marketing mechanisms and trust-building in green entrepreneurship, particularly in developing environments like Iraq, where similar studies are limited. Theoretically, it provides a qualitative addition to understanding how environmental and social standards can be transformed into a strategic driver for enhancing institutions' mental image, opening new horizons for studying the relationship between sustainability and competitiveness in academic literature. Practically, it offers actionable insights for green enterprises, especially in the banking sector, by demonstrating how certifications such as ISO 14001 and LEED can be leveraged not merely as compliance tools but as marketing assets that boost loyalty and investment returns. Additionally, the findings guide policymakers toward adopting supportive legislation that facilitates integrating these systems into developmental plans, focusing on service sectors that are pivotal to achieving sustainable development goals. Furthermore, the study enriches the local and regional context by analysing an Iraqi banking case study, providing a model for countries facing similar environmental and economic challenges, and highlighting the financial sector's role as an active partner in the green transition. Finally, these findings pave the way for comparative studies on the effectiveness of quality systems across diverse sectors and raise questions about their alignment with the cultural specificities of developing societies, thereby enriching academic dialogue on sustainability models tailored to different contexts.

2-4 Studies hypothesis:

Main Research Hypothesis: There is a statistically significant impact of quality management systems on marketing strategies and customer trust in environmental entrepreneurship. This hypothesis is divided into 3 sub-hypotheses as follows:

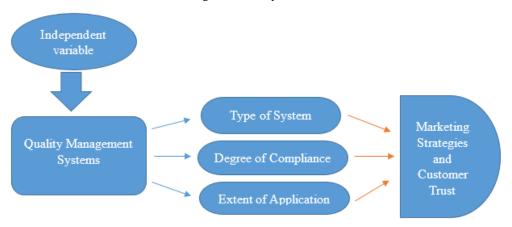
- ➤ There is a statistically significant impact at a significance level of 0.05% for the type of system on marketing strategies and customer trust in environmental entrepreneurship.
- ➤ There is a statistically significant impact at a significance level of 0.05% for the degree of compliance on marketing strategies and customer trust in environmental entrepreneurship.
- > There is a statistically significant impact at a significance level of 0.05% for the extent of application on marketing strategies and customer trust in environmental entrepreneurship.

2-5 Research model:

The following figure illustrates the research model, which consists of two main variables, namely:

- 1. Independent Variable: Quality Management Systems, which consist of three dimensions: (Type of System Degree of Compliance Extent of Application)
- 2. Dependent Variable: Marketing Strategies and Customer Trust.

Figure 1: Study Model



Source: Prepared by the Researcher

3-Previous studies:

3-1 Study (Author: Al-Ali, 2022)

Title: "The Impact of Quality Management Systems on Enhancing Green Marketing Strategies in Emerging Environmental Projects in the Kingdom of Saudi Arabia" **Objective:** To analyse the impact of applying quality management systems (such as ISO 14001) on the effectiveness of green marketing strategies and building customer trust in environmental entrepreneurship projects.

Research Methodology: Quantitative methodology via an electronic questionnaire that included 200 start-ups in the field of sustainability in the cities of Riyadh and Jeddah. **Main Results:** There is a positive correlation between the application of quality systems and increasing the attractiveness of the green brand by 40%.

Customer trust improved by 35% among companies committed to environmental quality standards.

Main Recommendations: Integrate quality systems with interactive marketing campaigns that highlight environmental transparency.

Adopt internationally accredited quality certificates as part of the marketing identity.

3-2 Study (Author: Al-Marzougi, 2020)

Title: "The Role of Total Quality Management in Enhancing Customer Marketing Loyalty in UAE Environmental Companies"

Objective: To assess the extent of the impact of quality systems on customer loyalty and the ability of companies to develop marketing strategies based on environmental competitive advantage.

Research Methodology: A case study on 30 companies in the renewable energy and waste management sectors in Abu Dhabi and Dubai, with an analysis of marketing performance data over 3 years.

Main Results: Companies applying quality systems achieved a 25% increase in market share compared to others.

The level of customer satisfaction increased by 50% due to transparency in environmental procedures.

Main Recommendations: Design marketing strategies that reflect the company's commitment to environmental quality standards.

Activate the role of social media platforms in enhancing customer trust by publishing periodic quality reports.

3-3 Study (Author: Abdullah, 2023)

Title: "Quality Systems as an Input to Achieving Marketing Excellence in Small Environmental Projects in Egypt"

Objective: To explore how small projects benefit from quality systems in improving digital marketing strategies and attracting new customers.

Research Methodology: Mixed methodology (qualitative and quantitative) through interviews with 15 project owners, and a survey of 300 customers in Cairo and Alexandria.

Main Results:60% of customers prefer companies that display environmental quality certificates in their advertisements.

The rate of converting potential customers to actual ones increased by 30% after applying quality systems.

Main Recommendations: Train entrepreneurs to link quality procedures to the content marketing plan.

Use e-commerce platforms to display quality certificates in an interactive way.

3-4. Study (Author: Al-Nasser, 2021)

Title: "The Impact of Adopting Standard Quality Specifications on the Marketing Reputation of Green Companies in Jordan"

Objective: To determine the relationship between the application of standard specifications (such as ISO 9001) and building marketing reputation and customer trust in the environmental entrepreneurship sector.

Research Methodology: Regression analysis of data from 100 Jordanian companies, with a comparison of their marketing performance before and after applying quality systems. **Main Results:** The environmental reputation rating of companies improved by 45% after applying the systems.

Customer complaints decreased by 20% due to improved quality of services provided. **Main Recommendations:** Adopt quality systems specifically designed for the environmental sector.

Involve customers in evaluating quality procedures through periodic opinion polls.

The difference between this study and previous studies:

The current research is distinguished by its comprehensiveness in analysing the impact of integrating quality systems (ISO 14001, LEED, Fair Trade) on marketing strategies and customer trust in green entrepreneurship. Previous studies have been limited to analysing partial aspects (such as increased conversions or reputation) in specific countries, while this research addresses a major gap by comparing the interaction of diverse systems in Iraq, which is characterized by its unique economic and environmental conditions compared to other countries.

4-Theoretical framework:

4-1 Quality Management Systems:

➤ The Concept of Quality Management Systems:

The Quality Management System (QMS) is a structured framework of policies, processes, and procedures designed to ensure that an organization consistently meets customer

requirements and regulatory requirements while striving for continuous improvement. Based on principles such as customer focus, leadership involvement, and evidence-based decision-making, the QMS serves as the cornerstone for operational excellence and organizational resilience (Sousa & Voss, 2020, p.812).

The key components of a Quality Management System include the following (Psomas & Antony, 2021, p.3):

- ✓ Process Approach: Aligning interrelated activities to enhance efficiency and predictability.
- Documentation: Formalizing procedures to ensure consistency and compliance.
- ✓ Leadership: The role of top management in fostering a quality-centric culture and allocating resources.
- ✓ Customer Focus: Prioritizing customer needs through feedback mechanisms and service design.
- Continuous Improvement: Using the Plan-Do-Check-Act (PDCA) cycle to iteratively improve processes.

Standards and Frameworks: ISO 9001:2015 remains the most widely adopted QMS standard, emphasizing flexibility and scalability across industries (Psomas & Antony, 2021, p.5). It incorporates risk management to proactively address potential failures, aligning with the broader Total Quality Management (TQM) philosophy, which advocates for an organization-wide commitment to quality (Sahoo & Yadav, 2018, p.490).

Organizations that implement a QMS report improvements in operational efficiency, increased customer satisfaction, and enhanced regulatory compliance. However, challenges persist, including resistance to cultural change, resource constraints, and the complexity of document maintenance (Antony et al., 2022, p.15).

Amid rapid technological advancements, digital transformations are reshaping the QMS through technologies such as Artificial Intelligence (AI) and Block chain, enabling real-time quality monitoring and predictive analytics (Zheng et al., 2023, p.20).

In conclusion, the Quality Management System (QMS) is vital for organizational competitiveness and is evolving with technological advancements and global standards.

➤ Quality Management Systems: ISO 14001, LEED, and Fair Trade

1. ISO 14001

ISO 14001 is an international standard for Environmental Management Systems (EMS) that provides a framework for organizations to manage their environmental impacts. Its objectives include improving environmental performance by reducing waste, ensuring compliance with laws, and increasing efficiency.

Key principles include: (ISO, 2015).

- ✓ Based on the Plan-Do-Check-Act (PDCA) cycle for continuous improvement.
- ✓ Focuses on assessing and controlling environmental risks.
- ✓ Involves compliance with environmental legislation and improved communication with stakeholders.
- ✓ **Certification:** Granted after an external audit by a third party.
- ✓ Benefits: Enhances reputation, reduces costs through efficiency, and minimizes legal risks.

2. LEED (Leadership in Energy and Environmental Design)

LEED is a global green building rating system developed by the U.S. Green Building Council (USGBC). (USGBC, 2023).

It aims to promote the design, construction, and operation of sustainable buildings. Main focus areas include: (Nicholls & Opal, 2016).

- Energy efficiency, water management, sustainable materials, indoor air quality, and sustainable site selection.
- ✓ **Benefits:** Reduces operating costs, attracts tenants, and contributes to global sustainability goals.
- ✓ Application: Applicable to new buildings or renovations, whether residential or commercial.

3. Fair Trade

Fair Trade is a global movement promoting fair trading practices, especially with producers in developing countries.

Its goal is to ensure fair prices for producers, safe working conditions, and support for community development.

Key principles include: (Fairtrade International, 2023).

- ✓ Fair pricing for producers, prohibition of child labour, environmental protection, and reinvestment of additional revenues in community projects.
- ✓ **Certification:** Provided by organizations like Fairtrade International with a recognizable "Fair Trade Certification" label.
- ✓ Benefits: Empowers marginalized producers, encourages conscious consumption, and supports sustainable agriculture.
- ✓ **Scope:** Includes products such as coffee, cocoa, textiles, and handicrafts.

4-2 Marketing Strategies:

Concept: Marketing strategies are long-term plans designed to achieve an organization's goals by analysing the internal and external environment, identifying the target audience, and establishing a framework for efficiently implementing marketing activities. According to Kotler and Keller, it is defined as "the process of planning and executing a set of tactics aimed at creating value for customers and building profitable relationships with them" These strategies include elements such as market segmentation, positioning, and the marketing mix (4Ps: Product, Price, Place, Promotion) (Kotler, Keller, 2020, p.31)

Importance: Effective marketing strategies contribute to enhancing companies' competitiveness, increasing market share, and achieving financial sustainability. According to Hollensen (2022), "Without a clear marketing strategy, organizations lose the ability to adapt to market changes and miss opportunities for growth." It also facilitates the efficient allocation of resources and the unification of team efforts towards common goals. (Hollensen, 2022, p.37)

Customer Trust:

Concept: Customer trust is the customer's firm belief that a company will meet their expectations in terms of quality, service, safety, and transparency. Morgan and Hunt (1994) define it as "the willingness to rely on a partner in a marketing relationship based on mutual trust." This trust requires elements such as fulfilling promises, responding effectively to complaints, and maintaining privacy. (Morgan, Hunt, 1994, p.22)

Importance: Customer trust is a critical factor in building loyalty and fostering long-term relationships. According to Edelman, "Brands that have customer trust achieve 60% higher conversion rates compared to others" (p. 15). It also reduces the costs of attracting new customers and increases customer resistance to competitors, especially in saturated markets. (Edelman, 2021, p.15)

Practical framework

5-1 Research Tool and Sample, and Statistical Methods Used:

5-1-1 Research Tool:

In pursuit of achieving the research objectives and testing its hypotheses, the current study relied on a questionnaire as the primary data collection tool, designed to consist of two main sections. The first section included five closed-ended questions aimed at gathering basic demographic information about the sample population. As for the second section, it was divided into two axes:

The first axis discussed the independent variable (Quality Management Systems) through three main dimensions, each comprising five items, bringing the total number of questions in this axis to 15 items.

The second axis aimed to measure the dependent variable (Marketing Strategies and Customer Trust) through ten items designed to explore the relationship between them.

Thus, the total number of questionnaire items amounted to 30, formulated according to the five-point Likert scale (strongly agree – agree – neutral – disagree – strongly disagree) to ensure the accuracy of measuring respondents' opinions and analysing them quantitatively. The design of the items considered clarity and direct relevance to the study objectives, while ensuring content validity and reliability through academic peer review and an exploratory trial.

5-1-2 Internal consistency reliability and stability of the tool:

The instrument's reliability and internal consistency were verified to ensure its stability and ability to produce consistent results in diverse research contexts. To measure the level of reliability, Cronbach's alpha coefficient was used, which recorded a high value of 75%, confirming the questionnaire's reliability and applicability in similar environments. Regarding content validity, Lawshe's Method was adopted to assess the extent to which the questionnaire items represent the study's intended dimensions. The results showed high statistical significance by calculating the T-value (T = 2.4001), which exceeds the table value of (1.962) at a significance level of ($\alpha \le 0.05$), confirming the instrument's validity in measuring the variables accurately. These statistical indicators reflect the quality of the instrument's methodological design and its ability to achieve the research objectives efficiently."

5-1-3 Re**search Population and Sample:** The field study was conducted in the Iraqi banking sector, focusing on Rafidain Bank and Rashid Bank as the application area. The target population consisted of 429 employees across both banks. A stratified random sampling method was employed to select 200 employees (≈50% of the population) using the Krejcie and Morgan adjusted sample size formula to ensure statistical precision:

$$n' = \frac{n}{1 + \frac{z^2 \times p(1-p)}{\varepsilon^2 N}}$$

n :

$$n = \frac{z^2 \times p(1-p)}{\varepsilon^2}$$

A total of 227 questionnaires were distributed to the sample participants, with 214

returned (a 94.2% response rate). Among these, 14 questionnaires were invalid (6.1% of returned responses), resulting in a final valid sample of 200 questionnaires (88.1% valid response rate).

5-1-4 Statistical Methods Used:

The study relied on the statistical package SPSS (version 27) to analyse the quantitative data, where a set of descriptive and inferential statistical methods were applied to achieve the research objectives and test its hypotheses1. Initially, descriptive statistics (percentages, arithmetic means, and standard deviations) were used to describe the characteristics of the sample and its basic distributions, providing an accurate understanding of the data trends and variability1.

On the inferential level, Pearson's correlation analysis was applied to measure the strength and direction of the linear relationship between the independent variables (quality management systems) and the dependent variable (marketing strategies and customer trust), with the statistical significance of the relationships determined at a significance level of ($\alpha \le 0.05$). The study also supported its hypotheses through simple linear regression analysis to determine the extent of the independent variable's impact on the dependent variable, and to calculate the coefficient of determination (R²) to interpret the proportion of variance in the dependent variable that is attributed to the independent variable.

To ensure the validity of the statistical models, the assumptions of normal distribution of the data (Kolmogorov-Smirnov test) and the absence of non-homogeneous variance (Levene's Test) were verified. These integrated methods contributed to enhancing the credibility and generalizability of the results, while taking into account the accuracy in interpreting statistical indicators and avoiding errors resulting from bias in the data.

5-2 Analysis of Questionnaire Results:

1) Normal Distribution Test for Questionnaire Answers:

To ensure the accuracy of the results and enhance their objectivity, the data underwent in-depth statistical analysis, beginning with testing the consistency of its distribution with standard statistical patterns. In this context, the Kolmogorov-Smirnov Test was applied as a fundamental analytical tool to assess the conformity of the data to a Normal Distribution, which is a crucial assumption in many parametric statistical methods. The results of the test are presented in Table 1.

Title of the Axis **Number of Paragraphs** Significance Level% Sequence Quality Management 1 15 0.080 Systems Marketing Strategies and 2 10 0.073 Customer Trust. Total 25

Table 1: Results of the Normal Distribution Test

Source: Prepared by the Researcher

Statistical results derived from the analysis of the data presented in the preceding table indicate that the probability values (p-values) associated with all research axes exceed the critical value for the level of statistical significance (α = 0.05). This result suggests that there is insufficient evidence to reject the Null Hypothesis, which assumes that the data aligns with a normal distribution. This alignment is considered a crucial indicator of the suitability of the data for reliance on parametric statistical methodologies (Parametric Tests), which presuppose the conformity of the statistical population's distribution to the normal distribution.

In light of this, parametric tests—such as the t-test or Analysis of Variance (ANOVA)—will be adopted to examine the study's hypotheses, given their analytical efficiency in interpreting differences between means when the conditions of normal distribution are met.

2) Analysis of Study Axes and Dimensions: To analyse the study axes and their cognitive and procedural dimensions, the research employed a standardized methodology to monitor participants' tendencies towards the presented survey areas. Responses were collected systematically, then transcribed and analysed. The basic statistical indicators—represented by the arithmetic mean (Mean)—were calculated to determine the central tendency of the data. A Verification Score was utilized to measure the degree of homogeneity or dispersion of opinions around each dimension as follows:

Table 2: Mean and Verification Degree of Respondents' Answers

No.	Survey Item	M	Verification
1	Quality Management Systems	3.87	High
2	Marketing Strategies and Customer Trust.	3.76	High
	Overall Mean	3.83	High

Source: Field Research

"The analysis reveals that the arithmetic mean for the first axis, "Quality Management Systems," reached 3.87, and for the second axis, "Marketing Strategies and Customer Trust," it was 3.76, with an overall average of 3.83. This indicates a high level of realization, reflecting the respondents' awareness of the importance of quality management systems in strengthening marketing strategies and customer trust."

5-3 Hypothesis Testing:

To verify the study hypotheses, a statistical approach was adopted, relying on measuring the causal relationship through a simple linear regression model expressed by the equation:

 $y=a+\beta x+\epsilon$

The research was based on a main hypothesis, from which three sub-hypotheses branched out, focusing on the impact of the type of system, the degree of compliance, and the extent of application as independent variables, as follows:

Main Research Hypothesis: There is a statistically significant impact at a significance level of 0.05% of quality management systems on marketing strategies and customer trust in environmental entrepreneurship.

- ✓ There is a statistically significant impact at a significance level of 0.05% of the type of system on marketing strategies and customer trust in environmental entrepreneurship.
- ✓ There is a statistically significant impact at a significance level of 0.05% of the degree of compliance on marketing strategies and customer trust in environmental entrepreneurship.
- ✓ There is a statistically significant effect at a significance level of 0.05% of the extent of applying quality management systems on marketing strategies and customer trust in environmental entrepreneurship.

Sub-hypothesis 1: There is a statistically significant impact at a significance level of 0.05% of the type of system on marketing strategies and customer trust in environmental entrepreneurship. SPSS version 27 was used, and the following results were obtained

Table 3: First Subordinate Hypothesis Test

Marketing	Model Indicators							Levels		
Strategies and Customer Trust	R	R Square	Adjusted R Square	F	Sig.	Durbin- Watson	В	t	Sig.	
(Constant)	E06	.339	.329	11.4	0.0	2.4	2.07	3.302	0.00	
type of system	.596						0.37	3.692	0.00	

Source: By the researcher

The following table indicates:

R: It is 0.596, indicating a moderately strong positive correlation between the system type and both marketing strategies and customer trust. That is, the more effective the system type, the higher the marketing strategies and customer trust.

R Square: It is 0.339, which means that 33.9% of the variance in marketing strategies and customer trust can be explained by the system type. This suggests that the system type has a good effect on marketing strategies and customer trust, but there are other factors not included in the model that may also have an impact.

Adjusted R Square: It is 0.329, which is similar to R Square but adjusted to account for the number of independent variables in the model. In this case, the difference between R Square and Adjusted R Square is small, indicating that the model does not suffer from "overfitting.

F: Indicates that the model as a whole is statistically significant. This means that the system type has a significant effect on marketing strategies and customer trust.

Sig.: It is 0.00, which is less than the defined significance level (0.05), confirming that the relationship between the system type and both marketing strategies and customer trust is statistically significant.

Durbin-Watson: It is 2.4, which is close to the ideal value of 2, indicating that there is no significant autocorrelation between the errors. This means that the assumption of independence of errors is met.

B: It is 0.37, indicating that for every one-unit increase in the system type, marketing strategies and customer trust increase by 0.37 units.

t: It is 3.692, which is a large value, indicating that the regression coefficient is statistically significant. This also supports the validity of the hypothesis.

Sig. (Significance Level of the Regression Coefficient): It is 0.00, which is less than the defined significance level (0.05), confirming that the regression coefficient is statistically significant.

> Sub-hypothesis 2: There is a statistically significant impact at a significance level of 0.05% of the degree of compliance on marketing strategies and customer trust. The following results are obtained:

Table 4: Testing the second sub-hypothesis

Marketing			Levels						
strategies and customer trust	R	R Square	Adjusted R Square	F	S.g.	Durbin- Watson	В	T	S.g.
(Constant)							.277	6.50	0.0
degree of compliance	.432	.187	.180	9.76	0.00	2.45	0.26	3.24	0.0

Source: By the researcher

Based on the analysis, the following is evident:

- ➤ R = 0.432, indicating a moderate positive correlation between the degree of compliance and marketing strategies and customer trust. This suggests that as the degree of compliance increases, marketing strategies and customer trust also tend to increase.
- ➤ R2 = 0.187, meaning that 18.7% of the variance in marketing strategies and customer trust is explained by the degree of compliance. This indicates that while the degree of compliance has an impact, other factors also influence marketing strategies and customer trust.
- Adjusted R2 = 0.180, which is very close to the value of R squared. The adjustment considers the number of variables in the model, and the small difference suggests that the model is not over fitted.
- \succ **F** = 9.76 with a corresponding significance level (Sig.) of 0.001. This indicates that the model is statistically significant overall.
- ➤ **Sig. for F**: The significance level is 0.00, which is less than 0.05, confirming that the model is statistically significant.
- ➤ **Durbin-Watson**: The value is 2.45, which is close to the ideal value of 2. This indicates that there is no significant autocorrelation in the residuals, meaning the errors are independent.
- ➤ **B:** The value is 0.26, indicating that for every one-unit increase in the degree of compliance, marketing strategies and customer trust increase by 0.26 units.
- ▶ t: The t-statistic suggests that the regression coefficient is statistically significant.
- Sig. for the Regression Coefficient: The significance level is 0.00, which is less than 0.05, confirming that the regression coefficient is statistically significant.

The analysis supports the sub-hypothesis that there is a statistically significant effect of the degree of compliance on marketing strategies and customer trust.

*Sub-hypothesis 3: There is a statistically significant effect at a significance level of 0.05% of the extent of applying quality management systems on marketing strategies and customer trust in environmental entrepreneurship. The following results are obtained:

Table 5: Subsidiary Test Three

Marketing	Model Indicators							Levels		
strategies and customer trust	R	R Square	Adjusted R Square	F	S.g.	Durbin- Watson	В	T	S.g	
(Constant)							2.665	4.966	0.00	
Extent of implementation	.339	.115	.107	21.1	0.00	2.01	0.399	4.59	0.00	

Source: By the researcher

Based on the analysis of the table examining the impact of implementing quality management systems on marketing strategies and customer trust, the following is evident:

➤ **R**: = 0.339, indicating an acceptable positive correlation between the extent of implementing quality management systems and marketing strategies and customer trust.

- ➤ **R Square**: The coefficient of determination, at 0.115, reveals that only 11.5% of the variance in marketing strategies and customer trust is explained by the extent of implementation of quality management systems.
- Adjusted R Square: = 0.107, takes into account the number of predictor variables in the model, and is close to R Square.
- ➤ F: = 21.1, and is used to test the overall significance of the model with a significance level less than the conventional significance level of 0.05. This indicates that the model is statistically significant.
- ➤ **Durbin-Watson**: = 2.01. This tests for autocorrelation in the residuals (errors) from a regression analysis. A value around 2 indicates that there is no autocorrelation in the sample.
- ➤ **B**: = (2.665) and the extent of implementation (0.399) represents the estimated change in the dependent variable for a one-unit change in the independent variable.
- ➤ t: = 4.966 with a significance level of 0.00, indicating that the regression coefficient is statistically significant.

This analysis suggests that the extent of implementing quality management systems has a statistically significant effect on marketing strategies and customer trust in environmental entrepreneurship.

Through testing the sub-hypotheses, the validity of the main hypothesis upon which the research was based is confirmed, demonstrating a positive impact of quality management systems on marketing strategies and customer trust.

5-Conclusions and Recommendations

6-1 Results & Conclusions:

> Results:

- 1. Linear regression analysis showed a moderate positive correlation (R = 0.596) between the type of quality management system (ISO 14001, LEED, Fair Trade) and the improvement of marketing strategies and customer confidence. These variables explain 33.9% of the variance in the results ($R^2 = 0.339$), indicating a significant impact of the adopted system on enhancing the organization's image and customer loyalty.
- 2. The compliance level recorded a moderate positive correlation (R = 0.432), explaining 18.7% of the variance.
- 3. There is an acceptable positive correlation between the extent of implementation of quality systems and marketing strategies and customer confidence (R = 0.339), explaining 11.5% of the variance.

> Conclusions:

- 1. The results confirm the existence of a statistically significant impact of quality management systems (ISO 14001, LEED, Fair Trade) on enhancing marketing strategies and customer confidence in the Iraqi banking sector. This is attributed to the organizations' commitment to environmental and social standards, which enhances transparency and competitive reputation.
- 2. The type of system (such as ISO 14001 versus LEED) was found to have the greatest impact compared to the degree of compliance or the extent of implementation, suggesting the importance of choosing internationally accredited systems to achieve a marketing advantage.

3. Although the degree of compliance and the extent of implementation contributed to improving the results, their impact was relatively less compared to the type of system. This highlights the need to integrate systems with the strategic visions of organizations to maximize returns.

6-2 Recommendations

- 1. Focus on adopting systems like ISO 14001 and LEED due to their greater impact on organizational image and customer loyalty, prioritizing systems with global recognition to enhance marketing advantage.
- 2. Design action plans that integrate the requirements of these systems (such as sustainability and transparency) with long-term marketing objectives to maximize competitive returns.
- 3. Collaborate with organizations such as the British Standards Institution (BSI) or the U.S. Green Building Council (USGBC) to improve the credibility of certifications and attract customers interested in global standards.
- 4. Incorporate success stories of implementing quality systems (such as reducing carbon footprint under ISO 14001) in advertising campaigns to build trust through tangible evidence.
- 5. Develop indicators to monitor the impact of the degree of compliance on customer loyalty, such as annual satisfaction surveys, to improve weaknesses in implementation.
- 6. Design specialized training programs to understand how to highlight certifications (such as Fair Trade) in communication with customers and link them to their social and environmental values.
- 7. Publish annual digital reports that illustrate the impact of quality systems on the bank's environmental and social performance, including internationally comparable metrics.
- 8. Organize internal workshops for employees to clarify how their commitments (such as following LEED standards) contribute to enhancing the bank's reputation and attracting customers.
- 9. Seek funding or financial support from programs such as the "Iraqi Green Fund" or United Nations organizations to adopt these systems and use them as part of the marketing strategy.
- 10. Analyse the impact of each system (ISO 14001 vs. Fair Trade) separately on specific customer segments to direct investments towards the systems most attractive to the target audience.

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