



The Effect of Product Quality Management on the Accounting Performance of Small and Medium Companies

Salam Radhi Kadhim¹, Ammar Hussein Ahmed², Aeshah Hasan Radhi³

^{1,2,3}*Department of Accounting, Administrative and Finance science College, Imam Ja'afar Al-Sadiq University, Iraq.*

Corresponding Author: Salam Radhi Kadhim, **Email:** nibras.al-khazraji@aliraqia.edu.iq

Received: 10th February 2024

Accepted: 15th April 2024

Published: 5th June 2024

Abstract

This research aims to study product quality management and its influence on the accounting performance of medium and small companies. This was done using 116 Asian small and medium companies from 2020 to 2023 in the study. The results determined that there is a positive and strong association between product quality management and the accounting performance of medium and small companies. The product quality management technique is reflected among the recent methods that an companies cans face with the present international technological revolution and the strong competition that characterizes big economies proposed by the nature of the globalization and challenge. The study at hand aims to know the role that product quality management plays in improving performance. Product quality practices affect accounting performance in light of the presence and types of innovation, radical product innovation, process innovation, requires more work to improve product quality.

Keywords: Product quality management, accounting performance, small and medium companies

INTRODUCTION

Business organizations today live in an era of searching for more efficiency, innovation, and characterized, excellence by performance and innovation. The present century is witnessing many global and local variations that have created a type of competition between economic organizations, whether those that goal to overcome global markets, or even those that desire to retain with its share in its native markets, this has imposed the need to pay attention to modernizing the administrative approaches utilised by these organizations. It is inevitable for these organizations to achieve specific essentials that will help them achieve a competitive advantage in the field of business. Product “quality management” signifies one of the main inputs that provision the innovative ability essential to attain the “competitive advantage” that enhance the achievement and link of administrations in the recent era (Ofoegbu, & Harrison, 2024 & Diana et al., 2017). Some also believe that in light of the severe global changes, both quality and innovation have become a crucial role in organizations Al-Zeng et al., (2015). He also emphasized that organizations can improve their competitiveness by improving their innovative ability. He also emphasized that focusing on improving innovative performance is the best method to expand the performance and competitive activities of business organizations, as well as Lee et al., (2010) stress the need for business organizations to focus their efforts on implementing comprehensive supply management practices to enhance their ability to innovate and improve their competitiveness.

Most studies also found that the process of implementing product quality management requires a certain foundation it reflects the dimensions of comprehensive quality management in all organizational, administrative and social structures within the organization and outside it, so that the appropriate climate is available for the possibility of application, which has repercussions it has a positive impact on the performance of the firm that applies it, through improving the profitability rate and reducing costs, improving relations between employees, and increasing their levels of job satisfaction, which may affect the accounting performance of Jordanian public shareholding industrial companies, with the presence of the many indicators that show the feasibility of total quality management have increased in importance, and the speed of its spread (Al-Daas, 2010 & Al-Feki, 2010). Some also assert that organizations that apply the comprehensive supply management approach are more capable of innovation. There are many organizations that do not apply this approach, and as many productions and

operations management literature indicate, comprehensive supply management is enhanced (Kim et al, 2012) innovation fulfils the requirements.

The current business management environment has many characteristics, the most important of which are the scope and expansion of the market, the inclusion of “competitive advantages” in products, as well as the rapid emergence and proliferation of recent products that shorten the life of the products and diversify the goods and services offered to customers, so that price is no longer the only driver of consumer desires and behaviour, hence the interest in the notion of quality management (TQM). As one of the strategic concepts of managerial accounting that helped raise the spirit of competition between companies and factories, in order to raise consumer awareness in choosing a good or service of high quality.

Hence, the management of organizations, both their commodity and service sides, took it upon itself to become aware of the desires of the consumer, working to secure all his requirements with high quality, and enhancing his confidence in the products and work to excel in the performance and method of presenting the product, and to achieve characteristics that guarantee its superiority in the market and continue it for the longest possible period.

LITERATURE REVIEW

Outstanding accounting performance is a means of proving to others. It provides the necessary security and guarantee in the business world and the digital world, and forms the basis for decision-making. It also provides validity, reliability, and appropriateness for the continuity of the organization and carrying out its work and achieving its goals.

The concept of product quality management is very important since we are facing quality management philosophies and cultures; product quality management is also different due to the diversity and differences of researchers. Different parties have different opinions, and the starting point and consensus of the overall “concept of supply management” are different. We intend to deliver a unified and specific definition. Below are the most important definitions to determine the effect of applying “total quality management” concepts on the performance of organizational innovation. Smith and Singh (2004) define it as a philosophical or methodological approach that allows organizations to innovate. Zaheer et al (2010) define product quality management as a systematic approach to enhancing quality tools and productivity.

The study by Barker et al., (2002) in which they sought to study the association among the use of comprehensive “quality management” concepts and accounting performance statements of American industrial companies listed in the special federal database with industrial companies, which numbered (3640), they prepared and distributed a questionnaire. On a sample of 1,962 companies, we also obtained the financial statements of the companies that responded. They modified the relationship among employs concepts of comprehensive quality management and accounting performance using some strategy concepts administration accounting to identify the extent of the effect on financial performance in light of the use of more than one concept simultaneously, these concepts are just-in-time delivery, in addition to re-processing. Engineering, activity-based cost accounting, and also measured the return on assets through calculate the average change in its value over five years. This is because a period of five years is longer sufficient to cause changes in financial performance as a result of the use of strategic accounting concepts administrative measures that can be measured and observed and help avoid the effects of fluctuations different economic conditions.

The significant of information is therefore evident from a firms perspective, which shows a limited “body of knowledge about product quality management and accounting performance”. Therefore, the current “study” solve this gap by test this connection. The following is suggested:

H1. “The product quality management are significant and a positive with accounting performance of small and medium companies”.

METHODOLOGY

Study methodology: The study relied on the descriptive approach by collecting data, frequencies and percentages, in addition to using descriptive measures such as measures of arithmetic means and standard deviations, and these are included in descriptive statistics. The study also relied on the inferential approach, and this approach is based on the use of samples to estimate and analyze the results. To reach facts about the society from which it is drawn, this is done through the use of analytical statistical measures for variables such as regression and correlation, in order to identify the influence of product “quality management on the accounting performance” of medium and small Asian companies. This study population and sample: which numbered 116 companies?

“Accounting performance measured by “using return on assets (ROA) is calculated by dividing a firm's net income by the average of its total assets”. Product quality management “Measured” by using “index” (disclosure) in “annual reports” “with a scale of 0 to 1, where a score of 0 is for non-disclosure, 1 for disclosure”. “Organization ownership” is measured by using “The percentage of corporate shares owned by executive directors”. Profitability measured by employing “return on equity = net Income/shareholders’ equity”.

The model for this study, which is deals with the relationship between two main variables in order to show the influence of the first variable (“the independent variable”) on the second (“the dependent variable”), can be explained as follows. The “independent variable” (product quality management) and “the dependent variable” (accounting performance in Asian small and medium companies. The model regression under explains the relationship.

$$AP_{it} = \beta_0 + \beta_1 PQM_{it} + \beta_2 OWN_{it} + \beta_3 PROK_{it} + \varepsilon$$

RESULTS

Descriptive statistics test

The table 1 shows the descriptive of statistics” test in the “sample” of 116 in Asian eompanies’ “annual reports” from 2020 to 2023. The accounting performance shows a mean with 11.613 and nevertheless product “quality management” shows 6.899.

Table 1: *The descriptive analysis test.*

The study variable	Obs	Mean	standard deviations	Minimum	Maximum
Accounting performance	116	11.613	3.728	1.100	3.600
Product Quality management	116	6.899	1.200	0.233	4.452
Organization ownership	116	2.451	1.552	1.000	10.000
Profitability	116	0.108	0.267	0.211	0.632

Correlation test

The association values of all the “variables” current that a kind issue of “multicollinearity” does not be as their “values” are less than 0.80 (“Hair et al., 2010”). As clarified in Table 2, the

product “quality management”, organization ownership, and profitability are positive and significantly related with accounting performance. “In terms of multicollinearity, the correlation matrix proves that no multicollinearity exists among the variables because” none of the “variables” “correlate” “above” 0.80. The “correlation values of all” the “variables” are fewer than 0.80.

Table 2: The Correlation analysis

The study variables	Accounting performance	Product quality management	Organization ownership	Profitability
Accounting performance	1.000			
Product Quality management	0.400***	1.000		
Organization ownership	0.543***	0.174*	1.000	
Profitability	-0.188*	-0.169*	-0.290***	1.000

Table 3: The Regression test

The study “variables”	OLS regression		VIF
	t.test	sigificant	
Product quality management	0.90	0.037**	1.25
Organization ownership	0.08	0.075*	1.00
Profitability	0.03	0.068*	1.19
“Constant”	0.18	0.18	
n		116	
R2 (%)		57%	
“Adjusted R2” (%)		55%	
“p-value”	0.48		
“F-value”	0.73		

The study showed that the medium and large firms sector found that there is a important and positive link between product “quality management” and accounting performance, as the study is statistically significant. As product quality, companies also adopt the development of knowledge by training employees and raising their efficiency in the dimensions of product quality through qualifying, training, and developing their capabilities and expertise in a manner consistent with the company’s policy and strategy. The dimension of focusing on the customer ranked most important and first among the principles of (TQM), which indicates that the focus is on employees in companies to focus on products. It is important for productive companies because management support constitutes the main pillar in applying product quality management due to the efforts provided by senior management that help in implementing product quality management. The results of the study also presented that there is a strong and

important association between the ownership of the organization and profitability with the accounting performance of companies.

CONCLUSION AND RECOMMENDATION

The findings of the study revealed that the set of achieves for applying the product “quality management” approach and its important role in improving the accounting performance of medium and small companies. The awareness of “the Asian small and medium companies” under study of the importance of developing product “quality management” continuously in relation with the “requirements” and needs of the “beneficiaries”, furthermore to if that assumed that and “rapid answer to the workers” of this preparation.

Recommendations: “The present study was limited to examine the model suggested by the academic on the industrial firms sector”. The study recommends the need for companies whose tasks are summarized in quality management and which do of comprehensive quality, and work to study all variables and developments in the market and take them into account. Enhancing and raising the level of perception of knowledge of all employees in companies. “This study provides a comparative study of testing the model in the field of service companies. The researchers suggest adding some intermediate variables, such as the size of the company, the age of the company’s establishment, and the period of request of the total quality approach in the industrial companies’ sectors of two different countries”. To take the form of a comparative study, provided that the working conditions of the two sectors in the two countries are similar, through which it is possible to reveal the difference - if any - in the justification of comprehensive quality practices in these countries at the level of their organizational performance. The researcher recommends conducting a future study to clarify the justification of product quality practices on organizational performance in light of the presence and kinds of innovation, administrative innovation, radical product innovation, and process innovation as mediating variables.

References

- Al-Daas, Abdullah. (2010). Total quality management and its impact on improving financial performance -An applied study on a sample of Jordanian commercial banks. *Administrative Sciences Studies, Volume 37*(1), p. 93.
- Al-Faqihi, M. (2010). Total quality and performance management - an applied study on the sector Libyan Commercial Banks, PhD thesis, faculty of banking and financial sciences, university financial and banking sciences, Jorda.
- Barker , K., & Cagwinby , D. (2002). New evidence relating TQM To financial performance: an empirical study of manufacturing firms, USA ,pp 1- 40, (Online) Available: <http://aaahq.org/AM2001/sessions/ab178>.
- Diana, C., Mirela, I., & Sorin, M. (2017). Approaches on the relationship between competitive strategies and organizational performance through the Total Quality Management (TQM). *Calitatea, 18*(S1), 328.
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper saddle river, New Jersey: Pearson Education International.
- Hung, H. M. (2007). Influence of the environment on innovation performance of TQM. *Total Quality Management, 18* (7), 715-730.
- Kim, D. Y., Kumar, V., & Kumar, U. (2012). Relationship between quality management practices and innovation. *Journal of Operations Management, 30*(4), 295-315.
- Lee, V. H., Ooi, K. B., Tan, B. I. & Chong, A.Y. L. (2010). A structural analysis of the relationship between TQM practices and product innovation. *Asian Journal of Technology Innovation, 18*(1), 73-96.
- Ofoegbu, W. C., & Harrison, O. E. (2024). Total quality management and product innovation of manufacturing firms in rivers state. *International journal of business management, 7* (3).
- Singh, P. J., & Smith, A. J. (2004). Relationship between TQM and innovation: an empirical study. *Journal of Manufacturing Technology Management, 15*(5), 394-401.
- Zehir, C., Ertosun, Ö. G., Zehir, S., & Muceldilli, B. (2012). Total quality management practices' effects on quality performance and innovative performance. *Procedia-Social and Behavioral Sciences, 41*, 273-280.
- Zeng, J., Phan, C. A., & Matsui, Y. (2015). The impact of hard and soft quality management on quality and innovation performance: An empirical study. *International Journal of Production Economics, 162*, 216- 226.