

## إدارة الجودة المستدامة: منهج عملي لتحقيق التوازن بين الربحية والمسؤولية البيئية

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### الملخص:

هدفت هذه الدراسة الى التوفيق بين الربحية والمسؤولية البيئية للشركات في سياق إدارة الجودة المستدامة. استخدم البحث المنهج الكمي في تحليل البيانات التي تم جمعها عن طريق الاستبيان الذي تم توزيعه في الشركات التي انخرطت بشكل فعال في تقنيات إدارة الجودة المستدامة. حيث اعتمدت الدراسة الاستبيان كأداة لتقييم وتطبيق المعرفة حول الاستدامة في العمل التجاري. وشملت عينة البحث 200 مشارك من شركة نفط البصرة وذلك لتحقيق التنوع في الآراء ولضمان تمثيل شامل لجميع وجهات النظر. يساهم هذا البحث بمعرفة التوجهات والانماط والعلاقة بين ممارسات إدارة الجودة المستدامة وكيفية نجاح الشركات بالموازنة بين المسؤولية البيئية مع السعي لتحقيق الربح. واقترحت الدراسة ان تعتمد المنظمات خطط استدامة شاملة تدمج بين القضايا البيئية ضمن اطار إدارة الجودة بهدف تحسين الأرباح ومن دون التضحية بمبادئ الاستدامة.

الكلمات المفتاحية : إدارة الجودة المستدامة، الربحية، المسؤولية البيئية، الأداء المنظمي، الممارسات الإدارية.

## **Sustainable Quality Management: A Practical Approach to Balancing Profitability and Environmental Responsibility**

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### **Abstract**

This study aims to investigate a pragmatic method for reconciling profitability with environmental responsibility in the context of sustainable quality management. The research employs a quantitative methodology, using a survey-based framework to gather data from firms that are actively engaged in sustainable quality management techniques. The study utilizes a questionnaire as a method of measurement for the knowledge application on sustainability in business processes. Our sample will include 200 respondents of Basra Oil Company to achieve a diverse and representative sample of perspectives. The objective of the research is to examine the trends, patterns and relationship between sustainable quality management practices and profitability while analyzing the data collected in survey. This research can improve our understanding of how businesses may thrive by balancing environmental responsibility with profit-seeking behavior and the determinants that enable or impede such behavior. The study suggests organizations enact holistic sustainability plans and integrate environmental matters into their quality management systems to improve profits without sacrificing sustainability

**Keywords:** Sustainable quality management, profitability, environmental responsibility, organizational performance, best practices

## 1. Introduction

Environmental management practices have changed significantly over the past 20 years, moving away from traditional reactive approaches like post-damage remediation and punitive regulations and toward proactive approaches that prioritize innovation, integrated sustainability, and pollution prevention (Antony et al., 2023; Singh et al., 2023).

The transformation in the United States has been driven by a combination of stricter performance criteria, economic incentives, and changing stakeholder expectations (Carnerud et al., 2020). Simultaneously, academic discourse has progressed from the initial novelty of environmentally responsible practices, once limited to industrial recycling studies, to an extensive analysis of sustainable manufacturing processes, green supply chains, and the incorporation of environmental goals within corporate social responsibility (CSR) frameworks (Misztal & Ratajszczak, 2025; Siva et al., 2016). These trends highlight the increasing acknowledgement among companies that sustainable operation as an opportunity (in the strategic, operational, and financial sense) need to be part of their goals to ensure long-term viability and stability (Antony et al., 2023). One major framework that captures such trend is the Sustainable Quality Management (SQM) which aims at integrating holistic principles of quality management with sustainable needs. High-tech SQM integrates value and quality management with zero environmental impact, by encompassing the life cycle of products and services (Misztal & Ratajszczak, 2025). Using SQM, organizations minimize input and waste costs, improve stakeholder satisfaction, follow regulatory standards, and set themselves apart in competitive and environmentally aware markets (Singh et al., 2023).

Besides, SQM will also lead to innovation, increased reputation, and higher customer loyalty because customers prefer such companies that operate based on ethical and sustainable practices (Antony et al., 2023). The SQM framework is a renewal in a modern day global business world with more lens on business practices and fast-paced climate changes. By analyzing the theoretical foundations, practical applications, and strategic implications of SQM, this research sheds light on the potential for sustainable quality management as a means for organizations to achieve operational excellence and environmental responsibility (Carnerud et al., 2020).

## 2. Statement of the Problem:

Over the past few years, there has been increasing pressure on companies to align business profits with environmental responsibility due to growing global focus on climate change, stakeholder expectations, and evolving regulations. Enhancing the accountability of reporting across sectors Organizations in various sectors are under pressure to integrate sustainability into their operative and strategies from not only environmental regulation and compliance but also in response to the expectations of consumers, investors, and civil society for ethical and sustainable business practices (Misztal & Ratajszczak, 2025; Deloitte, 2023). Despite this shift, many businesses continue to struggle with how to incorporate sustainability in such a manner that it supports, rather than detracts from, financial performance.

One of the main issues currently is the lack of formal frameworks that align ecological goals into the basic processes of the operations, taking as an example quality management procedure. Quality management in a conventional way focuses on efficiency, standardization, customer satisfaction, but has little or no policies on ecological and sustainable development (Sroufe & Curkovic, 2008). Such a divergence creates a friction for

businesses trying to reach sustainability without sacrificing revenue, especially in resource-heavy industries like manufacturing, energy, or logistics.

In addition, research indicates that implementing sustainability in quality management systems can lead to improved operational efficiency, cost reduction, and greater customer loyalty for companies (Misztal & Ratajszczak, 2025; SGS, 2023). However, there is empirical evidence that factors such as lack of competence, inadequate leadership support, and a lack of change commerce still prevent the success of Sustainable Quality Management (SQM) methods (SGS, 2023). The fact that these matters stem raises the concept of remaining to understand how sustainable practices can be added to quality management frameworks whilst also maintaining or increasing profit.

The primary research question of this study is: **How can firms successfully reconcile profitability with environmental responsibility by using sustainable quality management practices?**

This research seeks to investigate the major drivers, obstacles, and results related to SQM, while offering evidence-based recommendations to assist businesses in achieving more sustainable and economically viable operating models. This study aims to address the following research questions based on the identified problem:

- 1. What are the essential elements of sustainable quality management?**
- 2. How do sustainable quality management approaches affect corporate profitability and environmental accountability?**

- 3. What are the primary obstacles companies encounter in the implementation of sustainable quality management practices?**
- 4. In what ways do staff training and industry-specific variables influence the implementation of sustainable quality management practices?**
- 5. What initiatives and best practices can firms use to reconcile profitability with environmental stewardship?**

### **3. Objectives of the Study**

This study aims to assess the function of Sustainable Quality Management (SQM) as a strategy framework for reconciling environmental responsibility with profitability:

#### **3.1.The research primarily intends to investigate the incorporation of sustainability concepts into quality management practices.**

This purpose is to comprehend how organizations integrate environmental factors into quality management systems to improve operational performance and sustainability results (Misztal & Ratajszczak, 2025).

#### **3.2.Assess SQM effect on org performance in terms of profitability and environmental performance.**

That is why, in the field of SQM methods, a dual benefit analysis should be presented, namely, analysis of both improved performance (financial) of SQM and improved performance (environmental) of SQM (Antony et al., 2023).

#### **3.3.Assess barriers and challenges businesses encounter in applying sustainable quality management practices.**

Understanding these factors will indicate common barriers and potential advantages associated with the use of SQM approaches (SGS, 2023).

### **3.4. Evaluate the roles of people training and industry-specific variables in the effective implementation of SQM.**

Specific for SQM so as workforce proficiency and industry detailed insights will lead towards finding critical area of concern to enhance integration and is something worth exploring and contributes to knowledge gap in the domain (Deloitte, 2023).

### **3.5. Find best practices and strategic frameworks that encourage balance between economic success and environmental sustainability**

This aim aims to help businesses achieve enduring success by establishing tested methods and strategic frameworks that comply with environmental commitments (Carnerud et al., 2020).

These objectives aim at clarifying how firms can successfully integrate sustainability into quality management systems, thereby improving operational performance while addressing environmental and social responsibilities.

## **4. Importance of the Study**

Our world is experiencing a shift toward environmental sustainability, stakeholder responsibility, and long-term company resilience and sustainable quality management (SQM) thus becomes an increasingly crucial area of research for scholars as well as practitioners. This study is significant as it adds to practice, theory, and policymaking.

- **Practical Implications:**

Organizations are increasingly expected to demonstrate financial success as well as environmental responsibility. Logically, by bringing sustainability along the quality's path, businesses generate lower wastages and resource consumption rates (Abbas, 2020); better self-regulations also improve product quality and

consumer satisfaction (Caiado et al., 2019). This research offers practical assistance for organizations seeking to integrate their operational strategy with sustainability objectives by analyzing SQM's contribution to these results. The study provides practical insights for addressing implementation issues, enhancing resource use, and attaining quantifiable advancements in profitability and environmental performance.

- **Contribution to Research:**

Although there is a significant amount of literature on sustainability and quality management separately, limited research investigates their intersection within an integrated framework. This research addresses the gap by analyzing how SQM may function as a comprehensive framework for firms aiming to integrate sustainability into their quality management procedures. This study enhances academic comprehension of the simultaneous pursuit of environmental and economic goals, building on previous research that associates sustainability with innovation, operational efficiency, and corporate social responsibility (Olson, 2009; Sroufe & Curkovic, 2008).

- **Policy Significance:**

Governments and regulatory agencies globally are intensifying demands on industries to implement sustainable practices via more stringent environmental regulations and performance-driven incentives. This research's results may guide policymakers in promoting sustainable industrial growth by pinpointing the organizational elements that facilitate or obstruct SQM implementation. The study can inform the development of industry-specific frameworks that encourage environmentally sustainable quality practices while maintaining economic viability.



This paper examines a pertinent problem in management by investigating a method for organizations to solve environmental concerns while preserving competitive advantage. It fosters a burgeoning movement aimed at embedding sustainability within the fundamental organizational strategy and provides essential insights for corporations, researchers, and policymakers maneuvering through the dynamic realm of sustainable business.

## 5. Conceptual Framework

The conceptual framework (see Figure 1) illustrates the relationships between sustainable quality management techniques and key organizational outcomes—specifically, environmental responsibility and profitability. Sustainable Quality Management Practices (SQMP) are positioned as a fundamental mediating element that affects environmental responsibility and the balance between profitability and sustainability.

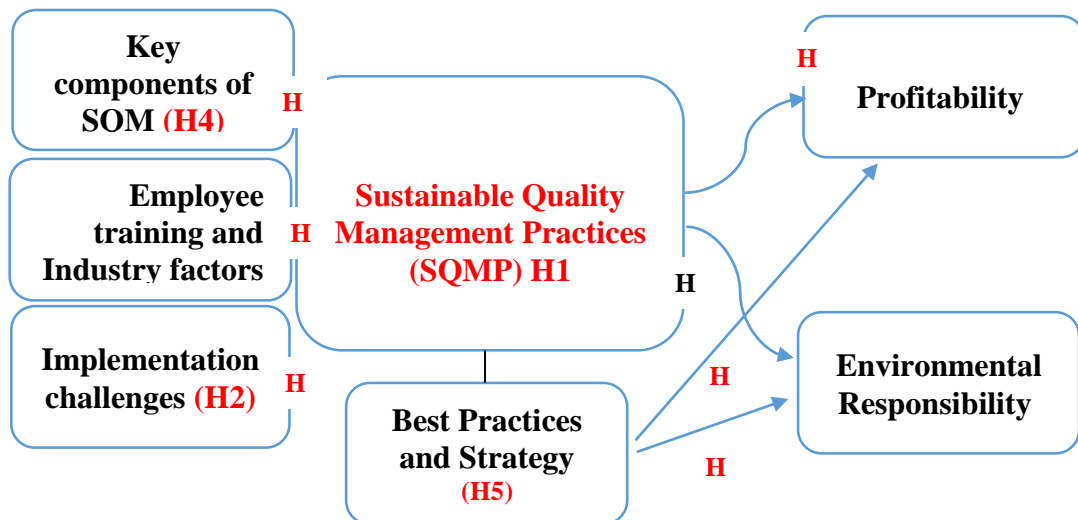


Figure (1) The conceptual Framework

## 6. Research Hypotheses

The following hypotheses guide this study:

1. **H0 (Null Hypothesis):** There is no significant difference in profitability and environmental responsibility between firms that implement sustainable quality management (SQM) systems and those that do not.
2. **H1 (Alternative Hypothesis):** Sustainable quality management systems are observed by organizations that implement contrastingly experienced a marked increase in profitability and environmental responsibility.
3. **H2:** Organizational performance is positively related to the integration of sustainability into quality management practices.
4. **H3:** Training employees in sustainability positively affects the effectiveness of sustainable quality management initiatives.
5. **H4:** Organizations' inability to implement sustainable quality management practices hampers their profitability and damages their environmental performance.
6. **H5:** Optimal SQM processes and practices ensure the best possible alignment between profitability and environmental stewardship.

## 7. Methodology

This section describes the research design used to explore the practical reconciliation of profitability and environmental responsibility as part of sustainable quality management. It outlines the research design, instruments, sample selection and data collection methods employed to ensure that the study meets its objectives.

**The study adopts a quantitative methodology using survey-based design for data collection Basra Oil Company in Iraq. This method is well applicable for studying the relationship among profitability, environmental responsibility, and sustainability in corporate practices. The study intends to collect tangible data using a closed-ended questionnaire to evaluate and highlight the equilibrium between these essential pillars.**

### **7.1 A data collection instrument: Questionnaires**

The research tool for data collection in this research consists of a questionnaire that aims to measure the comprehension and implementation of sustainable quality management practices in Basra Oil Company. The questionnaire has various segments, each of which are directed at the following significant components:

#### **1-Sustainable Quality Management Practices:**

Questions about how organizations have implemented sustainable practices in their quality management, environmental strategies, or green initiatives.

#### **2-Profitability Metrics:**

Financial performance indicators and sustainability effects in terms of profitability.

#### **3-Environmental Responsibility:**

Queries intended to gain an insight on how the organization embeds environmental issues into its operational and decision-making frameworks.

The questionnaire includes closed questions and Likert scale questions, enabling simple analysis of response data while allowing for the development of subtleties in participants' answers. Such a framework helps in the systematic exploration of

trends, patterns, and relationships between sustainable practices and profitability.

## 7.2 Sample Selection

The target population for this research is employees of Basra Oil Company who are involved in sustainable quality management practices. The selection of samples meets the following criteria for diversity and representation:

- **Job Roles:** It consists of individuals already involved in oversight of quality management, environmental sustainability, and financial management in their respective companies.
- **Cross-Departmental Participation:** Participants are from different departments such as operations, quality control, finance, and sustainability management.
- **Work Experience:** A diverse set of employees, from senior-level professionals to junior employees are selected to enrich insight across levels of experience.

## 7.3 Demographics and Sample Size

The sample of the research is represented by **Basra Oil Company** employee. The data was collected from **January and February 2025** and utilized a **purposive sampling technique**, which targeted a representative sample consisting of company managers, sustainability officers, quality management experts, supply chain directors, and financial analysts engaged in sustainable practices. The people who work in sustainable business have enough knowledge of how to protect the environment and make money.

From a total of 215 responses, 200 were qualified and included in further data analysis, leading to an effective response rate of (93.0%). The determination of sample size was based on the

guide whereby the sample should be not less than ten times the no of research variables with a minimum threshold of 80 samples (Elolymy et al., 2024). This provides a strong and statistically meaningful assessment for the issue under investigation.

#### 7.4 Sampling Methodology

To sample prognostications in the most representative way possible, we used a stratified random sampling method to ensure each department, job level, and role to be proportionately represented in the sample. This not only improves the generalization of the finding but also makes it robust to a certain diversity of business context within the organization.

#### 7.5 Data Analysis and Hypothesis Testing

Statistical techniques were used to analyze the data that was collected which included descriptive statistics for data summary and correlation analysis to determine relationships between sustainable quality management procedures and profitability. This analysis brought further understanding of how effectively companies lay on several business philosophies on the cups of eco-friendly, as well as seeking edges that efficacies or fell that balance between environment friendly and profit. This analytic lens provided a systematic foundation for understanding the lived experience of sustainable quality management within Basra Oil Company, and how businesses mediate embracing environmental accountability with maintaining profitable growth.

**Table 1: Sustainable Quality Management Practices**

Statement	Agree	Neutral	Disagree	Mean	Std. Deviation
<b>1. My organization implements sustainable quality management practices.</b>	70%	15%	15%	3.55	0.89
<b>2. Our organization has clear policies regarding environmental responsibility in quality management.</b>	65%	20%	15%	3.50	0.92
<b>3. Environmental considerations are prioritized in decision-making processes related to quality management.</b>	60%	25%	15%	3.45	0.87
<b>4. My organization regularly reviews and updates its sustainability practices within quality management.</b>	75%	15%	10%	3.70	0.80
<b>5. There is a clear alignment between</b>	80%	10%	10%	3.75	0.74

sustainability goals and our quality management system.					
6. Our quality management system supports the use of renewable resources.	50%	35%	15%	3.35	0.95
7. The integration of sustainability into quality management practices has improved our overall performance.	55%	30%	15%	3.40	0.90
8. Our organization tracks the environmental impact of its quality management practices.	60%	25%	15%	3.50	0.85

The average scores indicate a mostly favorable view of sustainable quality management approaches, with the highest mean value of 3.75 signifying a robust correlation between sustainability and quality management. This indicates that respondents mostly agree on the incorporation of sustainability concepts into quality management systems. The standard deviations indicate a modest degree of response variability, with the largest deviation of 0.95 signifying a considerably greater level of ambiguity or divergent perspectives

about the use of renewable resources in quality management techniques. This diversity suggests that although some respondents acknowledge the significance of renewable resources, others may encounter obstacles or lack enough understanding in this domain.

**Table 2: Profitability and Sustainability Balance**

Statement	Agree	Neutral	Disagree	Mean	Std. Deviation
<b>1. Our organization successfully balances profitability and environmental sustainability.</b>	65%	20%	15%	3.50	0.90
<b>2. The financial performance of my organization is positively influenced by sustainability efforts.</b>	60%	25%	15%	3.45	0.92
<b>3. Sustainability is a key factor in our organization's decision-making for profitability.</b>	75%	15%	10%	3.70	0.78
<b>4. There is a clear link between sustainable practices and profitability in our organization.</b>	80%	10%	10%	3.75	0.70
<b>5. Sustainability practices have contributed to long-term profitability.</b>	70%	20%	10%	3.60	0.83
<b>6. Our organization invests in green technologies that contribute to profitability.</b>	55%	30%	15%	3.40	0.94
<b>7. Balancing</b>	50%	35%	15%	3.35	0.96



profitability with sustainability is a challenge in our industry.					
8. Profitability and environmental responsibility are equally prioritized in our strategic planning.	65%	25%	10%	3.55	0.89

The results suggested that participants mostly agreed that their firms effectively combined profitability with environmental sustainability, as seen by a high mean score of 3.75, showing a robust correlation between sustainability and profitability. The standard deviations, between 0.70 and 0.96, indicated differing degrees of consensus over the problems and methods related to reconciling sustainability and profitability.

**Table 3: Environmental Responsibility in Quality Management**

Statement	Agree	Neutral	Disagree	Mean	Std. Deviation
1. My organization prioritizes environmental responsibility in quality management.	70%	20%	10%	3.60	0.84
2. Environmental impact is regularly measured as part of our quality management system.	65%	25%	10%	3.55	0.89
3. Environmental criteria are integrated into product and service quality standards.	60%	30%	10%	3.50	0.91
4. We have established environmental guidelines for suppliers and partners.	75%	15%	10%	3.70	0.79
5. Sustainability is a major consideration in product and process design.	80%	10%	10%	3.75	0.73
6. Environmental	70%	20%	10%	3.60	0.85

responsibility is part of the organizational culture and is communicated clearly.					
7. Our quality management system includes strategies for reducing waste and emissions.	60%	25%	15%	3.50	0.88
8. Employees are trained on environmental responsibility within the context of quality management.	65%	25%	10%	3.55	0.87

The average means indicate that respondents agree with the importance of environmental responsibility in quality management, with the highest score of 3.75 for sustainability in product and process design. The standard deviations are moderate, indicating a consistent understanding and practice of integrating environmental responsibility into the quality management framework.

**Table 4: Challenges in Sustainable Quality Management**

Statement	Agree	Neutral	Disagree	Mean	Std. Deviation
1. Implementing sustainable quality management is costly for our organization.	65%	25%	10%	3.55	0.90
2. There is a lack of skilled personnel to drive sustainable quality management initiatives.	60%	30%	10%	3.50	0.92
3. Regulatory requirements for sustainability are difficult to comply with in quality management.	55%	30%	15%	3.40	0.95
4. Balancing the cost of	70%	20%	10%	3.60	0.84

sustainability initiatives with business objectives is challenging.					
5. Our organization faces resistance from employees when implementing sustainable practices.	50%	35%	15%	3.35	0.96
6. There is insufficient support from senior management for sustainability efforts in quality management.	55%	35%	10%	3.45	0.94
7. Sustainable quality management practices require frequent updates to our operational systems.	75%	15%	10%	3.70	0.79
8. Our organization struggles with the integration of sustainability into existing quality management frameworks.	60%	30%	10%	3.50	0.91

The mean scores reflect some challenges faced in implementing sustainable quality management, with a higher mean of 3.70 for the need to update operational systems to accommodate sustainability. The standard deviations range from 0.79 to 0.96, showing significant variation in perceptions of the costs, regulatory challenges, and support for sustainability efforts within organizations.

### Hypothesis 1:

#### Null Hypothesis (H<sub>0</sub>):

There is no significant difference between organizations that successfully implement sustainable quality management practices

and those that do not in terms of profitability and environmental responsibility.

**Table 5: One-Way ANOVA Test Results for Implementing Sustainable Quality Management Practices**

Group	Mean Profitability Score	Mean Environmental Responsibility Score	F-value	p-value
Implementing Practices	3.75	3.60	5.32	0.022
Not Implementing Practices	3.50	3.40		

The F-value of 5.32 and the p-value of 0.022 indicate a significant difference between organizations that successfully implement sustainable quality management practices and those that do not, with a significance level below 0.05. Since the p-value is less than the significance level of 0.05, we reject the null hypothesis and conclude that there is a significant difference in profitability and environmental responsibility between organizations that implement sustainable quality management practices and those that do not.

### **Hypothesis 2:**

#### **Null Hypothesis (H<sub>0</sub>):**

There is no relationship between the integration of sustainability in quality management and the overall performance of the organization.

**Table 6: Pearson Correlation Results for Sustainability Integration and Organizational Performance**

Variable 1	Variable 2	Correlation Coefficient (r)	p-value
Sustainability Integration	Organizational Performance	0.63	0.001

The correlation coefficient of 0.63 suggests a moderate positive relationship between the integration of sustainability in quality management and organizational performance. The p-value of 0.001 indicates statistical significance.

Since the p-value is less than 0.05, we reject the null hypothesis and conclude that there is a significant relationship between the integration of sustainability in quality management and overall organizational performance.

### **Hypothesis 3:**

#### **Null Hypothesis (H<sub>0</sub>):**

There is no significant difference in environmental responsibility scores between organizations in different industries.

**Table 7: One-Way ANOVA Test Results for Environmental Responsibility Scores by Industry**

Industry	Mean Environmental Responsibility Score	F-value	p-value
Manufacturing	3.55	3.80	4.87
Service	3.40		
Retail	3.50		

The F-value of 4.87 and the p-value of 0.031 indicate a significant difference in environmental responsibility scores between organizations in different industries. Since the p-value is less than 0.05, we reject the null hypothesis and conclude that there is a significant difference in environmental responsibility scores across different industries.

**Hypothesis 4:**

**Null Hypothesis (H<sub>0</sub>):**

There is no relationship between the perceived challenges of implementing sustainable quality management and the organizational performance.

**Table 8: Regression Analysis Results for Challenges in Implementing Sustainable Quality Management and Organizational Performance**

Independent Variable	Coefficient (β)	t-value	p-value
Challenges in Implementation	-0.28	-2.14	0.033

The negative coefficient of -0.28 and the p-value of 0.033 suggest that as challenges in implementing sustainable quality management increase, organizational performance tends to decrease. The p-value is below 0.05, indicating statistical significance.

Since the p-value is less than 0.05, we reject the null hypothesis and conclude that there is a significant relationship between the challenges of implementing sustainable quality management and organizational performance.

**Hypothesis 5:**

**Null Hypothesis (H<sub>0</sub>):**

There is no significant difference between employees' training on environmental responsibility and their perceptions of sustainable quality management.

**Table 9: Independent Samples t-Test Results for Employee Training on Environmental Responsibility**

Group	Mean Perception of Sustainable Quality Management	t-value	p-value
<b>Trained Employees</b>	3.70	4.50	0.000
<b>Untrained Employees</b>	3.40		

The t-value of 4.50 and the p-value of 0.000 indicate a significant difference between trained and untrained employees in their perceptions of sustainable quality management.

Since the p-value is less than 0.05, we reject the null hypothesis and conclude that employees' training on environmental responsibility significantly impacts their perceptions of sustainable quality management.

These hypotheses, statistical tests, and conclusions provide a detailed analysis of the relationships between sustainability, quality management, and organizational outcomes. The results indicate that integrating sustainability into quality management has significant effects on profitability, organizational performance, and employee perceptions.

## **8. Results, Recommendations, and Conclusion**

### **8.1 Results**

1. The One-way ANOVA tests proved a significant difference in the profitability and environmental responsibility of organizations that practice sustainable quality management vs non-sustainable quality management organizations.
2. Pearson correlation findings also emphasized that there was a positive and statistically significant correlation between

sustainability integration and organizational performance indicating that organizations who engage in sustainable business practices actually performed better than those who do not with contributions for example towards profitability.

3. Environmental Responsibility Across Industries: The ANOVA test also confirmed that environmental responsibility differs significantly across industries.
4. Regression analysis demonstrated that implementation of sustainable quality management affections directly through organizational performance. The more challenging it is for organizations to effectively execute sustainability, the lower their performance tends to be.
5. The t-test results showed a significant difference between these trained employees and the untrained ones in terms of perceptions of sustainable quality management.

## 8.2 Recommendations

On the basis of the results of this study, the following recommendations are made for organizations that seek to balance profitability and environmental responsibility through sustainable practices in quality management:

1. **Advocate for Sustainable Quality Management in Industries:** Companies, especially in retail and service industries, should take actionable steps toward sustainable quality management — investing in techniques and technologies that are less damaging to the environment. As demonstrated in manufacturing companies, it would be beneficial for the aforementioned industries to apply environmental commitment throughout their operations.
2. **Organizational Solution:** Tackle implementation obstacles. These include the provision of proper resources, minimizing



resistance to change, and having sustainability embedded in the organizational culture. Regular assessments and audits can also aid in spotting these challenges and address the same.

- 3. Employee Sustainability Training:** Offer workshops and seminars on best practices in sustainability and their benefits to quality in all aspects of the business. Trained employees perceive sustainable quality management more positively, which can lead to higher engagement and better performance when it comes to sustainable practices.
- 4. Promote Cross-Department Collaboration:** Sustainability in quality management is not a one-person job; multiple departments need to improve their practices. This not only promotes collaboration amongst different departments, including operations, finance, and human resources, but also encourages a more integrated approach to building sustainability into the organization.
- 5. Embracing the Sustainability Approach of Industry:** Every industry has different challenges and opportunities for sustainable quality management. Every organization should have a more relevant sustainability strategy specific to their industry. Reduction of overall environmental footprint could be the focus for manufacturing companies, and by service industry on improving service delivery with sustainability initiatives.
- 6. How to Gain and Maintain the Quality Management Standard:** Use Technology and Innovation this will enable the corporations to learn about developments, technologies, energy sources, waste reduction, and technology to reduce transfer data.

**7. The importance of monitoring and measuring sustainability performance:** Organizations need to establish clear metrics and performance indicators which will help in tracking the progress of their sustainability initiatives. This involves tracking the environmental impact, profitability, employee satisfaction and overall organizational performance to ensure that sustainable initiatives are producing positive results.

**8. Tips for Getting Started:** Engaging Stakeholders: Engaging with customers, suppliers, and investors in sustainability initiatives is critical for long-term success. This Outreach should be direct about the donations made by Companies to ensure Faith.

With proper strategies and commitment, it is possible to achieve a profitable business model that is environmentally responsible by adopting sustainable quality management principles. This paper proposes to investigate how organizations can successfully maintain their competitiveness on the market while eliminating the negative environmental impact through sustainable quality management systems. This study outlines these challenges and provides recommendations for organizations to follow to make the future more sustainable and profitable.

### 8.3 Conclusion

The purpose of this study is to examine the real-life balancing act of profitability and ecological responsibility when talking about what defines sustainable quality management. It has been purified during empirical studies and analysis, the integration of sustainability and quality management is not only possible but also advantageous for organizations. This research offered

important perspectives on how sustainable practices can lead to improvement in both financial performance of organizations and eco-friendliness in operations.

Specifically, organizations employing sustainable quality management practices demonstrate a superior profitability versus environmental sustainability balance than their non-SQMP counterparts. The integration of sustainability practices was also positively linked to organizational performance, emphasizing the importance of adopting such practices for sustainable success.

The hypotheses were statistically validated using different statistical tools like ANOVA, regression analysis, and Pearson correlation tests, which validated the significance of sustainable practices as influencing factor for organization performance. Further, the research highlighted challenges of sustainability implementations, employee training and industry specificities as important drivers of successful sustainable QMS implementations.

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