

Ibrahim Garba Muhammad Department of Business Administration & Entrepreneurship, Bayero University Kano ibrahimgeem@gmail.com

*Corresponding Author: Ibrahim Garba Muhammad Department of Business Administration & Entrepreneurship, Bayero University Kano ibrahimgeem@gmail.com

EFFECT OF TOTAL QUALITY MANAGEMENT, SOCIAL INTERACTIONS AND EMPLOYEE ON SMEs PERFORMANCE: A **CONCEPTUAL FRAMEWORK**

ABSTRACT

Small and medium enterprises (SMEs) are critical drivers of economic development, particularly in low-income economies. However, high failure rates persist across African contexts, often linked to challenges in quality management, employee engagement, and customer relations. This conceptual paper proposes a framework integrating Total Quality Management (TQM), employee satisfaction, and social interactions as strategic enablers of SME performance. Drawing on the Resource-Based View (RBV), the paper synthesizes existing literature to highlight how internal capabilities such as quality-driven processes and satisfied, socially connected employees may contribute to performance outcomes. By addressing gaps in existing studies and focusing on the Nigerian SME sector, this paper offers theoretical insights and practical implications for SME managers and policymakers. Future empirical validation of this framework is recommended to strengthen its relevance and applicability.

INTRODUCTION

Small and medium enterprises (SMEs) have long been recognized as pivotal engines of economic growth, employment creation, and poverty alleviation across the globe (Dzuljastri Abdul Razak et al., 2018; Eggers, 2020; Gamage et al., 2020; Kulathunga et al., 2020). Representing over 90% of enterprises worldwide and contributing more than 50% to global employment (Dushime et al., 2022; Qalati et al., 2021), SMEs play a crucial role in enhancing local innovation and sustaining inclusive development (Prasanna et al., 2019). In Nigeria, SMEs constitute a substantial portion of the economy and have received increasing attention from policymakers through various support programs, including the Anchor Borrower Programme (Isichei et al., 2020). However, despite these initiatives, the performance of Nigerian SMEs remains suboptimal.

Numerous structural and operational challenges hinder their growth ranging from limited access to finance and inadequate infrastructure to weak managerial capabilities, regulatory burdens, and lagging adoption of innovation and quality practices (Muchaendepi et al., 2019; Musa & Muruga, 2016; Ellera et al., 2020). Research shows that internal organizational factors particularly Total Quality Management (TQM), employee satisfaction, and knowledge integration play an instrumental role in enhancing firm performance (Alzoubi & Ahmed, 2019; Eniola et al., 2019; McDermott & Prajogo, 2012).

However, these elements are often underutilized in the Nigerian SME context, where informal structures dominate and managerial maturity varies widely (Qalati et al., 2021; Dzuljastri Abdul Razak et al., 2018).

Moreover, social interaction—a critical yet often overlooked organizational factor—has not received sufficient scholarly attention in SME literature. In resource-constrained environments, informal communication, interpersonal trust, and team collaboration can function as strategic assets that influence customer responsiveness, adaptability, and ultimately business performance (Hudson et al., 2001; Matt et al., 2020). The synergy between these social dynamics and structured quality initiatives such as TQM is particularly relevant in developing countries, where formal coordination mechanisms may be weak or absent (Setyani Dwi Lestari et al., 2020).

Despite the extensive body of research on SME challenges, empirical and conceptual work integrating TQM, employee satisfaction, and social interaction as predictors of SME performance remains limited, particularly in sub-Saharan Africa. Several scholars have recommended exploring broader performance indicators, including human and social factors (Hilman et al., 2020; Davcika et al., 2020; Dushime et al., 2022). Responding to this gap, this study proposes a conceptual framework grounded in the Resource-Based View (RBV), which positions internal capabilities as strategic resources. By focusing on Nigerian SMEs, the study contributes to an evolving body of literature and offers a contextualized understanding of how human-centered and process-oriented strategies may jointly drive performance improvements

2.0 REVIEW OF RELATED LITERATURE

2.1 SMEs Performance

SME performance refers to how effectively an enterprise achieves its strategic and operational goals. It encompasses both financial and non-financial outcomes such as profitability, growth, customer satisfaction, innovation, and employee productivity (Kashif et al., 2019; Anggadwita & Mustafid, 2014). Scholars have linked SME performance to environmental factors such as economic, social, political, and demographic conditions (Cicea et al., 2019), as well as to entrepreneurial strategies like opportunity focus and value creation (Sadiku-Dushi et al., 2019). Furthermore, internal factors such as innovation capacity, human capital effectiveness, and employee involvement significantly influence performance outcomes (Rahaman et al., 2021; McDermott & Prajogo, 2012; Sawaean & Ali, 2021). Despite its multidimensional nature, many studies treat SME performance as a fragmented construct, highlighting the need for an integrated framework that aligns human resource variables with performance indicators.

2.2 Total Quality Management (TQM)

Total Quality Management (TQM) is a strategic approach focused on continuous improvement across all functions of an organization, aiming to enhance customer satisfaction and long-term performance. It emphasizes quality in processes, employee engagement, leadership commitment, and customer focus (Baird et al., 2011; Sadikoglu & Olcay, 2014). TQM facilitates structural and cultural transformation by enhancing organizational competencies, improving process consistency, and fostering innovation (Iqbal & Asrar-ul-Haq, 2018; Firman et al., 2020). It is particularly relevant for SMEs, where limited resources require strategic deployment of internal capabilities to remain competitive. The integration of TQM into SME operations has

been found to positively influence both financial and operational outcomes (Othman et al., 2020; Eniola et al., 2019), though implementation often remains inconsistent in developing contexts.

2.3 Employee Satisfaction and Social Interaction

Employee satisfaction is a psychological state reflecting how content individuals are with their job roles, working environment, and organizational relationships. It is influenced by intrinsic and extrinsic factors including compensation, recognition, work-life balance, and interpersonal relationships (Judge et al., 2019; Martine, 2018). Satisfied employees are more likely to exhibit organizational commitment, reduced turnover intentions, and higher productivity (Gurz et al., 2017; Bernal et al., 2015).

A related but underexplored construct is social interaction, which refers to informal communication and collaboration among employees. In SMEs, where formal systems are less developed, social interaction can act as a substitute for structured coordination, enabling knowledge sharing, teamwork, and responsiveness to customer needs. Research suggests that the interplay between employee satisfaction and social interaction can significantly affect organizational outcomes such as innovation and service quality (Dubby et al., 2012; Hagihara et al., 1998). However, studies often treat these constructs in isolation, limiting our understanding of their synergistic effects.

2.4 Linking TQM and SMEs Performance

The implementation of TQM has been widely associated with improved SME performance across different sectors and geographies. Empirical studies demonstrate that TQM positively impacts innovation speed, operational efficiency, and customer satisfaction (Anifowose et al., 2022; Alzoubi & Ahmed, 2019). TQM also strengthens organizational culture and aligns internal processes with strategic goals (Sawaean & Ali, 2021; Eniola et al., 2019). Despite these benefits, many SMEs in developing economies face implementation challenges due to resource constraints, skill gaps, and leadership inertia. Therefore, contextualizing TQM within the unique operational dynamics of Nigerian SMEs is necessary to understand its true impact.

Proposition 1: Total Quality Management has a significant positive effect on SME performance.

2.5 Linking Employee Satisfaction, Social Interaction, and SMEs Performance

There is growing consensus that employee satisfaction significantly enhances SME performance by fostering motivation, innovation, and organizational citizenship behavior (Kustuer, 2011; Elholoui & Asli, 2021). Additionally, social interaction has been shown to influence productivity through mechanisms such as peer support, information exchange, and collaborative problem-solving (Simon, 1976; Robbins, 1998). In SMEs, where roles are often flexible and hierarchical structures are flatter, social capital becomes a critical performance lever.

Integrating employee satisfaction with social interaction provides a holistic perspective on human resource dynamics. When employees are satisfied and socially engaged, they are more likely to contribute meaningfully to organizational goals. This is particularly relevant in SMEs that rely heavily on human capital and informal networks for adaptability and service delivery (Brill et al., 2001; Veitch et al., 2005).

Proposition 2: Employee satisfaction and social interaction have a significant positive effect on SME performance.

2.6 Conceptual Framework

Drawing from the preceding review, the proposed conceptual framework positions TQM, employee satisfaction, and social interaction as interrelated internal capabilities that drive SME performance. Performance is conceptualized as a multidimensional construct encompassing both financial outcomes (e.g., profitability, growth) and non-financial indicators (e.g., innovation, customer retention). The framework suggests that TQM directly influences performance, while employee satisfaction and social interaction either mediate or moderate this relationship. Small and Medium Enterprise's performance is described depending on the success level of the SMEs in fulfilling their objectives. Fielden et al. (2003) consider that performance is evaluated according to the achievement of organizational goals throughout its evolution in terms of the effectiveness of its human resources, supplier performance, product and service quality customer and markets, and other financial factors. Measuring the performance of the SMEs is an important activity that underpins its strength. The performance of the SMEs is usually evaluated from different points of view. In the literature, financial and non-financial measures are the most mentioned. To make efficient strategic decisions for enterprises and ensure long-term success both of these meters are used at the same time. Employee satisfaction is positively correlated with SME performance and is described as the degree to which a person feels satisfied to improve the performance of the organization. Dubby, (2012), asserted that employee satisfaction encompasses a lot of different facets that include motivation and increase SME performance. Hence overall employee satisfaction leads to improved productivity of SME performance.

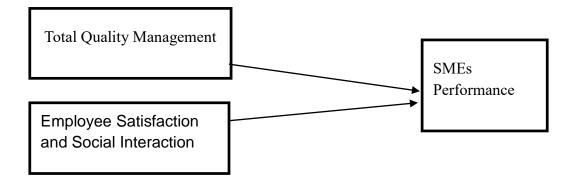


Figure 1: A research framework

2.7 Theoretical Underpinning: Resource-Based View (RBV)

In order to support the variables of this study, the study employed Resource Based View (RBV), the main focus of RBV theory is to examine the performance of the organizations based on their resources (Peteraf& Barney, 2003). The RBV is one of the strategic management theories which describe how business organizations achieve competitive advantage by configuring their resources to become (i) rare; (ii) difficult to imitate; and (iii) difficult to substitute (Wuen et al., 2020). This reasoning explains how different business organizations in terms of size, can thrive by relying upon their internal factors (Kasturi et al., 2006). This implies the importance of linking key resources with business performance (Kunc&Morecroft, 2010). According to the resource-based view, strategic capabilities such as TQM and Employee Satisfaction are internal resources that create competitive advantages for the organization (Asad et al., 2020). Therefore, this study examined the effect of employee satisfaction and total quality management on SME performance which is in line with the RBV theory.

The Resource-Based View (RBV) offers a compelling lens through which to examine the role of internal capabilities in SME performance. RBV posits that sustainable competitive advantage stems from resources that are valuable, rare, inimitable, and non-substitutable (Barney, 1991; Peteraf & Barney, 2003). In this study, TQM, employee satisfaction, and social interaction are conceptualized as intangible strategic resources that can yield performance benefits if effectively deployed. TQM enhances organizational routines and process reliability; employee satisfaction fosters commitment and productivity; and social interaction facilitates tacit knowledge transfer and organizational learning. Together, these resources provide a strategic foundation for SMEs to overcome contextual limitations and enhance competitiveness. By aligning with RBV, this study reinforces the importance of internal resource configuration in achieving superior performance in Nigerian SMEs.

3.0 METHODOLOGY

This study adopts a conceptual research design, underpinned by a structured and critical literature review methodology. The aim was to develop an integrative framework linking Total Quality Management (TQM), employee satisfaction, and social interaction to SME performance, particularly within the Nigerian context.

The literature review was conducted using a systematic yet flexible approach, drawing from peer-reviewed journal articles, conference proceedings, and scholarly books. Major academic databases searched include Google Scholar, ScienceDirect, Emerald Insight, and SpringerLink, focusing on publications between 2010 and 2024 to capture recent theoretical and empirical developments.

A combination of keywords was used, including: "Total Quality Management and SMEs," "employee satisfaction in SMEs," "social interaction at workplace," "SME performance," "TQM in developing countries," and "RBV theory and SME competitiveness." Boolean operators (AND, OR) were employed to refine search results.

The inclusion criteria were as follows:

1. Articles published in English;

- 2. Peer-reviewed journals or conference papers;
- 3. Studies focusing on SMEs, preferably in developing or emerging markets;
- 4. Literature explicitly addressing TQM, employee satisfaction, social interaction, or SME performance.

Exclusion criteria included:

- 1. Non-academic sources (e.g., blogs, magazines);
- 2. Studies unrelated to SMEs or lacking empirical or conceptual rigor;
- 3. Duplicates or retracted publications.

Following initial screening based on titles and abstracts, full-text reviews were conducted to extract key constructs, theoretical lenses, and empirical findings. The selected literature was then thematically analyzed and synthesized to identify conceptual linkages and gaps, which informed the development of the proposed framework.

This conceptual paper design is justified due to the lack of integrated models examining the triadic relationship between TQM, employee satisfaction, and social interaction within SMEs in low-income economies. By employing a Resource-Based View (RBV) theoretical lens, the study contributes to theory-building and offers a foundation for future empirical research.

4.0 RESULTS AND DISCUSSION

The outcome of this conceptual study is the development of a framework that links Total Quality Management (TQM), employee satisfaction, and social interaction to the performance of SMEs. Drawing on the Resource-Based View (RBV), these constructs are positioned as internal capabilities that can drive competitive advantage when effectively leveraged.

The review revealed that while TQM practices enhance operational efficiency and customer satisfaction, their implementation in developing countries is often hindered by contextual challenges such as inadequate infrastructure and managerial capacity. Employee satisfaction, on the other hand, plays a critical role in shaping employee behavior, motivation, and innovation—factors that are essential for SME growth. Furthermore, social interaction within the workplace emerged as a unique but underexplored construct, particularly in SMEs where informal structures often replace formal coordination mechanisms.

The proposed framework contributes to existing literature in several ways. First, it integrates three often separately studied constructs into a cohesive model, allowing for a more holistic understanding of performance determinants in SMEs. Second, it responds to specific calls in recent studies (e.g., Hilman et al., 2020; Dushime et al., 2022) for more nuanced analyses of performance beyond financial metrics. Third, by embedding the discussion within the Nigerian context, the framework provides a localized perspective that is both theoretically grounded and practically relevant.

From a managerial standpoint, the framework underscores the need for SME owners and managers to balance process-oriented strategies (such as TQM) with human-centric factors (like employee satisfaction and team dynamics). For policymakers, it highlights the importance of supporting SMEs not only through financial

incentives but also through training programs and soft-skill development that enhance internal organizational capabilities.

Lastly, the framework lays the groundwork for future empirical research. Scholars may test the model using structural equation modeling or case studies, focusing on how these internal resources interact to influence various performance dimensions. It also opens avenues to examine moderating effects such as firm size, industry type, and leadership style on the proposed relationships.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study developed a conceptual framework to examine how Total Quality Management (TQM), employee satisfaction, and social interaction jointly influence the performance of small and medium enterprises (SMEs), with a focus on the Nigerian context. Anchored in the Resource-Based View (RBV), the study identifies these internal capabilities as strategic assets that can drive competitiveness, innovation, and sustainability in SMEs.

The framework advances existing scholarship by integrating constructs that are often examined in isolation. While TQM enhances process efficiency and quality, employee satisfaction and social interaction enrich the human capital base of the firm, fostering commitment, creativity, and informal knowledge sharing. Together, these dimensions present a holistic view of performance enhancement rooted in organizational capabilities rather than external interventions alone.

However, this conceptual approach is not without limitations. The study does not empirically test the relationships proposed in the framework, and its reliance on secondary literature limits generalizability. Additionally, the nuances of social interaction within diverse cultural or sectoral contexts in Nigeria are not deeply explored. These limitations point to the need for empirical validation using quantitative or mixed-method approaches in future research.

5.2 Recommendations for Practice:

- 1. SME owners and managers should invest in structured TQM practices while fostering a workplace culture that values employee voice, recognition, and collaborative behavior.
- 2. Capacity-building programs should be introduced by business support organizations to train SME managers on how to integrate quality systems with human resource development.
- 3. Policy makers should develop interventions that go beyond financing, emphasizing soft skill development, employee well-being, and leadership effectiveness within SMEs.

5.3 Recommendations for Research:

- 1. Future studies should empirically test the proposed framework using structural equation modeling (SEM) or longitudinal case studies across different regions of Nigeria.
- 2. Researchers may examine the mediating or moderating role of social interaction in the relationship between TQM and performance.

- 3. Further exploration is needed on how contextual factors—such as firm size, sector, and ownership structure—affect the strength of the identified relationships.
- 4. Comparative studies between SMEs in Nigeria and other developing economies could also enrich the theoretical generalizability of the framework.

By articulating these contributions and directions, this study serves as a foundational reference for scholars and practitioners seeking to improve SME performance through a capability-driven lens.

REFERENCE

- Alzoubi, H., & Ahmed, G. (2019). Do tqm practices improve organisational success? A case study of electronics industry in the uae. International journal of economics and business research, 17(4), 459-472. Https://doi.org/10.1504/ijebr.2019.099975
- Anggadwita, G., & Mustafid, Q. Y. (2014). Identification of factors influencing the performance of small medium enterprises (smes). Procedia - social and behavioral sciences, 115, 415-423. Https://doi.org/10.1016/j.sbspro.2014.02.448
- Alkahtani, A., Nordin, N., & Khan, R. U. (2020). Does government support enhance the relationship between networking structure and sustainable competitive performance among smes? Journal of innovation and entrepreneurship2020, 9(14). Https://doi.org/10.1186/s13731-020-00127-3
- Belhadi, A., Sha'ri, Y. B. M., Touriki, F. E., & Fezazi, S. El. (2018). Lean production in smes: literature review and reflection on future challenges. Journal of industrial and production engineering, 2168–1015, 2168– 1023. Https://doi.org/10.1080/21681015.2018.1508081
- Booltink, L. W., & Saka-Helmhout, A. (2018). The effects of r&d intensity and internationalization on the performance of non-high-tech smes. *International small business journal: researching entrepreneurship*, 36(1), 81–103.
- Baird, K., Jia Hu, K., & Reeve, R. (2011). The relationships between organizational culture, total quality management practices and operational performance. International journal of operations & production management, 31(7), 789-814. Https://doi.org/10.1108/01443571111144850
- Basheer, M. F., Siam, M. R. A., Awn, A. M., & Ghulam, S. (2019). Exploring the role of tqm and supply chain practices for firm supply performance in the presence of information technology capabilities and supply technology adoption: a case of textile firms in pakistan. 275–288. Https://doi.org/10.5267/j.uscm.2018.9.001
- Cicea, C., Popa, I., Marinescu, C., & Ștefan, S. C. (2019). Determinants of smes' performance: evidence from european countries. Economic research-ekonomska istrazivanja 32(1), 1602–1620. Https://doi.org/10.1080/1331677x.2019.1636699
- Davcika, N. S., Cardinalib, S., Sharmac, P., & Cedrola, E. (2020). Exploring the role of international r&d activities in the impact of technological and marketing capabilities on smes' performance. Journal of

- business research, 4(42). Https://doi.org/10.1016/j.jbusres.2020.04.042
- Dushime, E., Muathe, S. M., & Kavindah, L. (2022). New paradigms on the performance of smes: the reflection on entrepreneurial innovation in burundi. *International journal of research in business and social science*, 11(1), 2147–4478. Https://doi.org/10.20525/ijrbs.v11i1.1581
- Dzuljastri Abdul Razak, Moha Asri Abdullah, & Ersoy, A. (2018). Small medium enterprises (smes) in turkey and malaysia a comparative discussion on issues and challenges. *International journal of business, economics, and law,* 15(3), 2289–1552.
- Eggers, F. (2020). Masters of disasters? Challenges and opportunities for smes in times of crisis. *Journal of business research*, 116, 199–208. Https://doi.org/10.1016/j.jbusres.2020.05.025
- Ellera, R., Alfordb, P., Kallmünzerc, A., & Petersa, M. (2020). Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization. *Journal of business research*, 112(0148-2963/), 119–127. Https://doi.org/10.1016/j.jbusres.2020.03.004
- Eniola, A. A., Olorunleke, G. K., Akintimehin, O. O., Ojeka, J. D., & Oyetunji, B. (2019). The impact of organizational culture on total quality management in smes in nigeria. *Heliyon*, 5(8), e02293. Https://doi.org/10.1016/j.heliyon.2019.e02293
- Firman, A., Mustapa, Z., & Ilyas, G. B. (2020). Relationship of tqm on managerial perfomance: evidence from property sector in indonesia. 1, 47–57.
- Gamage, S. K. N., Ekanayake, E., Abeyrathne, G., Prasanna, R., Jayasundara, J., & Rajapakshe, P. (2020). A review of global challenges and survival strategies of small and medium enterprises (smes). Economies, 8(79). Doi:10.3390/economies8040079
- García-Bernal, J., & Ramírez-Alesón, M. (2015). Why and how tqm leads to performance improvements. *Quality Management Journal*, 22(3), 23–37. Https://doi.org/10.1080/10686967.2015.11918439
- Hendrawan, A., Sucahyowati, H., & Cahyandi, K. (2018). E-commerce in small and medium enterprises (smes) in order to improve performance. *In jurnal terapan manajemen dan bisnis* (vol. 4, issue 2, pp. 208–215). Https://doi.org/10.26737/jtmb.v4i2.1025
- 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. Doi 10.1108/ijppm-02-2019-0059
- Isichei, E. E., Agbaeze, K. E., & Odiba, M. O. (2020). Entrepreneurial orientation and performance in smes the mediating role of structural infrastructure capability. *International journal of emerging markets*, 15(6), 1219–1241. Doi 10.1108/ijoem-08-2019-0671
- Iqbal, A., & Asrar-Ul-Haq, M. (2018). Establishing relationship between tqm practices and employee performance: the mediating role of change readiness. *International journal of production economics*,

- 203. Https://doi.org/10.1016/j.ijpe.2018.05.034
- Kashif, M., Lai, F., & Lai, C. (2019). Integrating sustainability reporting into enterprise risk management and its relationship with business performance: a conceptual framework. 208.
- Kulathunga, K. M. M. C. B., Ye, J., Sharma, S., & 1, P. R. W. (2020). How does technological and financial literacy influence sme performance: mediating role of erm practices. *Information*, 11(292). Doi:10.3390/info11060297
- Matt, D. T., Modrák, V., & Zsifkovits, H. (2020). Industry 4.0 for smes challenges, opportunities, and requirements. Https://doi.org/10.1007/978-3-030-25425-4
- Muchaendepi, W., C, M., Hamandishe, T., & Kanyepe, J. (2019). Inventory management and performance of smes in the manufacturing sector of harere. Science direct, 33(2352–9789), 454–461.
- Musa, H., & Muruga, C. (2016). Malaysian smes development: future and challenges on going green. Sciencedirect, 224, 254262.
- Mustafa, H. K., & Yaakub, S. (2018). Innovation and technology adoption challenges: impact on smes' company performance. *International journal of accounting, finance, and business*, 3(15), 57–65.
- Mcdermott, C. M., & Prajogo, D. I. (2012). Service innovation and performance in smes. *International journal of operations and production management*, 32(2), 216–237. Https://doi.org/10.1108/01443571211208632
- Niyi A. O., Ghasemi, M., & Olaleye, B. R. (2022). Total quality management and small and medium-sized enterprises' (smes) performance: mediating role of innovation speed. Sustainability (switzerland), 14(14). Https://doi.org/10.3390/su14148719
- Ochuba, D. C. (2022). Effect of auditing skills on small business performance: a study of small businesses in anambra state, nigeria. *International journal of advanced research* (ijar), 10(2), 2320–5407. Http://dx.doi.org/10.21474/ijar01/14266
- Othman, I., Norfarahhanim, S., Ghani, M., & Woon, S. (2020). The total quality management (tqm) journey of malaysian building contractors. *Ain shams engineering journal*, 11(3), 697–704. Https://doi.org/10.1016/j.asej.2019.11.002
- Peter, F. O., Adegbuyi, O., Olokundun, M. A., Peter, A. O., Amaihian, A. B., & Ibidunni, S. A. (2018). Government financial support and financial performance of smes. *Academy of strategic management journal*, 17(3).
- Prasanna, R., Jayasundara, J., Gamage, S. K. N., Rajapakshe, P., & Abeyrathne, G. (2019). Sustainability of smes in the competition: a systemic review on technological challenges and sme performance rpir. *Journal of open innovation: technology, market, and complexity*, 5(100). Doi:10.3390/joitmc5040100
- Qalati, S. A., Yuan, L. W., Khan, M. A. S., & Anwar, F. (2021). A mediated model on the adoption of social

- media and smes' performance in developing countries. *Technology in society*, 64, 160–791. Https://doi.org/10.1016/j.techsoc.2020.101513
- Rahman, N. A., Yaacob, Z., & Radzi, R. M. (2016). The challenges among malaysian sme: a theoretical perspective. *World journal of social sciences*, 6(3), 124–132.
- Sawaean, F. A. A., & Ali, K. A. M. (2019). The impact of entrepreneurial leadership and learning orientation on organizational performance of smes: the mediating role of innovation capacity. Management science letters, 10, 369–380. Doi: 10.5267/j.msl.2019.8.033
- Setyani Dwi Lestari, Leon, F. M., Widyastuti, S., Brabo, N. A., & Putra, A. H. P. K. (2020). Antecedents and consequences of innovation and business strategy on performance and competitive advantage of smes. *Journal of asian finance, economics and business*, 7(6), 365–378. Https://doi.org/doi:10.13106/jafeb.2020.vol7.no6.365
- Alzoubi, H., & Ahmed, G. (2019). Do tqm practices improve organisational success? A case study of electronics industry in the uae. *International journal of economics and business research*, 17(4), 459–472. Https://doi.org/10.1504/ijebr.2019.099975
- Anggadwita, G., & Mustafid, Q. Y. (2014). Identification of factors influencing the performance of small medium enterprises (smes). Procedia *social and behavioral sciences*, 115, 415–423. Https://doi.org/10.1016/j.sbspro.2014.02.448
- Baird, K., Jia Hu, K., & Reeve, R. (2011). The relationships between organizational culture, total quality management practices and operational performance. *International journal of operations & production management*, 31(7), 789–814. Https://doi.org/10.1108/01443571111144850
- Basheer, M. F., Siam, M. R. A., Awn, A. M., & Ghulam, S. (2019). Exploring the role of tqm and supply chain practices for firm supply performance in the presence of information technology capabilities and supply chain technology adoption: a case of textile firms in pakistan. 7, 275–288. Https://doi.org/10.5267/j.uscm.2018.9.001
- Cicea, C., Popa, I., Marinescu, C., & Ștefan, S. C. (2019). Determinants of smes' performance: evidence from european countries. Economic research-ekonomska istrazivanja , 32(1), 1602–1620. Https://doi.org/10.1080/1331677x.2019.1636699
- Eniola, A. A., Olorunleke, G. K., Akintimehin, O. O., Ojeka, J. D., & Oyetunji, B. (2019). The impact of organizational culture on total quality management in smes in nigeria. Heliyon, 5(8), e02293. Https://doi.org/10.1016/j.heliyon.2019.e02293
- Firman, A., Mustapa, Z., & Ilyas, G. B. (2020). Relationship of tqm on managerial perfomance: evidence from property sector in indonesia. 1, 47–57.
- García-Bernal, J., & Ramírez-Alesón, M. (2015). Why and how tqm leads to performance improvements. Quality management journal, 22(3), 23–37. Https://doi.org/10.1080/10686967.2015.11918439
- Iqbal, A., & Asrar-Ul-Haq, M. (2018). Establishing relationship between tqm practices and employee performance: the mediating role of change readiness. *International journal of production economics*,

- 203. Https://doi.org/10.1016/j.ijpe.2018.05.034
- Kashif, M., Lai, F., & Lai, C. (2019). Integrating sustainability reporting into enterprise risk management and its relationship with business performance: a conceptual framework. 208.
- Mcdermott, C. M., & Prajogo, D. I. (2012). Service innovation and performance in smes. International journal of operations and production management, 32(2), 216–237. Https://doi.org/10.1108/01443571211208632
- Niyi Anifowose, O., Ghasemi, M., & Olaleye, B. R. (2022). Total quality management and small and medium-sized enterprises' (smes) performance: mediating role of innovation speed. Sustainability (switzerland), 14(14). Https://doi.org/10.3390/su14148719
- Othman, I., Norfarahhanim, S., Ghani, M., & Woon, S. (2020). The total quality management (tqm) journey of malaysian building contractors. Ain shams engineering journal, 11(3), 697–704. Https://doi.org/10.1016/j.asej.2019.11.002
- Rahaman, A., Luna, K. F., Ping, Z. L., Islam, M. S., & Karim, M. (2021). Do risk-taking, innovativeness, and proactivity affect business performance of smes? A case study in bangladesh. 8(5), 689–695. Https://doi.org/10.13106/jafeb.2021.vol8.no5.0689
- Sadikoglu, E., & Olcay, H. (2014). The effects of total quality management practices on performance and the reasons of and the barriers to tqm practices in turkey. Advances in decision sciences, 2014, 537605. Https://doi.org/10.1155/2014/537605
- Sadiku-Dushi, N., Dana, L. P., & Ramadani, V. (2019). Entrepreneurial marketing dimensions and smes performance. Journal of business research, 100(march), 86–99. Https://doi.org/10.1016/j.jbusres.2019.03.025
- Sahoo, S., & Yadav, S. (2020). Sciencedirect sciencedirect sciencedirect influences of tpm and tqm practices on performance of influences of tpm and tqm practices on performance of engineering product and component manufacturers engineering product and component manufacturers 17th global conference on sustainable manufacturing. Procedia manufacturing, 43, 728–735. Https://doi.org/10.1016/j.promfg.2020.02.111
- Sawaean, F. A. A., & Ali, K. A. M. (2021). The nexus between learning orientation, tqm practices, innovation culture, and organizational performance of smes in kuwait. Interdisciplinary journal of information, knowledge, and management, 16(april), 147–172. Https://doi.org/10.28945/4743
- Sharma Sanjay, S. M. (2019). Tqm , scm and operational performance : an empirical study of indian pharmaceutical industry. August. Https://doi.org/10.1108/bpmj-01-2018-0005
- Yakob, S., Yakob, H.-S., Rubayah, B. A. M, & Raziff, N. A. M. (2019). The effect of enterprise risk management practice on sme performance. The south east asian journal of management volume, 13(2). Doi: 10.21002/seam.v13i2.11785
- Yas, H., Alsaud, A. B., Almaghrabi, H. A., Almaghrabi, A. A., & Othman, B. (2021). The effects of tqm practices on performance of organizations: a case of selected manufacturing in- dustries in saudi arabia harith. 11, 503–510. Https://doi.org/10.5267/j.msl.2020.9.017
- Zulgurnain A, Gongbing, B., & Mehreen, A. (2018). Does supply chain finance improve smes' performance?

The moderating role of trade digitization. Business process management journal.