OmniaScience

Journal of Industrial Engineering and Management
JIEM, 2025 – 18(1): 10-32 – Online ISSN: 2013-0953 – Print ISSN: 2013-8423
https://doi.org/10.3926/jiem.7899

The Mediating Role of TQM Interventions and Benchmarking in the Impact of Organizational Culture on Organizational Performance

Naseem Mohammad Twaissi[1], Mohammad Orsan Al-Zoubi[2], Ra'ed Masa'deh[3], Jumana Ziad Al Zoubi[4], Jebril Ali Alhelalat[5*]

[1]*Department of Business Administration, College of Business Administration and Economics, Al-Hussein Bin Talal University (Jordan)*
[2]*Department of Business Management, School of Business, The University of Jordan (Jordan)*
[3]*Department of Management Information Systems, School of Business, The University of Jordan (Jordan)*
[4]*Department of Public Administration, School of Business, The University of Jordan (Jordan)*
[5]*Department of Hotel Management, Petra College for Tourism and Archaeology, Al-Hussein Bin Talal University (Jordan)*

n.twaissi@ahu.edu.jo, m.alzoubi@ju.edu.jo, r.masadeh@ju.edu.jo, j.zoubi@ju.edu.jo
Corresponding author: Jebrilalhelalat@gmail.com

Received: May 2024
Accepted: December 2024

Abstract:

Purpose: The purpose of this research is to underscore the influence exerted by organizational culture on the organizational performance of Small and Medium-sized Manufacturing Enterprises (SMEs), leveraging the mediation of Total Quality Management (TQM) interventions and benchmarking practices.

Design/methodology/approach: The empirical data underpinning this research was procured from SMEs within the manufacturing and industrial sectors of Jordan, using a sample of 710 owners and managers. This data was meticulously analyzed utilizing the statistical software package, Analysis of Moment Structures (AMOS). Structural Equation Modeling (SEM), a multivariate statistical analysis technique, was employed to scrutinize the interrelationships among the variables under consideration.

Findings: The research reveals a positive correlation between organizational culture and organizational performance, with benchmarking and TQM interventions as significant mediators.

Practical implications: This study refocuses management practitioners on improving organizational efficiency, corporate culture, TQM, and standard setting, providing beneficial insights for academics, managers, and policymakers.

Originality/value: It significantly contributes to the limited literature on TQM in the context of manufacturing SMEs. While some research acknowledges benchmarking as a vital part of TQM, this study uniquely positions both as independent mediators between organizational culture and performance. Additionally, it views benchmarking through knowledge management, underscoring TQM interventions and benchmarking in the context of Jordanian manufacturing SMEs, distinguishing it from prior research.

Keywords: organizational culture, organizational performance, total quality management, benchmarking, SMEs, Jordan

To cite this article:

Twaissi, N.M., Al-Zoubi, M.O., Masa'deh, R., Al Zoubi, J.Z., & Alhelalat, J.A. (2025). The mediating role of TQM interventions and benchmarking in the impact of organizational culture on organizational performance. *Journal of Industrial Engineering and Management*, 18(1), 10-32. https://doi.org/10.3926/jiem.7899

1. Introduction

In today's dynamic and uncertain business environment, small and medium-sized enterprises (SMEs) are trying to improve their values, standards, processes, and procedures of work to increase their performance and competitive position in the markets, as well as offer goods and services that meet or exceed customer demands. Organizational culture is a broad concept that includes both written and unwritten statements that make a particular organization different from another in terms of a vision, mission, practices, values, and behaviors; initiatives; incentives; and the ways of interacting with internal and external groups. Barney's theory (1991) indicated that a successful organizational culture encourages employee collaboration, removes barriers among organizational units, encourages quick decision-making, and increases employee's productivity.

A company that creates a positive work culture with clear standards, provides regular feedback, and shows the right appreciation helps employees achieve better results since they accurately know what is right to do and not to do. Often, organizations use a wide range of methods and indicators to gain insight and feedback about their employees' performance. Academic literature has offered some models accompanied by a group of indicators that help firms assess the impact of a work culture on employees' behaviors and performance. Combining TQM procedures with other management strategies can improve organizational performance. An example of this is the Shewhart Cycle (Plan, Do, Study, Act). Implementing TQM strategies along with other measures such as continuous work improvement, customer focus, a good relationship with suppliers, high management commitment, employee engagement, and a structural approach to solving work problems can all contribute to creating a positive work environment (Brah, Ong & Rao, 2000; Cassell, Nadin & Gray, 2001; Chin, Pun, Lau & Lau, 2001; Mehralian, Nazari, Nooriparto & Rasekh, 2017).

Many of the current studies have examined the relationship between work culture and organization performance by mediating TQM between these two variables (Ho, Duffy & Shih, 2001; Prajogo & Sohal, 2006). Although mediating TQM interventions between organization culture and work performance appears to be effective in assessing a company's overall performance, benchmarking in knowledge management, which focuses on evaluating a firm's superior and innovative performance, can give a bigger picture of work assessment than TQM measures alone.

In this context, Porter (1990) and Powell (1995) assert that combining TQM measures with other management tools that place a constant emphasis on improving product, process, and consumer reaction can enhance a company's performance and give it a competitive advantage. This study contributes to incorporating benchmarking as a second complementary measure consistent with TQM to provide a better understanding of the relationship between organizational culture and performance. In addition, benchmarking is a knowledge management tool that is used to identify performance gaps by comparing a company's current performance with that of the leading competitive firms operating in the same industry and allowing the company to create a new work culture and choose the best strategies to fill the gap in performance.

Based on the above literature and theories relevant to the study focus, we developed a comprehensive theoretical model that mediates both TQM and benchmarking measures in the relationship between organizational culture and performance. In doing so, we utilize this model to better understand how TQM and benchmarking metrics can mediate the relationship between the performance cultures at work in Jordan's SMEs. The idea behind this choice is that SMEs in Jordan have been striving to compete in international markets based on using TQM and benchmarking tools to strengthen an organizational culture that supports the skills and knowledge of their employees as preconditions to increasing their performance and competitive advantage. We argue this study model can be an aid to decision-makers in Jordanian SMEs to gain the benefits of combining these variables to improve

employees' skills and knowledge and the overall organizational performance. In addition to its practical proposition, the study aims to research crucial issues in integrating TQM, benchmarking as a stand-alone subject, organizational culture, and performance theories and practices in one study. Previous studies in this field have considered TQM in general (e.g., Al-Hyari, 2021; Shammout & Jawazneh, 2022), while this study focuses more on benchmarking due to its importance in the contexts of manufacturing firms (Maiga & Jacobs, 2004).

Based on the above discussions, this research proposes the following question: What are the relationships among organizational culture, TQM, benchmark indicators, and organizational performance of small and medium-sized enterprises in Jordan?

2. Hypotheses Development

2.1. Organizational Culture and Organizational Performance

The success of an organization can be measured by that success, and all aspects of organizational culture have a beneficial impact on the many perspectives on organizational performance (Jenner, Hebert, Appell & Baack, 1998; Ahmed & Shafiq, 2014; Lin, Han, Kim, Jiang & Xia, 2022). Various studies have revealed direct and indirect relationships between organizational culture and performance (Siehl & Martin, 1990; Denison & Mishra, 1995; Kotter & Heskett, 2011; Ng'ang'a & Wesonga, 2012; Shahzad, Luqman, Khan & Shabbir, 2012; Nikpour, 2017). According to the study's findings (Fiordelisi & Ricci, 2014), productive and devoted workers support an effective organizational culture that increases output and performance within the company. Additionally, Stoica, Liao and Welsch (2004) argued that organizations use some management strategies in order to improve their work culture, which is a prime factor in increasing employee performance. Therefore, organizations' leaders attempt to develop strategies and tactics to create a dynamic work culture that inspires employees' behaviors toward innovative performance (Sorensen, 2002). In the literature, studies show that employees and managers view the organizational culture of high-growth companies differently; managers view organizational culture as a hierarchy (Strengers, Mutsaers, Van Rossum & Graamans, 2022). The commitment between partner companies mediates the relationship between organizational culture and international project performance (Lin et al., 2022). SMEs who are top performers share similar organizational cultures in several dimensions (Kyriakidou & Gore, 2005).

According to Kilmann, Saxton and Serpa (1985), organizational culture is a product of interactions between managers, supervisors, and employees as well as their shared values, attitudes, conventions, and expectations. Hofstede (1980) defined organizational culture as the collective state of mind that distinguishes one organization from another in terms of routines, values, habits, and practices. According to Polychroniou and Trivellas (2018), employee productivity will be at its highest level when the organization's culture and performance are in harmony. Strengers et al. (2022) indicated that an organization's vision, missions, values, practices, systems, work procedures, and leadership styles may all contribute to creating a workplace culture that supports employee productivity. Deal and Kennedy (1982) argued that every organization, regardless of size or nature, has a unique set of values, traditions, norms, and behaviors that shape its personal identity, as well as how the behavioral patterns of its employees influence and are influenced by organizational culture.

According to Asif and Sajjad (2018), the organizational culture of manufacturing SMEs might affect how well they perform. Similar to this, Tidor, Gelmereanu, Baru and Morar (2012) emphasized that altering organizational culture is necessary in order to diagnose and improve the culture and performance of manufacturing SMEs. Kilmann et al. (1985) asserted that every organization has a special culture that determines the methods of implementing its daily work duties and explains why some companies succeed or fail in achieving their intentional goals. Leaders must pinpoint the cultural and sociological elements that either support or hinder an organization's performance in order to strengthen its employees' unique abilities as a precondition to high performance. In light of the aforementioned clues, we propose the following hypothesis:

H1: Organizational culture positively influences organizational performance.

2.2. Organizational Culture and TQM Interventions

The organizational culture can contribute to establishing the best conditions for implementing or applying TQM techniques (Panuwatwanich & Nguyen, 2017; Haffar, Al-Hyari, Djebarni, Al-Shamali, Abdul-Aziz & Al-Shamali, 2022). According to Ali, Abdullah and Gorondutse (2017) and Patyal and Koilakuntla (2018), OC has a positive influence on the implementation of TQM in service and production sectors in developing countries. According to Gambi, Boer, Gerolamo, Jørgensen and Carpinetti (2015), organizational culture is crucial to the effective application of TQM policies. Rad (2006) stressed that a work environment supported by TQM initiatives can encourage employees to take risks, solve problems, think critically, and innovate. Sinha, Garg, Dhingra and Dhall (2016) emphasized the positive effects of organizational culture and TQM interventions on overall company performance. Despite the fact that it may be difficult for companies to pinpoint the exact ways of measuring the impacts of organizational culture on employee productivity, they often utilize some quantitative and qualitative measures for this purpose. A model was developed that shows organizational culture's influences on TQM. There is also a clear connection in previous studies between organizational culture dimensions and TQM interventions (Sinha et al., 2016). Further, the literature shows that there is a positive effect of Organizational Culture on Total Quality Management (TQM) (Gorondutse, Ali & Hilman, 2021). Furthermore, it was claimed that there is a positive effect of both TQM and organizational culture on SME performance (Hilman, Ali & Gorondutse, 2020).

For example, a company may conduct surveys or in-depth interviews to understand more about how employees feel at work and how top management initiatives help them react rapidly to continuous changes in the market and customer preferences. According to Baird, Hu and Reeve (2011), a flexible organization's culture that promotes the application of TQM principles can help organizations that operate in the production and service sectors increase their capabilities for innovation and growth in the market. For Maull, Brown and Cliffe (2001), organizations that utilize the TQM principle lay the basis for establishing a favorable organization's culture that is able to enhance the employee's unique performance and a company's competitive advantage. Schein (1997) and Haffar, Al-Karaghouli and Ghoneim (2013) indicated that adoption of TQM principles gives an organization an opportunity to enjoy a friendly and family-like work culture and encourages employees to achieve their jobs in more fashionable ways. Hilman et al. (2020) asserted that the performance of SMEs can be enhanced by combining TQM interventions with organizational culture factors. According to Cameron and Quinn (2006), successful implementation of TQM interventions has a positive impact on improving work processes and procedures and the quality of products and services that will be delivered to customers. Since organizational culture has a strong relationship with TQM interventions, we propose the following hypothesis:

H2: TQM positively influences organizational culture.

2.3. TQM Interventions and Organizational Performance

According to Zwain, Lim and Othman (2017) and Abbas and Kumari (2023), TQM is a collective approach for improving both individual and organizational performance. TQM is an important strategy for modern organizations to improve continual processes in reducing and eliminating manufacturing errors. It focuses on improving customer service, training employees to work with effectiveness and increasing customer satisfaction (Snongtaweeporn, Siribensanont, Kongsong & Channuwong, 2020). Alzoubi, Hayati, Rosliza, Ahmad and Al-Hamdan (2018) also found that implementing TQM Interventions contributes to increasing organizational performance. Juran (1989) proposed five TQM principles, including preparation, planning, evaluation, implementation, and diversified skills, to improve the effectiveness of industrial companies. Krajewski, Ritzman and Malhotra (2010) highlighted some TQM principles that are able to enhance a productive work environment, such as customer focus, employee involvement, integration of systems, continuous improvement of the work's processes, and a structural approach to decision-making. Khalfallah, Salem, Zorgati and Lakhal (2021) and Abu-Mahfouz (2019) believed that TQM techniques such as top management support, customer focus, leadership styles, collaborative teamwork, communication skills, and training are all essential for the success, growth, and survival of organizations. It was shown that TQM practices directly impact operational performance (Sharma & Modgil, 2019). There is a causal relationship between TQM and Nonfinancial performance (Abdi & Singh, 2021). Further, there is a positive relationship also between TQM and organizational performance (Tripathi, 2004; Thai & Jie, 2017; Abbas

& Kumari, 2023). The supplier quality management dimension of the TQM model affects operational performance (Adem & Virdi, 2020).

Albuhisi and Abdallah (2018), Alghamdi, (2018), and Hilman et al. (2020) affirmed the strong direct relationship between TQM and company performance. However, other studies (McCabe & Wilkinson, 1998; Su, Li, Zhang, Liu & Dang, 2008; Sinha & Dhall, 2018) found that there was not always a reliable link between the two variables because TQM is a long-term strategy that makes it difficult to evaluate its direct and immediate impact on employee and organization performance. So, before implementing TQM interventions, companies have to improve the entire work system, design operational plans and other management strategies that encourage employees to engage in work and update the skills and knowledge of their employees in order to produce high-quality products and services that satisfy customers' needs or exceed them. In light of the above literature, we suggest the following hypothesis:

H3: TQM interventions positively influence organizational performance.

2.4. Organizational Culture and Benchmarking

Typically, a company uses benchmarking as a helpful tool to identify its performance gaps in relation to those of other pioneering companies operating in the same industry. According to Dubey, Gunasekaran, Childe, Papadopoulos, Hazen, Giannakis et al. (2017), organizational culture has a beneficial impact on sustainable benchmarking.

"Benchmarking is defined as the comparison of products, services and processes across divisions that carry out similar operations in the same organization, among competing firms in the same industry, and among firms with similar processes across different industries". (Sammut-Bonnici, 2015). Benchmarking is the process of collecting and analyzing data about leading companies and then absorbing, adapting, and translating this data into practices to help the organization improve its work culture and performance. When it comes to organizational culture improvements, benchmarking can be described as a set of standards that comprise qualities or attributes that distinguish the practices of a particular organization from those of others. According to Auluck (2002) and Kozak (2002), implementation of the benchmarking methods can be more supported by a strong organizational culture. Dess and Picken (2000), Hughes, Hughes and Morgan (2007), and Abdulmuhsin, Zaker and Asad (2021) showed the company can operate more successfully if its benchmarking process is built on continuous learning and constructive discussion, as well as encouraging the process of acquiring, sharing, and exploiting new information and knowledge as a basis for innovation and competitiveness. Benchmarking is directly correlated with organizational performance by the way of innovative organizational culture (Alosani & Al-Dhaafri, 2020).

Institutional theory dictates that imitating the behaviors and actions of successful organizations is acceptable as long as it complies with moral and legal standards. However, a knowledge-based perspective of the organizations demonstrates that it is difficult to copy the behaviors and actions of other companies since they are made up of intangible and intellectual assets that have been deeply ingrained in people's minds and hands (Massa & Testa, 2004). The primary stage in assessing the implementation of a benchmarking approach is identifying an organization's culture in terms of its beliefs, values, and practices, and how they influence organizational behavior and shape its culture at large (Francis & Holloway, 2007). Thus, benchmarking can be an effective strategy to assist a company in creating a positive workplace environment that promotes collaboration in problem solving and human resources development.

According to Kyriakidou and Gore (2005), the benchmarking technique may be used to promote creativity at work and make it easier for Small and Medium-Sized firms to produce new ideas and concepts for best practices. There are previous studies that claimed that benchmarking is strongly associated with organizational culture (e.g., DiMaggio & Powell, 1983; Liu, Ke, Wei, Gu & Chen, 2010). Based on the above discussions, we suggest the following hypothesis that links organizational culture with benchmarking:

H4: Organizational culture positively influences benchmarking.

2.5. Benchmarking and Organizational Performance

Today's Small and Medium-Sized enterprises use benchmarking tools to ensure continuous improvement in their performance. Benchmarking is a structured approach that aims to identify work areas in need of development by comparing a current company's performance with that of distinctive and successful firms in terms of their products, services, processes, and work values. Adjusting the company's performance in accordance with the practices of other leading companies will contribute to improve its overall performance. Several studies have viewed benchmarking as a continuous process that helps firms improve their administrative and operational procedures in comparison to the performance of other exceptional firms (Kouzmin, Löffler, Klages & Korac-Kakabadse, 1999). According to Yasin (2002) and Alosani and Al-Dhaafri (2020), benchmarking assists managers in developing operational plans that lower performance deficiencies and increase overall organizational efficiency. Organizational performance can be improved by effectively implementing benchmarking (Maiga & Jacobs, 2004).

Historically, the assessment of organization performance has been a focus of management theory, which explains that successful measurement of any organizational performance depends on the right methods and processes used for this purpose and their impact on employees and the organization. According to Bogetoft (2012), benchmarking requires gathering and analyzing data about the performance of other successful businesses to improve the quality of decision-making related to the continuous improvement of organizations long-term strategic objectives. Additionally, Singh and Twalo (2015) strongly recommend benchmarking as the primary tool for evaluating an organization's capacity to manage and develop its human resources.

Organizational performance is now measured by a number of methods that are accompanied by a wide range of indicators such as customer focus, employee initiatives, operations efficacy, financial reporting, and a company's missions and objectives. For instance, The KPI Scorecard has been used as a comprehensive methodology that allows every organization to assess its performance in terms of profit margin, total revenue, labor effectiveness, and other factors that affect the overall organization's performance (Kaplan & Norton, 2000).

Even though the vision, mission, values, and goals of a particular company may appear to be distinct from those of other organizations, their effective achievement depends on how well their management and employees are able to adopt and implement the best practices of other successful organizations. Benchmarking is a systematic approach used to enhance an organization's effective performance based on input, process, and output (Anderson & McAdam, 2004). Benchmarking tools are also associated with knowledge management practices that focus on the company's innovative performance (Chourides, Longbottom & Murphy, 2003). In addition, it is believed that recent developments in information technology, such as Artificial intelligence, have made it easier to put the benchmarking tool in place as part of knowledge management strategies that focus on the company's innovative performance. Based on the above clues, we make a connection between benchmarking and organizational performance through the following hypothesis:

H5: Benchmarking positively influences organizational performance.

2.6. Mediating Impact of TQM Interventions on the Relationship between Organizational Culture and Organizational Performance

Many studies have emphasized the role of flexible organizational structure and workplace culture in supporting the application of TQM principles as a predictor for increasing performance (Maull et al., 2001; Prajogo & McDermott, 2005; Zu, Robbins & Fredendall, 2010; Baird et al., 2011). According to Cicmil and Kekäle (1997), a positive work atmosphere facilitates the implementation of TQM as an essential tool for enhancing an organization's performance and its competitive advantage. It is stated that "Organization culture comprises the attitudes, experience, beliefs and values of organizations" (Oparanma, 2015).

Kaluarachchi (2010) and Mosadeghrad (2006) believed that a company with an open and flexible workplace culture has the opportunity to use TQM strategies to improve the quality of goods and services that satisfy customers' needs and expectations. However, Al-Khalifa and Aspinwall (2001) believed that a hostile workplace with rigid rules and regulations would make it difficult to implement TQM principles and adversely impact the company's performance

and its position in the markets. Kaluarachchi (2010) and Mosadeghrad (2006) indicated that a strong adaptive work culture will successfully promote the deployment of TQM interventions as the prime for superior performance.

Al-Dhaafri and Alosani (2020) emphasize that the TQM tool significantly affects the development of an entrepreneurial culture that motivates staff to produce goods and services that satisfy consumer demand as the organization's ultimate goal. Researchers also asserted that putting TQM techniques into practice will improve the work climate and increase the performance of small and medium-sized businesses in developing countries. Bhat and Rajashekhar (2009) and Mosadeghrad (2006) indicated that Companies with strong value systems and adequate reward systems would support the deployment of TQM interventions in a way that enables employees to increase quantity and improve quality and productivity as vital factors for company success. In addition, the adoption of a structural model that maintains balance between the organization's culture and its performance, along with the implementation of TQM interventions, can improve all aspects of business operations. Based on the above literature review, we suggest TQM as a mediator variable between the two study constructs through the following hypothesis:

H6: The relationship between organizational culture and performance is positively mediated by TQM.

2.7. Mediating Impact of Benchmarking on the Relationship between Organizational Culture and Organizational Performance

Despite the fact that many studies show that effective implementation of benchmarking strategies can improve organizational culture and innovative performance, there is no clear model yet able to interpret the direct relationship among these three variables. Blackiston (1996), Elmuti and Kathawala (1997), and Pemberton, Stonehouse and Yarrow (2001) considered benchmarking an innovative strategy that enables firms to improve their operational processes, create continuous learning environments, and provoke all organization members to work together to realize the company's objectives. One of the major objectives of benchmarking is the adoption of other companies' best practices, and the creation of a new practical plan aids in the promotion of a workplace culture that enhances the achievement of the business's long- and short-term objectives. Benchmarking, which is the process of gathering, analyzing, and drawing conclusions from data about the business strategies and best practices of competitors, would inspire decision-makers to find the most effective solutions to close the performance gap that currently exists as well as assist organizations in identifying the areas that need to be improved. In addition to creating a cooperative, educational, and harmonious workplace, encourage worker productivity and innovative performance. Organizational performance refers to the degree to which the organization, with some informational, financial, and human resources, positions itself effectively on the business market" (Contu, 2020).

Benchmarking is a knowledge management technique that helps managers create a workplace culture that motivates employees to go above and beyond the call of normal daily work, take on more challenging tasks, and share and use practical knowledge to reach the highest levels of innovative performance. According to Argyris and Schön (1978), Senge (1990), Jashapara (1993), and Zott (2003), benchmarking is positively associated with knowledge management practices, organizational learning, and innovative performance. A company that develops its business models based on benchmarking, workplace culture, and productivity is able to grow, develop, and survive in the market. Based on the above-mentioned logic, we suggest benchmarking as a mediator variable between organizational culture and performance through the following hypothesis:

H7: Benchmarking effectively mediates the relationship between business culture and performance.

2.8. The Study Model

From the above discussion, it is clear that there is a relationship between TQM and organizational culture in different dimensions and different industries. There is also a relationship between organizational culture, organizational performance, and TQM dimensions. Several studies have shown a connection between TQM and organizational performance as well as a connection between TQM and organizational culture. Studies have also shown a connection between organizational culture and organizational performance. Benchmarking was proved to be connected with organizational performance through innovative organizational culture.

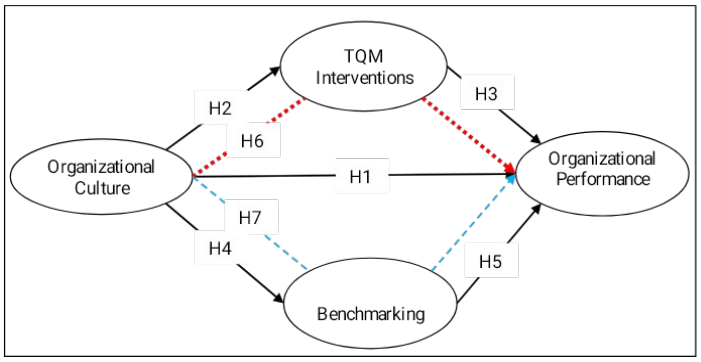

Figure 1. Conceptual Model

Accordingly, and Based on the literature review above, organizational culture was considered an independent variable, while organizational performance was a dependent variable. In addition, benchmarking and TQM intervention were considered as mediating variables. The conceptual framework for the study's conceptual is given below:

3. Research Methodology

3.1. Population and Sample

The study population consisted of all industrial sector small and medium enterprises located in Jordan. According to the Jordan Chamber of Industry, there are a total 2361 industrial sector SMEs in Jordan, having 10522 employees (Yousuf, Haddad, Pakurar, Kozlovskyi, Mohylova, Shlapak et al., 2019). These industrial sectors SMEs were further stratified into 10 subcategories as shown in Table 1.

Sectors	Number of SMEs	Sample
Engineering, electrical and information technology industries	453	136
The therapeutic industries and medical supplies sector	72	22
Food, catering, agricultural and animal industries	591	177
Packaging industry, paper, cardboard and office supplies	231	69
Chemical and cosmetic industries	232	70
Plastic and rubber products	261	79
Construction industries	210	63
Wooden & Furniture Industries	101	30
Mining industries	34	11
Leather and knitting industries	176	53
Total	2361	710

Table 1. Number of SMEs in Jordan and the Research Sample

Keeping in view study objectives, the data were collected from project managers and project owners of industrial or manufacturing SMEs as they have better insights about TQM implementation, benchmarking, organizational culture and performance. To get more generalized result, it was decided to target 30% of every subsector by distributing 710 questionnaires overall. The respondents were selected by adopting stratified random sampling technique, as this sampling technique is deemed more appropriate in the study context. According to Acharya, Prakash, Saxena and Nigam (2013), stratified sampling technique can represent even the smallest sub-set of the population.

In this study, population is divided into sub-groups based on the nature of manufacturing enterprises. Online Google survey form was developed to collect the research data. The respondents' contact detail was obtained from the websites of Jordan Chamber of Industry and Jordan Business Directory (jordanyp.com). Total 710 online

questionnaire links were shared with target respondents, from which 549 responses were returned back; out of the 549 responses, 21 responses were dropped because of inadequate or incomplete information. Therefore, the response rate was 74 percent as the utilizable responses were 528, this figure of sample is also supported by (Saunders, Lewis & Thornhill, 2009).

The demographics found that 90% of the survey respondents were men and 10% were women. Also, the majority of SMEs in Jordan were operated by males. The age of respondents' ranges from 24 to 65 or above, with the highest being 69% for 34-44 years.

3.2. Instrument Design

The measurement items for the current study were adopted from past valid studies. Organizational culture was measured with a scale adopted from the study of Sabri, Ilyas and Amjad (2011); whereas organizational performance scale was adopted from the study of Sinha and Dhall (2018). The construct of TQM intervention was measured with seven dimensions, and items to measure each dimension, and were adopted from the study of Sinha and Dhall (2018); while benchmarking measures were adopted from the study of Parast and Adams (2012). All items were measured on a five-point Likert scale where (1) represented strongly disagree and (5) strongly agree. The five-point Likert scale balances simplicity, encourages more accurate responses, and eventually reduces common biases associated with survey research (Tourangeau & Yan, 2007; Chyung, Roberts, Swanson & Hankinson, 2017).

3.3. Data Analysis

The hypothesized model was tested using two-step approach. Firstly, to test the measurement model Confirmatory Factor Analysis (CFA) was conducted using the AMOS-24. Secondly, to explore the structural relationships between study variables and test the study hypotheses, Structural Equation Modeling (SEM) was conducted. Items' loadings, constructs' correlations, reliabilities, and validities were also assessed prior to measurement model testing and hypotheses testing.

4. Results

4.1. Reliabilities and Validities

Cronbach's alpha (CA) values were used to evaluate internal consistency measures. As shown in Table 2, Cronbach's alpha values range from 0.83 to 0.92, which are more significant than 0.70 as recommended by Nunnally (1978). There are also excellent item loadings as these are ranging from 0.65 to 0.86. Discriminant and convergent validities are determined through the values of Average Variance Extracted (AVE) and Composite Reliability (CR). The values higher than 0.50 for AVE and higher than 0.70 for CR, confirm convergent validity (Fornell & Larker, 1981; Bagozzi & Yi, 1988). If the values for square root of AVE is greater than the constructs' correlation values, then discriminant validity is achieved (Anderson & Gerbing, 1988).

Variables	Items	Loadings	SMC*	CA	AVE
Organizational Culture	OC1	0.651	0.424	0.860	0.560
	OC2	0.760	0.577		
	OC3	0.794	0.630		
	OC4	0.796	0.633		
	OC5	0.732	0.535		
Organizational Performance	OP1	0.777	0.604	0.911	0.674
	OP2	0.817	0.667		
	OP3	0.862	0.743		
	OP4	0.855	0.732		
	OP5	0.790	0.625		
TQM Interventions	TQMI1	0.748	0.559	0.918	0.621
	TQMI2	0.807	0.651		
	TQMI3	0.815	0.665		
	TQMI4	0.805	0.648		
	TQMI5	0.827	0.684		
	TQMI6	0.776	0.602		
	TQMI7	0.732	0.536		
Benchmarking	B1	0.696	0.485	0.828	0.546
	B2	0.750	0.563		
	B3	0.736	0.542		
	B4	0.772	0.595		

*SCM= Squared Multiple Correlations; N=528.

Table 2. Factor Analysis

Table 3 demonstrates excellent discriminant and convergent validities as all values of AVE, CR, and square root of AVE are well above the recommended cutoff criteria.

Constructs/Variables	CR	AVE	1	2	3	4
1- Organizational Culture	0.864	0.560	0.748			
2- Organizational Performance	0.912	0.674	0.318***	0.821		
3- TQM Interventions	0.920	0.621	0.326***	0.518***	0.788	
4- Benchmarking	0.828	0.546	0.392***	0.619***	0.438***	0.739

Table 3. Validity Analysis

4.2. Measurement Model Fit

CFA results in Table 4 reveal excellent model fit for hypothesized four-factor measurement model (χ^2 = 512.260, df = 183, $\chi 2/df$= 2.80, IFI = 0.95, TLI = 0.94, CFI = 0.95, RMSEA = 0.06) fulfilling the model fit criteria recommended by (Hu & Bentler, 1999; Kline, 2005; Hair, 2009).

Measurement Models	$\chi 2$	Df	$\chi 2/df$	RMSEA	IFI	TLI	CFI
Factor Model	512.260	183	2.80	0.06	0.95	0.94	0.95
Recommended Values			< 3.0	<0.08	>0.90	>0.90	>0.90

Table 4. Measurement Model

The AMOS output of measurement model is shown in Figure 2.

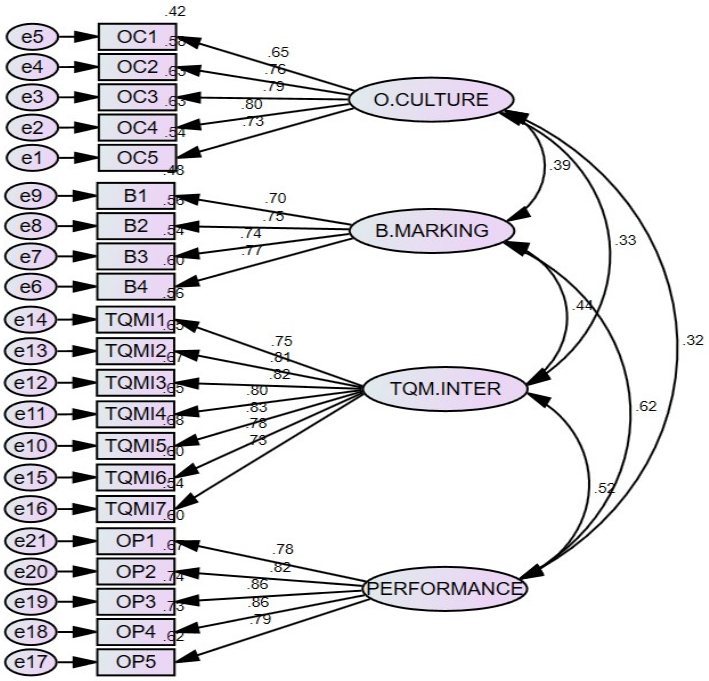

Figure 2. Measurement Model

4.3. Test of Hypotheses

The direct effects are shown in Table 5. The results reveal that that is a significant and positive impact of organizational culture on organizational performance (β = 0.273, P <.001). As a result, our first hypothesis H1 is accepted. Moreover, results also demonstrate significant impact of organizational culture on TQM intervention (β = 0.294, P <.001), and TQM intervention on organizational performance (β = 0.472, P <.001). Consequently, H2 and H3 were accepted. Furthermore, results reveal significant impact of organizational culture on benchmarking (β = 0.331, P <.001), and benchmarking on organizational performance (β = 0.541, P <.001) is also significant. Thus, H4 and H5 were accepted.

Hypotheses	Estimate	SE*	P-Value
H1: Organizational Culture → Organizational Performance	0.273	0.067	<.001
H2: Organizational Culture → TQM Interventions	0.294	0.046	<.001
H3: TQM Interventions → Organizational Performance	0.472	0.056	<.001
H4: Organizational Culture → Benchmarking	0.331	0.050	<.001
H5: Benchmarking → Organizational Performance	0.541	0.048	<.001

*SE= Standard Error

Table 5. Direct Effects

The results of mediation or indirect effect of organizational culture on organizational performance through TQM intervention and benchmarking, are presented in Table 6.

Hypotheses	Total Effect	Direct Effect	Indirect Effect
H6: Organizational Culture →TQM Interventions → Organizational Performance	0.436***	0.201***	0.235***
H7: Organizational Culture →Benchmarking → Organizational Performance	0.435***	0.168**	0.267***

***p<.001; **p<.01

Table 6. Mediation Effects

Indirect effect of organizational culture on performance through the mediation of TQM intervention is significant (β = 0.235, P <.001). Moreover, the mediation effect of benchmarking between the relationship of organizational culture and performance is also significant and positive (β = 0.267, P <.001). Though the results proved significant mediation of TQM interventions and benchmarking between the relationship of organizational culture and organizational performance, but there is no full mediation as the direct effects are also significant (β =0.201, P<.001 and β =0.168, P<.01). Therefore, there is partial mediation, and the hypothesized mediation relationships as H6 and H7 are also well supported by data results, hence accepted. Furthermore, as we have large sample size and the Sobel mediation test can work well with large sample size (Sobel, 1982), we have calculated the Sobel test. The results revealed significant mediation as the p-value was less than 0.001.

5. Discussion

In Jordan, the economy relies heavily on Small and Medium Enterprises (SMEs), the most vital gears in its economic machine. As per the report by Al-Tamimi and Jaradat (2019), SMEs constitute a staggering 98% of the nation's business sector. Moreover, their weighty contribution of nearly half of Jordan's Gross Domestic Product underscores their strategic role in bolstering the nation's fiscal health and stability. A surge of academic curiosity into the dynamics of SMEs, especially within the manufacturing sector, has been discernible in recent years, as exemplified by the research led by Ugheoke (2021) and Zhen, Yousaf, Radulescu and Yasir (2021). These studies primarily focused on discerning the relationship between organizational culture and overall performance—a richly nuanced area of study made even more complex by the introduction of factors such as benchmarking and TQM interventions.

The first research objective or Hypothesis One (H1) sought to examine the influence of organizational culture on an organizational performance. This hypothesis posits a positive correlation between the nature of organizational culture and the organization's performance. It postulates that cultivating an apt or ideal organizational culture could potentially bolster the organization's performance metrics. Upon examination, this hypothesis confirmed that the characteristics of culture, as documented in various studies (Siehl & Martin, 1990; Denison & Mishra, 1995; Kotter & Heskett, 2011; Ng'ang'a & Wesonga, 2012; Shahzad et al., 2012; Nikpour, 2017), indeed positively impact various aspects of organizational performance.

However, the realm of organizational performance is far from uniform, and its measurement methodologies differ based on the type of performance being assessed. Gambi et al. (2015) delved into the association between organizational culture and operational performance, revealing that a well-crafted organizational culture can positively influence organizational performance, particularly in the realm of quality practices. Yet, it is critical to acknowledge that manufacturing SMEs, with their operational complexities, stand in stark contrast to their service-providing counterparts. These operational intricacies amplify the hurdles manufacturing SMEs encounter in their journey towards survival and growth. Nakashima, Arimitsu, Nose and Kuriyama (2002) highlighted that the discourse on effective manufacturing operations has dominated academic conversations for several decades. Complementing this discourse, Asif and Sajjad (2018) examined how different types of organizational cultures shape the performance of manufacturing SMEs in Pakistan, finding a positive correlation.

Still, as Tidor et al. (2012) noted, diagnosing and transforming an organizational culture presents significant challenges, suggesting that enhancing the performance of manufacturing SMEs is an uphill task without an accompanying cultural shift. Hence, the affirmation of H1 emphasizes that the performance of manufacturing SMEs is irrevocably intertwined with their organizational culture. However, it is crucial to acknowledge the findings

of some studies that show either a negative or non-existent relationship between organizational culture and performance (Byles & Keating, 1989). These studies suggest that each organization possesses a unique culture, each at its distinctive stage of maturation. Consequently, the impact of organizational culture on performance varies significantly across different organizations (Byles & Keating, 1989; Ott, 1989; Demirbag, Tatoglu, Tekinkus & Zaim, 2006). This discrepancy in findings can be attributed to the differing focal points of various studies. While this research is centered on SMEs, most studies reporting a negative correlation between organizational culture and performance focus mainly on larger corporations. Thus, the scale and scope of an organization contribute significantly to the nature of the relationship between culture and performance, warranting a nuanced interpretation of findings based on specific contexts.

Following this, the second research proposition, Hypothesis Two (H2), was meticulously constructed to examine the relationship between organizational culture and TQM interventions. The findings underscored that an optimal organizational culture forms the bedrock for successful TQM implementation, aligning with the research of Panuwatwanich and Nguyen (2017), who posit that organizational culture plays a pivotal role in creating an environment conducive to TQM practices. The third research proposition, Hypothesis Three (H3), aimed to investigate the direct impact of TQM interventions on organizational performance. The empirical evidence supported the positive influence of TQM intervention on performance, resonating with Alzoubi et al., (2018), who asserted that TQM interventions could guide organizational behavior towards enhanced performance. Hypothesis Four (H4) was conceived to examine the correlation between organizational culture and benchmarking. The findings confirmed that a strong organizational culture fosters efficient benchmarking practices, a viewpoint echoed by Dubey et al., (2017), who contended that an organization's culture can impact the sustainability of benchmarking practices.

In exploring the effect of benchmarking on organizational performance, Hypothesis Five (H5) posited that benchmarking techniques could be better promoted and executed within a robust corporate culture than a weaker one, a stance supported by Auluck (2002) and Kozak (2002). As Dess and Picken (2000), Hughes et al., (2007), and Abdulmuhsin et al (2021) argue, an organization's benchmarking process that promotes continuous learning and encourages discussions and utilization of new knowledge can form the foundation for innovation and competitiveness. Hypothesis Six (H6) aimed to highlight the role of TQM interventions in examining the relationship between organizational culture and performance. The findings demonstrated that TQM interventions positively mediate the relationship between organizational culture and performance, underscoring the ways in which an organization's culture can foster performance enhancement. Finally, Hypothesis Seven (H7) empirically evaluated the notion that benchmarking acts as a positive mediating variable in the relationship between organizational culture and performance. It underscored benchmarking as a significant mediator in the relationship between organizational culture and performance, aligning with Sinha and Dhall's (2018) recommendations advocating for benchmarking's use in this capacity. These findings, thus, emphasize the crucial role that both TQM and benchmarking play in the relationship between organizational culture and performance within the context of SMEs in Jordan.

6. Conclusion

Amid the myriad intricacies of the global business landscape, our exploration embarked on a rigorous journey, meticulously investigating two pivotal pathways: benchmarking and TQM interventions. The core objective of our expedition was to shed a spotlight on how the abstract and often elusive concept of organizational culture holds a tangible and, indeed, profound sway over the performance trajectory of Small and Medium-sized Manufacturing Enterprises (SMEs). As an interface between the tangible and the intangible, the corporate culture impacts all the variables in the organizational ecosystem.

The fruits of our intellectual labor have delivered palpable insights, unraveling a notably positive correlation between these seemingly disparate elements—organizational culture and performance. This observation powerfully solidifies the hypothesis that a harmoniously curated or finely tailor-made organizational culture possesses the transformative potency to substantially enhance the performance parameters. The unfolding canvas of our results has painted a compelling picture, emphatically accentuating the concept that a superior organizational culture serves as the fertile breeding ground for the successful implantation, nurturance, and

robust blossoming of TQM practices. Simultaneously, our investigation has echoed the anthem of TQM's positive impact on organizational performance. Our findings validate that TQM interventions, when effectively incorporated within an organizational framework, do not merely act as ancillary improvements. Instead, they form the backbone of strategic growth, driving profound enhancements in the performance and productivity of the organization.

Equally significant in our research voyage has been the identification and subsequent amplification of the role of benchmarking, an aspect often consigned to the shadows in traditional organizational discourse. Our study asserts that the effective deployment of benchmarking strategies, far from being an isolated event, can indeed be born out of the womb of an organization's cultural fabric, thus instigating substantial enhancements in organizational performance. Our empirical data does more than merely highlight the indispensable role of TQM interventions in mapping the intricate network of connections between organizational culture and performance. It digs deeper, unfurling the silken threads that constitute the vibrant tapestry of TQM interventions, thus offering a holistic view of this dynamic construct.

The threads we have identified and meticulously studied include continual improvement, customer orientations, mutually beneficial supplier relationships, top management commitment, employee involvement, process approach, and data-driven decision-making. Each of these factors plays an instrumental role in crafting the grand narrative of culture and performance in the complex theater of organizational settings. In the finale of our research narrative, the dramatic interplay between organizational culture and performance is unveiled. And here, benchmarking does not merely play a part; it takes center stage, choreographing the dance of culture and performance. The interplay we have unearthed and thoroughly investigated indicates a synergistic interdependence. This discovery underscores the fact that, when effectively implemented, benchmarking can amplify the positive influences of an effective organizational culture on performance, thus driving an enterprise towards the apex of its potential.

7. Implications

Organizational behavior and management are broad domains, and studies based on these domains offer significant theoretical and practical implications. Similarly, this study has highlighted the comprehensive area of organizational culture and TQM. Therefore, it has provided several implications for researchers and practitioners.

7.1. Theoretical Implications

Our explorative inquiry ventured into the profound, multidimensional realm of organizational culture and its labyrinthine relationship with performance. We applied a meticulously comprehensive lens to the study of performance, thus introducing an audacious disruption to the traditional research paradigm. By challenging the predominant and often oversimplified perspectives on performance indicators, we sought to reimagine the conventional focus and, instead, spotlighted unconventional metrics. This radical departure from the status quo has not only introduced a fresh perspective but also foregrounded the need for a more encompassing approach to understanding performance.

Our findings represent an intellectual rupture from the extant research threads, especially noticeable in its unique geographical and industrial focus—namely, the manufacturing small and medium enterprises (SMEs) in the hitherto overlooked locale of Jordan. This particular emphasis underscores our commitment to diversity and inclusivity in research, recognizing that the unique cultural and economic context of Jordan may offer enlightening and distinct insights into the universal understanding of organizational culture and performance. It is a clarion call to the academic community to broaden their research horizons and acknowledge the rich, varied, and nuanced landscapes beyond the traditionally studied regions. Moreover, our study also made a bold foray into unchartered territory by positioning benchmarking as an independent variable, rather than relegating it to a mere dimension of TQM. This is a marked deviation from the prevalent academic discourse and challenges the usual treatment of benchmarking within the TQM framework. By recognizing the potential of benchmarking as an independent factor, our study expands the theoretical horizon and imbues new significance to the role of benchmarking in understanding organizational performance.

In conclusion, this research reshapes traditional perspectives on organizational culture and performance by introducing new insights. Focusing on Jordanian manufacturing SMEs, it highlights the unique insights available when exploring a population that is partially neglected and less-studied, pushing for broader inclusivity in research. Additionally, the study positions benchmarking as an independent variable, expanding its role beyond TQM and rethinking its impact on performance; which is believed to be a unique contribution. These theoretical insights not only enrich existing literature but also encourage the academic community to explore diverse regions, rethink assumptions, and consider new frameworks for understanding organizational effectiveness and performance, along with other variables, such as organizational culture, strategy, and quality implications.

7.2. Practical Implications

Venturing beyond the academic confines of theoretical discourse, our meticulous research outlines a path that reaches deeply into the tangible domain, capturing implications emerging from an expansive socio-economic context. Akin to a detailed roadmap, our research provides a strategic trajectory for practical implementation that is grounded in an in-depth understanding of the underpinnings of organizational behavior. These research insights, fruitfully harvested from the fields of theoretical understanding and empirical observation, can act as a beacon for the managers of Small and Medium Enterprises (SMEs) who stand on the precipice of significant performance transformations.

In the context of these SMEs, our research shines a light on the crucial significance of comprehending, nurturing, and actively managing organizational culture. This insight places a spotlight on the critical role that culture plays in determining performance outcomes. Beyond simply being an abstract concept, organizational culture here emerges as a concrete, actionable variable that can be effectively manipulated to yield significant improvements in enterprise performance. In the setting of the rapidly evolving SME landscape in Jordan, a burgeoning and significant contributor to job creation and economic growth, our research findings take on even more profound implications. The research outcomes we propose hold the promise of a vital impact, potentially triggering a significant transformation in the business practices and strategic approaches adopted by SMEs within this crucial national economic sector. Based on this, managers in Jordanian SMEs are recommended to prioritize understanding and cultivating a positive organizational culture, ensuring that it aligns closely with the enterprise's strategic goals. By actively managing and shaping this culture, managers can foster a work environment that enhances employee engagement, drives productivity, and ultimately leads to better performance. Specifically, focusing on regular training programs, encouraging open communication, and implementing feedback mechanisms can adapt and reinforce the cultural values that support business growth. Our research unravels a deep understanding of the intersections and influences of organizational culture, TQM interventions, and benchmarking on overall organizational performance; this understanding serves as an essential guide for managers aiming to lead their manufacturing SMEs through the unpredictable and challenging conditions of today's business world.

In addition, by assimilating the insights derived from this research, these managerial stakeholders are equipped with the intellectual ammunition necessary to develop comprehensive, informed policies. Such policies can effectively leverage the established connections between culture, TQM, and benchmarking to enhance enterprise performance. This knowledge can also be instrumental in bolstering the implementation of TQM practices within their organizations, fostering a culture of continuous improvement and high-quality standards. By setting a clear, evidence-based benchmark, our research facilitates the design of efficient, performance-oriented strategies that can be used as templates by SMEs in Jordan and beyond. Through the adoption and adaptation of these strategies, it is envisaged that these organizations will witness significant improvements in their performance metrics, aligning their operations closer to their strategic objectives. Hence, SMEs managers are recommended to set clear quality and performance standards, encourage employee involvement in quality initiatives, and utilize benchmarking to identify and adopt best practices to achieve strategic goals. This approach is expected to enhance competitiveness, adaptability, and growth in Jordan's business environment in general, and the manufacturing one in particular.

In conclusion, our research serves as a guidepost for SME managers, illuminating the path toward informed decision-making, strategic TQM implementation, and rigorous performance benchmarking. It points to a future

where SMEs in Jordan and beyond can strategically harness the power of their organizational culture to drive a high-performance ethos and significantly contribute to national economic growth and sustainability.

8. Limitations and Further Research Recommendations

While our research was comprehensive and far-reaching, investigating a variety of dimensions of organizational behavior, we freely acknowledge that there exist certain constraints and potential areas of improvement which could act as catalysts for future investigations in this field. Our study, at its core, was fundamentally circumscribed within the context of manufacturing Small and Medium Enterprises (SMEs) based in Jordan. The choice of this setting and demographic was due to a combination of strategic and pragmatic reasons, yet this specific focus does engender certain limitations which are noteworthy.

The first area of potential expansion for future research relates to the scope of the enterprises surveyed. Future studies might venture beyond the confines of Jordanian manufacturing SMEs to encompass a broader demographic. Including SMEs from developed countries would offer an interesting comparative perspective, allowing for an examination of how the interplay between organizational culture and performance might be affected by the variances in economic, cultural, and institutional landscapes. Moreover, an expansion of the horizon to incorporate multinational corporations (MNCs) could also be a fruitful avenue of exploration. Given the diversity, complexity, and global reach of MNCs, including them in the research canvas could significantly enrich the understanding of organizational behavior in different geographical, cultural, and industrial contexts.

Secondly, in our endeavor to fill a specific gap in the existing knowledge of Jordan's SME landscape, our study inevitably had to make certain choices in terms of the variables examined. Our model revolved around the relationship between organizational culture and performance, yet we acknowledge that there are other significant variables, not included in our study, that could potentially have a profound influence on this relationship. Future research might consider the inclusion of variables such as innovation capabilities and entrepreneurial orientation. These variables are of particular relevance in the contemporary business environment, with innovation being a key driver of competitive advantage and entrepreneurial orientation often being linked to improved business performance. A subsequent study that incorporates these elements could offer a more robust, comprehensive, and nuanced model of the relationship between organizational culture and performance in SMEs.

Our study relied on questionnaires as the primary method for collecting data to evaluate organizational performance. While this method offers certain advantages in terms of practicality and efficiency, future research might benefit from adopting a more diversified approach towards data collection. For instance, future investigations could consider evaluating financial performance using a broader set of financial indicators, such as return on assets, equity return, and earnings per share. Using these metrics could provide a more objective and comprehensive assessment of organizational performance, which in turn could enhance the robustness and validity of the findings.

Lastly, it would be prudent for future studies to account for external market forces such as market disruptions or technological advancements. These external factors are increasingly becoming major influencers of organizational behavior and performance. Incorporating these aspects would not only add an extra layer of complexity but also increase the relevancy and interest of the findings, given the rapid pace of change in today's business environment.

In summary, while our study has provided valuable insights into the relationship between organizational culture and performance within Jordan's SME landscape, it also reveals potential areas for improvement and expansion. We hope that these suggestions and recommendations will inspire future research initiatives, broadening the scope and deepening the understanding of organizational behavior in various contexts. The quest for knowledge is never-ending, and every research study, while answering some questions, invariably opens up new avenues for exploration and discovery.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

References

Abbas, J., & Kumari, K. (2023). Examining the relationship between total quality management and knowledge management and their impact on organizational performance: a dimensional analysis. *Journal of Economic and Administrative Sciences,* 39(2), 426-451. https://doi.org/10.1108/JEAS-03-2021-0046

Abdi, M., & Singh, A.P. (2021). Effect of total quality management practices of nonfinancial performance: an empirical analysis of automotive engineering industry in Ethiopia. *The TQM Journal,* 34(5), 116-144. https://doi.org/10.1108/TQM-03-2021-0069

Abdulmuhsin, A.A., Zaker, R.A., & Asad, M.M. (2021). How exploitative leadership influences on knowledge management processes: the moderating role of organisational citizenship behaviour. *International Journal of Organizational Analysis,* 29(3), 529-561. https://doi.org/10.1108/IJOA-09-2020-2424

Abu-Mahfouz, S.S. (2019). TQM practices and organizational performance in the manufacturing sector in Jordan mediating role of HRM practices and innovation. *Journal of Management and Operation Research,* 1(22), 1-12.

Acharya, A.S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: why and how of it. *Indian Journal of Medical Specialties,* 4(2), 330-333. https://doi.org/10.7713/ijms.2013.0032

Adem, M.K., & Virdi, S.S. (2020). The effect of TQM practices on operational performance: an empirical analysis of ISO 9001: 2008 certified manufacturing organizations in Ethiopia. *The TQM Journal,* 33(2), 407-440. https://doi.org/10.1108/TQM-03-2019-0076

Ahmed, M., & Shafiq, S. (2014). The impact of organizational culture on organizational performance: a case study of telecom sector. *Global Journal of Management& Business Research,* 14(3), 21-30.

Al-Dhaafri, H.S., & Alosani, M.S. (2020). Impact of total quality management, organisational excellence and entrepreneurial orientation on organisational performance: empirical evidence from the public sector in UAE. *Benchmarking: An International Journal,* 27(9), 2497-2519. https://doi.org/10.1108/BIJ-02-2020-0082

Al-Hyari, K. (2021). The influence of TQM on export performance of manufacturing SMEs in Jordan. *Jordan Journal of Business Administration,* 17(4).

Al-Khalifa, K.N., & Aspinwall, E.M. (2001). Using the competing values framework to investigate the culture of Qatar industries. *Total Quality Management,* 12(4), 417-428. https://doi.org/10.1080/09544120124219

Al-Tamimi, K.A., & Jaradat, M.S. (2019). The role of small medium enterprises in reducing the problem of unemployment in Jordan. *International Journal of Development and Economic Sustainability*, 7(2), 28-36.

Albuhisi, A.M., & Abdallah, A.B. (2018). The impact of soft TQM on financial performance: the mediating roles of non-financial balanced scorecard perspectives. *International Journal of Quality & Reliability Management,* 35(7), 1360-1379. https://doi.org/10.1108/IJQRM-03-2017-0036

Alghamdi, F. (2018). Total quality management and organizational performance: a possible role of organizational culture. *International Journal of Business Administration,* 9(4), 186-200. https://doi.org/10.5430/ijba.v9n4p186

Ali, G.A., Abdullah, H.H., & Gorondutse, A.H. (2017). The effect of entrepreneurial orientation, market orientation, total quality management and organisational culture on the SMEs performance: a theoretical framework. *Journal of Business and Retail Management Research (JBRMR),* 12(1), 26-40. https://doi.org/10.24052/JBRMR/V12IS01/TEOEOMOTQMAOCOTSPATF

Alosani, M.S., & Al-Dhaafri, H.S. (2020). An empirical examination of the relationship between benchmarking, innovation culture and organisational performance using structural equation modelling. *The TQM Journal,* 33(4), 930-964. https://doi.org/10.1108/TQM-02-2020-0034

Alzoubi, M.M., Hayati, K.S., Rosliza, A.M., Ahmad, A.A., & Al-Hamdan, Z.M. (2018). Total quality management intervention for enhancing nursing commitment and performance in Jordanian hospital: protocol of a quasi-experimental study. *International Journal of Advanced Scientific Research & Development (IJASRD),* 5(10), 1-12. https://doi.org/10.26836/ijasrd/2018/v5/i10/51001

Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modeling in practice: a review and recommended two-step approach. *Psychological Bulletin,* 103(3), 411. https://doi.org/10.1037/0033-2909.103.3.411

Anderson, K., & McAdam, R. (2004). A critique of benchmarking and performance measurement: lead or lag?. *Benchmarking: An international Journal,* 11(5), 465-483. https://doi.org/10.1108/14635770410557708

Argyris, C., & Schön, D.A. (1978). *Organizational learning: A theory of action perspective.* Reading, MA: Addison-Wesley Publishing Company.

Asif, M., & Sajjad, W. (2018). Organizational culture and performance: an empirical study of SMEs in Pakistan. *Journal of Management and Research,* 5(2), 1-26.

Auluck, R. (2002). Benchmarking: a tool for facilitating organizational learning? *Public Administration and Development: the International Journal of Management Research and Practice,* 22(2), 109-122. https://doi.org/10.1002/pad.219

Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science,* 16(1), 74-94. https://doi.org/10.1007/BF02723327

Baird, K., Hu, K.J., & Reeve, R. (2011). The relationships between organizational culture, total quality management practices and operational performance. *International Journal of Operations and Production Management,* 31(7), 789-814. https://doi.org/10.1108/01443571111144850

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management,* 17(1), 99-120. https://doi.org/10.1177/014920639101700108

Bhat, K.S., & Rajashekhar, J. (2009). An empirical study of barriers to TQM implementation in Indian industries. *The TQM Journal,* 21(3), 261-272. https://doi.org/10.1108/17542730910953031

Blackiston, G.H. (1996). Juran institute: a barometer of trends in quality management. *National Productivity Review,* 16(1), 15-23. https://doi.org/10.1002/npr.4040160105

Bogetoft, P. (2012). *Performance benchmarking measuring and managing performance.* Springer. https://doi.org/10.1007/978-3-642-31371-4

Brah, S.A., Ong, A.L., & Rao, B.M. (2000). Understanding the benchmarking process in Singapore. *International Journal of Quality & Reliability Management,* 17(3), 259-275. https://doi.org/10.1108/02656710010306157

Byles, C.M., & Keating, J.R. (1989). Strength of organization culture and performance: strategic implications. *Journal of Business Strategies,* 6, 42-54. https://doi.org/10.54155/jbs.6.1.42-54

Cameron, K., & Quinn, R. (2006). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework.* San Francisco, CA: Jossey-Bass.

Cassell, C., Nadin, S., & Gray, M.O. (2001). The use and effectiveness of benchmarking in SMEs. *Benchmarking,* 8(3), 212-222. https://doi.org/10.1108/EUM0000000005624

Chin, K.S., Pun, K.F., Lau, C.S., & Lau, H. (2001). Performance improvement of international roaming service-a benchmarking study. *Benchmarking,* 8(2), 120-131. https://doi.org/10.1108/14635770110389834

Chourides, P., Longbottom, D., & Murphy, W. (2003). Excellence in knowledge management: an empirical study to identify critical factors and performance measures. *Measuring Business Excellence,* 7(2), 29-45. https://doi.org/10.1108/13683040310477977

Chyung, S.Y., Roberts, K., Swanson, I., & Hankinson, A. (2017). Evidence-based survey design: The use of a midpoint on the Likert scale. *Performance Improvement Journal,* 56(10). https://doi.org/10.1002/pfi.21727

Cicmil, S., & Kekäle, T. (1997). Implications of organizational and individual learning for effective change management in education-an exploratory study of management practices in elementary schools in England and Finland. *The Journal of Workplace Learning,* 9(5), 169-176. https://doi.org/10.1108/13665629710169639

Contu, E.G. (2020). Organizational performance-theoretical and practical approaches; study on students' perceptions. *Proceedings of the International Conference on Business Excellence,* 14(1), 398-406. https://doi.org/10.2478/picbe-2020-0038

Deal, T.E., & Kennedy, A.A. (1982). Corporate cultures: the rites and rituals of corporate life: Addison-Wesley, 1982. *Business Horizons,* 26(2), 82-85. https://doi.org/10.1016/0007-6813(83)90092-7

Demirbag, M., Tatoglu, E., Tekinkus, M., & Zaim, S. (2006). An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs. *Journal of Manufacturing Technology Management,* 17(6), 829-847. https://doi.org/10.1108/17410380610678828

Denison, D.R., & Mishra, A.K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science,* 6(2), 204-223. https://doi.org/10.1287/orsc.6.2.204

Dess, G.G., & Picken, J.C. (2000). Changing roles: Leadership in the 21st century. *Organizational Dynamics,* 28(3), 18-34. https://doi.org/10.1016/S0090-2616(00)88447-8

DiMaggio, P.J., & Powell, W.W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review,* 48(2), 147-160. https://doi.org/10.2307/2095101

Dubey, R., Gunasekaran, A., Childe, S.J., Papadopoulos, T., Hazen, B., Giannakis, M. et al. (2017). Examining the effect of external pressures and organizational culture on shaping performance measurement systems (PMS) for sustainability benchmarking: some empirical findings. *International Journal of Production Economics,* 193, 63-76. https://doi.org/10.1016/j.ijpe.2017.06.029

Elmuti, D., & Kathawala, Y. (1997). An overview of benchmarking process: a tool for continuous improvement and competitive advantage. *Benchmarking for Quality Management and Technology,* 4, 229-243. https://doi.org/10.1108/14635779710195087

Fiordelisi, F., & Ricci, O. (2014). Corporate culture and CEO turnover. *Journal of Corporate Finance,* 28, 66-82. https://doi.org/10.1016/j.jcorpfin.2013.11.009

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research,* 18(1), 39-50. https://doi.org/10.1177/002224378101800104

Francis, G., & Holloway, J. (2007). What have we learned? Themes from the literature on best□ practice benchmarking. *International Journal of Management Reviews,* 9(3), 171-189. https://doi.org/10.1111/j.1468-2370.2007.00204.x

Gambi, L.D.N., Boer, H., Gerolamo, M.C., Jørgensen, F., & Carpinetti, L.C.R. (2015). The relationship between organizational culture and quality techniques, and its impact on operational performance. *International Journal of Operations and Production Management,* 35(10), 1460-1484. https://doi.org/10.1108/IJOPM-12-2013-0563

Gorondutse, A.H., Ali, G.A., & Hilman H. (2021). Developing rightly culture on TQM-evidence from SMEs in the context of emerging economy. *RAUSP Management Journal,* 56(4), 465-481. https://doi.org/10.1108/RAUSP-11-2020-0264

Haffar, M., Al-Hyari, K.A., Djebarni, R., Al-Shamali, A., Abdul-Aziz, M., & Al-Shamali, S. (2022). The myth of a direct relationship between organizational culture and TQM: propositions and challenges for research. *The TQM Journal,* 34(5), 1395-1415. https://doi.org/10.1108/TQM-06-2020-0138

Haffar, M., Al-Karaghouli, W., & Ghoneim, A. (2013). The mediating effect of individual readiness for change in the relationship between organizational culture and TQM implementation. *Total Quality Management & Business Excellence,* 24(5/6), 693-706. https://doi.org/10.1080/14783363.2013.791112

Hair, J. (2009). *Multivariate Data Analysis.* New York.

Hilman, H., Ali, G.A., & Gorondutse, A.H. (2020). The relationship between TQM and SMEs' performance: the mediating role of organizational culture. *International Journal of Productivity and Performance Management,* 69(1), 61-84. https://doi.org/10.1108/IJPPM-02-2019-0059

Ho, D.C.K., Duffy, V.G., & Shih, H.M. (2001). Total quality management: An empirical test for mediation effect. *International Journal of Production Research,* 39(3), 529-548. https://doi.org/10.1080/00207540010005709

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-related Values.* Thousand Oaks, CA: Sage.

Hu, L.T., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal,* 6(1), 1-55. https://doi.org/10.1080/10705519909540118

Hughes, M., Hughes, P., & Morgan, R.E. (2007). Exploitative learning and entrepreneurial orientation alignment in emerging young firms: implications for market and response performance. *British Journal of Management,* 18(4), 359-375. https://doi.org/10.1111/j.1467-8551.2007.00519.x

Jashapara, A. (1993). The competitive learning organization: a quest for Holy Grail. *Management Decision,* 31(8), 52-62. https://doi.org/10.1108/00251749310047160

Jenner, R.A., Hebert, L., Appell, A., & Baack, J. (1998). Using quality management for cultural transformation of Chinese state enterprises: a case study. *Journal of Quality Management,* 3(2), 193-210. https://doi.org/10.1016/S1084-8568(99)80113-8

Juran, J.M. (1989). *Juran on Leadership for Quality.* New York: Maxwell Macmillan Int.

Kaluarachchi, K.A.S. (2010). Organizational culture and total quality management practices: A Sri Lankan case. *The TQM Journal,* 22(1), 41-55. https://doi.org/10.1108/17542731011009612

Kaplan R.S., & Norton D.P. (2000). *The Strategy Focussed Organisation.* HBS Press. https://doi.org/10.1108/sl.2001.26129cab.002

Khalfallah, M., Salem, A.B., Zorgati, H., & Lakhal, L. (2021). Innovation mediating relationship between TQM and performance: cases of industrial certified companies. *The TQM Journal,* 34(3), 552-575. https://doi.org/10.1108/TQM-01-2021-0019

Kilmann, R.H., Saxton, M.J., & Serpa, R. (1985). *Gaining Control of the Corporate Culture.* Jossey-Bass.

Kline, R.B. (2005). *Principles and Practice of Structural Equation Modeling* (2nd ed.). New York: Guilford Press.

Kotter, J.P., & Heskett, J.L. (2011). *Corporate Culture and Performance.* New York: Free Press.

Kouzmin, A., Löffler, E., Klages, H., & Korac Kakabadse, N. (1999). Benchmarking and performance measurement in public sectors: towards learning for agency effectiveness. *International Journal of Public Sector Management,* 12(2), 121-144. https://doi.org/10.1108/09513559910263462

Kozak, M. (2002). Destination benchmarking. *Annals of Tourism Research,* 29(2), 497-519. https://doi.org/10.1016/S0160-7383(01)00072-X

Krajewski, L.J., Ritzman, L.P., & Malhotra, M.K. (2010). *Operations Management Processes & Supply Chains.* Global Edition (9th ed.). New Jersey: Pearson Education, Inc.

Kyriakidou, O., & Gore, J. (2005). Learning by example: Benchmarking organizational culture in hospitality, tourism and leisure SMEs. *Benchmarking: An International Journal,* 12(3), 192-206. https://doi.org/10.1108/14635770510600320

Lin, Y.H., Han, W., Kim, C.J., Jiang, L., & Xia, N. (2022). Effect of commitment on the link between organizational culture and international project performance: a comparison between China and Korea. *Engineering, Construction and Architectural Management,* 30(9), 4518-4539. https://doi.org/10.1108/ECAM-12-2021-1116

Liu, H., Ke, W., Wei, K.K., Gu, J., & Chen, H. (2010). The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems. *Journal of Operations Management,* 28(5), 372-384. https://doi.org/10.1016/j.jom.2009.11.010

Maiga, A.S., & Jacobs, F.A. (2004). The association between benchmarking and organizational performance: an empirical investigation. *Managerial Finance,* 30(8), 13-33. https://doi.org/10.1108/03074350410769209

Massa, S., & Testa, S. (2004). Innovation or imitation? Benchmarking: a knowledge management process to innovate services. *Benchmarking: An International Journal,* 11(6), 610-620. https://doi.org/10.1108/14635770410566519

Maull, R., Brown, P., & Cliffe, R. (2001). Organizational culture and quality improvement. *International Journal of Operations & Production Management,* 21(3), 302-326. https://doi.org/10.1108/01443570110364614

McCabe, D., & Wilkinson, A. (1998). The rise and fall of TQM: the vision, meaning and operation of change. *Industrial Relations Journal,* 29(1), 18-29. https://doi.org/10.1111/1468-2338.00076

Mehralian, G., Nazari, J.A., Nooriparto, G., & Rasekh, H.R. (2017). TQM and organizational performance using the balanced scorecard approach. *International Journal of Productivity and Performance Management,* 66, 111-125. https://doi.org/10.1108/IJPPM-08-2015-0114

Mosadeghrad, A.M. (2006). The impact of organizational culture on the successful implementation of total quality management. *The TQM Magazine,* 18(6), 606-662. https://doi.org/10.1108/09544780610707101

Nakashima, K., Arimitsu, H., Nose, T., & Kuriyama, S. (2002). Analysis of a product recovery system. *International Journal of Production Research,* 40(15), 3849-3856. https://doi.org/10.1080/00207540210132706

Ng'ang'a, M.J., & Wesonga, J.N. (2012). The impact of organizational culture on performance of educational institutions. *International Journal of Business and Social Science,* 3(8), 211-217.

Nikpour, A. (2017). The impact of organizational culture on organizational performance: the mediating role of employee's organizational commitment. *International Journal of Organizational Leadership,* 6, 65-72. https://doi.org/10.33844/ijol.2017.60432

Nunnally, J.C. (1978). *Psychometric Theory.* New York: McGraw-Hill.

Oparanma, A.O. (2015). Organizational Culture: Creating the Influence Needed for Strategic Success in Health Care Organizations in Nigeria. *Developing Countries Studies,* 5,(17), 2015.

Ott, J.S. (1989). *The Organizational Culture Perspective.* Pacific Grove, CA: Brooks/Cole.

Panuwatwanich, K., & Nguyen, T.T. (2017). Influence of organisational culture on total quality management implementation and firm performance: evidence from the Vietnamese construction industry. *Management and Production Engineering Review,* 8(1), 5-15. https://doi.org/10.1515/mper-2017-0001

Parast, M.M., & Adams, S.G. (2012). Corporate social responsibility, benchmarking, and organizational performance in the petroleum industry: a quality management perspective. *International Journal of Production Economics,* 139(2), 447-458. https://doi.org/10.1016/j.ijpe.2011.11.033

Patyal, V.S., & Koilakuntla, M. (2018). Impact of organisational culture on quality management practices: an empirical investigation. *Benchmarking: An International Journal,* 25(5), 1406-1428. https://doi.org/10.1108/BIJ-12-2016-0191

Pemberton, J.D., Stonehouse, G.H., & Yarrow, D.J. (2001). Benchmarking and the role of organizational learning in developing competitive advantage. *Knowledge and Process Management,* 8(2), 123-135. https://doi.org/10.1002/kpm.110

Polychroniou, P., & Trivellas, P. (2018). The impact of strong and balanced organizational cultures on firm performance: Assessing moderated effects. *International Journal of Quality and Service Sciences,* 10(1), 16-35. https://doi.org/10.1108/IJQSS-09-2016-0065

Porter, M.E. (1990). New global strategies for competitive advantage. *Planning Review,* 18(3), 4-14. https://doi.org/10.1108/eb054287

Powell, T.C. (1995). Total quality management as competitive advantage: a review and empirical study. *Strategic Management Journal,* 16(1), 15-37. https://doi.org/10.1002/smj.4250160105

Prajogo, D.I., & McDermott, C.M. (2005). The relationship between total quality management practices and organizational culture. *International Journal of Operations and Production Management,* 25(11), 1101-1122. https://doi.org/10.1108/01443570510626916

Prajogo, D.I., & Sohal, A.S. (2006). The relationship between organization strategy, total quality management (TQM), and organization performance--the mediating role of TQM. *European Journal of Operational Research,* 168(1), 35-50. https://doi.org/10.1016/j.ejor.2004.03.033

Rad, A.M.M. (2006). The impact of organizational culture on the successful implementation of total quality management. *The TQM Magazine,* 18(6), 606-625. https://doi.org/10.1108/09544780610707101

Sabri, P.S., Ilyas, M., & Amjad, Z. (2011). Organizational culture and its impact on the job satisfaction of the University teachers of Lahore. *International Journal of Business and Social Science,* 2(24).

Sammut-Bonnici, T. (2015). Benchmarking. *Wiley Encyclopedia of Management.* Publisher John Wiley & Son, Ltd. https://doi.org/10.1002/9781118785317.weom120043

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students* (5th ed.). England: Pearson Education Limited.

Schein, E.H. (1997). *Organisational culture and leadership* (2nd ed.). San Francisco, CA: Jossey-Bass.

Senge, P.M. (1990), *The Fifth Discipline: The Art and Practice of the Learning Organization.* New York, NY: Doubleday/Currency,

Shahzad, F., Luqman, R.A., Khan, A.R., & Shabbir, A.L. (2012). Impact of organizational culture on organizational performance: an overview. *Interdisciplinary Journal of Contemporary Research in Business,* 3(9), 975-985.

Shammout, A.B., & Jawazneh, A.K. (2022). The Effect of Implementing Total Quality Management (TQM) on the Performance of Employees: A Field Study on Private Service Organizations in Amman. *Jordan Journal of Business Administration,* 18(1).

Sharma, S., & Modgil, S. (2019). TQM, SCM and Operational Performance: An Empirical Study of Indian Pharmaceutical Industry. *Business Process Management Journal,* 26, 331-370. https://doi.org/10.1108/BPMJ-01-2018-0005

Siehl, C., & Martin, J. (1990). Organisational culture: a key to financial performance. *Organisational Climate and Culture* (241-281). San Francisco, CA: Jossey-Bass.

Singh, P., & Twalo, T. (2015). Effects of poorly implemented performance management systems on the job behavior and performance of employees. *International Business & Economics Research Journal (IBER),* 14(1), 79-94. https://doi.org/10.19030/iber.v14i1.9034

Sinha, N., & Dhall, N. (2018). Mediating effect of TQM on relationship between organizational culture and performance: evidence from Indian SMEs. *Total Quality Management & Business Excellence,* 31(15-16), 1841-1865. https://doi.org/10.1080/14783363.2018.1511372

Sinha, N., Garg, A.K., Dhingra, S., & Dhall, N. (2016). Mapping the linkage between organisational culture and TQM: the case of Indian auto component industry. *Benchmarking,* 23(1), 208-235. https://doi.org/10.1108/BIJ-12-2014-0112

Snongtaweeporn, T., Siribensanont, C., Kongsong, W., & Channuwong, S. (2020). Total Quality Management in Modern Organizations by Using Participation and Teamwork. *Journal of Arts Management,* 4(3), 818-829. Available at: https://so02.tci-thaijo.org/index.php/jam/article/view/243921

Sobel, M.E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology,* 13, 290-312. https://doi.org/10.2307/270723

Sorensen, J.B. (2002). The strength of corporate culture and reliability of firm performance. *Administrative Science Quarterly,* 47(March), 70-91. https://doi.org/10.2307/3094891

Stoica, M., Liao, J., & Welsch, H.P. (2004). Organizational culture and patterns of information processing: The case of small and medium-sized enterprises. *Journal of Developmental Entrepreneurship,* 9(3), 251-266.

Strengers, J., Mutsaers, L., Van Rossum, L., & Graamans, E.P. (2022). The organizational culture of scale-ups and performance. *Journal of Organizational Change Management,* 35(8), 115-130. https://doi.org/10.1108/JOCM-09-2021-0268

Su, Q., Li, Z., Zhang, S.X., Liu, Y.Y., & Dang, J. X. (2008). The impacts of quality management practices on business performance: an empirical investigation from China. *International Journal of Quality & Reliability Management,* 25(8), 809-823. https://doi.org/10.1108/02656710810898621

Thai, V., & Jie, F. (2017). The impact of total quality management and supply chain integration on firm performance of container shipping companies in Singapore. *Asia Pacific Journal of Marketing and Logistics,* 30(3), 605-626. https://doi.org/10.1108/APJML-09-2017-0202

Tidor, A., Gelmereanu, C., Baru, P., & Morar, L. (2012). Diagnosing organizational culture for SME performance. *Procedia Economics and Finance,* 3, 710-715. https://doi.org/10.1016/S2212-5671(12)00218-3

Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological bulletin,* 133(5), 859. https://doi.org/10.1037/0033-2909.133.5.859

Tripathi, D. (2004). Influence of experience and collaboration on effectiveness of quality management practices: The case of Indian Manufacturing. *International Journal of Productivity and Performance Management,* 54(1), 23-33. https://doi.org/10.1108/17410400510571428

Ugheoke, S.O. (2021). Does organizational culture matter in managerial role and high-performance achievement? lessons from Nigeria SMEs. *Business Perspectives and Research,* 9(3), 385-398. https://doi.org/10.1177/2278533721989831

Yasin, M. (2002). The theory and practice of benchmarking: then and now. *Benchmarking,* 9, 217-243. https://doi.org/10.1108/14635770210428992

Yousuf, A., Haddad, H., Pakurar, M., Kozlovskyi, S., Mohylova, A., Shlapak, O. et al. (2019). The effect of operational flexibility on performance: a field study on small and medium-sized industrial companies in Jordan. *Montenegrin Journal of Economics,* 15(1), 47-60. https://doi.org/10.14254/1800-5845/2019.15-1.4

Zhen, Z., Yousaf, Z., Radulescu, M., & Yasir, M. (2021). Nexus of digital organizational culture, capabilities, organizational readiness, and innovation: investigation of SMEs operating in the digital economy. *Sustainability,* 13(2), 720-769. https://doi.org/10.3390/su13020720

Zott, C. (2003). Dynamic capabilities and the emergence of intra-industry differential firm performance: insights from a simulation study. *Strategic Management Journal,* 24(2), 97-125. https://doi.org/10.1002/smj.288

Zu, X., Robbins, T.L., & Fredendall, L.D. (2010). Mapping the critical links between organizational culture and TQM\Six Sigma practices. *International Journal of Production Economics,* 123(1), 86-106. https://doi.org/10.1016/j.ijpe.2009.07.009

Zwain, A.A.A., Lim, T.K., & Othman, N.S. (2017). TQM and academic performance in Iraqi HEIs: associations and mediating effect of KM. *The TQM Journal,* 29(2), 357-368. https://doi.org/10.1108/TQM-08-2013-0096