Essential Quality Management in SMEs: A Literature Review

Sahala Siallagan[1)], Keysar Panjaitan[2)], Randeska Manullang[3)], Maher Yahya Salloom[4)]

e-mail: sahalaall@unimed.ac.id[1)]; pkeysar9@gmail.com[2)]; andeskiandra79@gmail.com[3)]

[1) 2)] Department of Mechanical Engineering Education, Faculty of Engineering, Universitas Negeri Medan, [3)] Department of Economics Education, Faculty of Economics, Universitas Negeri Medan, [4)] Department of Mechatronics Engineering, Al-Khwarizmi College of Engineering, University of Baghdad, Iraq

Abstract. Quality is important in many businesses, including manufacturing and services. Many countries use quality approaches, such as strategic quality management, quality systems, quality assurance, and quality control, to obtain a competitive edge in an era of tremendous global competition. The implementation of quality management (QM) methods typically necessitates company-wide involvement to make sure the practices are successfully embraced across many parts of the organization's products, processes, and services. Applying QM tools throughout the entire organisation is crucial if businesses want to remain competitive. However, most SMEs frequently find this difficult because they have to compete on a worldwide scale against big businesses that are already well-established players in the market. Studies in developing countries are unwilling to employ QM in SMEs due to the uncooperative culture of manager, low management skill, lack of relevant knowledge, and technical barriers.

Keywords: quality management; quality tool; SME; competitive

1 Introduction

The continued good running of a business or service is ensured by quality management. It has four main components: quality planning, quality assurance, quality control and quality improvement. Quality management deals not only with the quality of the product, but also with how this can be achieved and what steps are required to maintain the desired level of quality. Quality management refers to the monitoring of all the functions and tasks required to maintain the required quality standards. This includes defining quality policies, developing and implementing quality assurance and plans, quality control and improvement. The global economy depends heavily on the contribution of small and medium-sized enterprises (SMEs). It should come as no surprise that SMEs now power most developing nations' economies. Many civilizations have benefited greatly from the expansion, innovation, and success of the firms. Liberalization and globalization have created a wealth of new economic prospects, particularly for SMEs in emerging nations like Indonesia. But there is now fierce rivalry both locally and internationally as a result of liberalization and globalization. SMEs must put competitive

ICIESC 2024, September 17, Medan, Indonesia

DOI 10.4108/eai.17-9-2024.2353083

strategies into place that will allow them to rival in sectional, regional, and international trade if they hope to obtain a competitive advantage. Various competitive methods for performance improvement have been employed, including quality management (QM) techniques.

2 Theory

Small and medium-sized enterprises, also known as SMEs, are businesses with revenues or number of employees below a certain threshold. International organizations such as the World Bank, OECD, European Union, United Nations, and World Trade Organization use the acronym "SME". In Indonesia, SMEs account for more than 90% of all businesses across all sectors. Agriculture accounts for the majority of these businesses, followed by retail, hotels, and restaurants in second place, and manufacturing in third place. Accounting for 60.51% of Indonesia's GDP, SMEs are considered the foundation of the country's economy. Approximately 98.7% of the 64 million micro, small and medium are micro-scale businesses, with the remaining portion being small and medium-sized businesses (SMEs). Despite their tiny percentage, SME contributions to Indonesia’s GDP in 2019 were 9.5 % for small business and 13.6 % for medium-sized business.

According to information released by the Republic of Indonesia’s Ministry of Cooperatives and SMEs, there were 64,194,056 SMEs in 2019, accounting for 99.99 % of all business and 96.9 % of all employment. MSMEs have a significant and critical role in the national economy as evidenced by their 60.5% GDP contribution and their 15.6% share of non-oil exports [2]. SME/MSME is defined as enterprises with a maximum turnover of IDR 50 billion or maximum assets (excluding land for construction) of IDR 10 billion, according to Government Regulation No. 7 of 2021 on Establishing, Protecting and Empowering Cooperatives and Micro, Small and Medium Enterprises. The thorough categorization is:

1. A micro-enterprise is a company with a maximum annual revenue of IDR 2 billion or a maximum asset value of IDR 1 billion (excluding land and building assets).
2. Small enterprise: a company having assets (apart from land and buildings) of more than IDR 1 billion to IDR 5 billion, or a turnover of more than IDR 2 billion up to at most of IDR 15 billion.
3. A moderate-sized enterprise is an organization having assets (apart from land and buildings) and a turnover of at least IDR 15 billion up to at most of IDR 50 billion greater than IDR 5 billion and up to IDR 10 billion at most.
4. A large enterprise is a company with more than IDR 50 billion in revenue or more than IDR 10 billion in assets (excluding land and building assets).

Pros and Cons of Small and Medium Enterprises (SMEs)

Pro’s of being a SME:

1. They are nearer to their customers. To provide more specialized assistance and perhaps form a small bond with their clients
2. They are adaptable. It will help them become closer to their customers.

3. They have the ability to increase recognition even more. No matter how long you keep your eyes open, a SME will be better able to identify and meet the unique needs of its customers. Conversely, a big organization might recognize it or decide not to cover it since they would be too tiny for it.

4. They decide more quickly. In SMEs, only one person or a small group will be responsible for making decisions. Compared to large organizations, where decisions typically involve sophisticated, dynamic instruments affecting several persons and groups, it will make them far more deft at setting and achieving goals.

5. It's simple to get the employees involved with the company. More prominent proximity to the board and a broader global perspective on the business (every representative's work in large organizations is more precise than detailed) would make it easier to genuinely link the employees with the organization's goals. Both productivity and motivation will rise as a result [3].

Cons of being a SME:

1. It's harder to get financing. Small businesses generally don't have the financial muscle of larger companies. So they generally need outside financing, but it's more limited and available under worse circumstances. They don't have access to the financial levers that larger partnerships can leverage, like capital raises and initial public offerings.
2. Gaining the trust of a large number of customers can be difficult. It can be difficult for small businesses to reach customers. Large companies have the financial muscle to advertise widely and make their presence known, but for small businesses, reaching the required number of customers can be a difficult and time-consuming process. Small businesses may find it difficult to achieve the security that larger companies can offer their customers because they are less well-known than their competitors.
3. Costs have increased. Small businesses face many hurdles in leveraging economies of scale, leading to rising prices in certain industries and making it difficult to adjust costs offered to customers.
4. It is difficult to endure a crisis's protracted duration. Even though SMEs tend to be more flexible in handling changes, when long-term crises arise, their lack of financial resources can lead to serious problems. Consequently, small and medium-sized businesses frequently have enormous difficulties making ends meet during economic downturns, which leads to the closure of many of them.
5. They'll be more nervous when they arrive at the innovation. Regretfully, a SME will struggle more to adapt to mechanical changes than it will to some new technological advancements—again, for budgetary reasons. However, SMEs can take advantage of some very catchy and creative arrangements.

Table 1. Advantage vs disadvantage of SMEs

Advantage	**Disadvantage**
High flexibility	Less financial resources
Less bureaucratic (informal)	Less human resources (e.g. for supporting activities)
Strong ties to customers and suppliers	Often conservative and patriarch structures

Often low fluctuation	Strategy often dictated by strong patriarch
Strong focus on customer needs	Dependent on few knowledge carriers
Often inimitable knowledge and experience in special area (hard to replace)	Often no strong links to external partners for knowledge transfer (e.g. universities)

SMEs have numerous difficulties, fewer than half of small firms endure for more than five years, and just a portion of SMEs are upgraded to the primary category of superior implementing business, according to Araujo [4]. This suggests that governments are not providing enough assistance to SMEs to maximise their economic contributions. The primary difficulty facing SMEs, according to study conducted by the World Economic Forum and the National University of Singapore Business School [5], is viability and development, as expressed by 67% of CEOs. Low margins are often mentioned, as a result of the difficulties in growing the company and entering new markets. SMEs are the backbone of many economies, however they frequently encounter particular difficulties getting loans, such as: Financial Reporting: Compared to larger organisations, smaller enterprises might not have the same level of formal financial reporting. Lenders may find it challenging to obtain a comprehensive picture of their financial stability as a result.

Owner-Dependency: The abilities and financial stability of SMEs' owners are frequently crucial. The ability of the company to repay loans may be directly impacted by a negative change in the owner's circumstances.

Market Volatility: SMEs' cash flow and creditworthiness are at risk due to their general susceptibility to market and economic downturns.

Real-World Example: Let's say a neighbourhood artisan bakery is looking to borrow money to grow. A higher perceived credit risk is a result of incomplete financial records, dependence on the owner's knowledge, and the possible influence of shifting customer preferences.

7 Clue distinguish between SMEs and companies

SMEs and companies have the following differences:

- Research and Development: Growth and expansion are the goals of both kinds of enterprises. This is achieved, among other things, through product creation and market research. Nonetheless, because they have access to large amounts of money and resources, companies have the advantage.
- Structure: Employees of large corporations are usually dispersed over several office floors. You will probably only encounter the vice president of your department at business functions, so the hierarchy is clear. Your employer is only a message away in SMEs. Employees, regardless of department or status, seem to be working together more.
- Market niche: With each new product or attendance they launch, companies can be able to enter new trade segments. SMEs have to commence with a niche market in the interim. An SME can explore other market sections after this niche market generates the necessary money for growth.
- Funding – There is no lack of eager owners prepared to place a wager on a well-established corporation. The existence of venture capital firms contributes to sustainable funding. For SMEs, funding originates from loan sources or the business owner themselves. Occasionally, loved ones lend a hand to help an aspirant business owner realise their ambition.

- Revenue: In consequence of narrow product lines and narrow trade permeation, SMEs have a narrow source of earnings. Businesses manage a type of goods and services in a wide range of marketplaces, which provides them the ability to take advantage of winning proposals and balance out bad business choices. Stock appreciation is one way that a company's increased revenue is allocated to its shareholders.
- Culture: SMEs are more likely to try new things because they don't stand to lose much. They look for novel approaches to problems. Any tactic that allows them to stand out is a wise one. In the meanwhile, corporations have their established protocols that they often adhere to.
- Workers: A company's well-established and robust culture frequently results in a staff that is uniform. When it comes to who they hire, SMEs typically draw a more diverse clientele. Usually, these employees are also there to get experience or conduct experiments. If they were seeking security and the famous climb up the company stage, the workers would have engaged a big company.

The way to obtain a rivalry profit towards companies

- Establish a prestige as a sectional company by announcing the entrance for the neighborhood. From the beginning, your brand should be easy to recognise. Participate actively in neighbourhood activities to build your social capital. Engage in altruistic endeavours. Make the most of the nearby infrastructure.

- Put customer service first - Don't lose 10 prospective clients by falling short of their expectations. Building a devoted clientele and achieving repeat business are your objectives. You also need recommendations from your regulars.

- Concentrate on a niche – Although growth is your ultimate goal, for the time being, stick to a narrow market. Once you have a devoted client base that can help you meet your sales goals, do everything in your power to satisfy your current audience. Then, begin looking into growth options.

- Establish a customer loyalty program. Give your devoted patrons a sense of appreciation. Create a program for consumer loyalty. Giving your ardent fans first dibs on new items or offering special discounts and freebies may be rather easy.

The main sources of capital for small firms are bank loans or the owners' own resources. Bigger businesses might receive funding from investors. Expansive enterprises regularly have a unbending bureaucracy and a well-established administration structure. Small companies have a single point of contact at the top of the company. There are certain similarities, such as the restricted application of QM methods and the reduced utilisation of instruments and methods. The high expense of training and factors unknown to the authors are among the causes for not performing.

2.2 Quality Management

A One way to describe quality is the degree of excellence. A relative indicator of goodness is quality. Operationally, high-quality products are those that satisfy consumer demands. Although there isn't one definition of quality that applies to everyone, quality specialists have some common ground in their definitions. An association can center on quality by utilizing the quality administration strategy, which is based on the inclusion of all individuals and endeavors to attain long-term victory through client fulfillment and focal points for all individuals of the association and society. Business success and long-term viability have always hinged on quality. The contributions to the quality practices study have been impressive, primarily from quality pioneers and even promoters like Crosby, Deming, Ishikawa, Juran, Feigenbaum, Oakland, and plentiful more. Every expert has a sound concept and method for raising the standard of work. The advancements made by each of these quality specialists demonstrate a notable enhancement in the production system and process. Both coordinate and backhanded picks up to the company's natural administration practices—particularly in add up to squander reduction—can result from upgrades made to the fabricating framework. Natural execution and improvements to the taking after components of the generation system—including quality management—have been found to be emphatically related. Quality is perceived intangible in certain ways. Most likely, perception will be used to determine quality, with the manufacturer or company evaluating implementation and the user or consumer defining purposes. It is possible to conclude that the definition of quality is that it must take into account the needs of the client as well as a predicted level of consistency, dependability, affordability, and market suitability.

Nations utilize quality approaches, such as key quality administration, quality frameworks, quality affirmation, and quality control, to get or keep up a competitive edge in an period of furious worldwide competition. For an efficient system to integrate the activities of many groups within an organisation to generate, maintain, and improve quality, quality must be managed and controlled. This will make it possible to give the most cost-effective marketing, engineering, production, and service possible to satisfy customers. Quality has evolved into an industry-wide strategic weapon. High-quality companies typically hold a larger market share than their rivals. Quality is important, and many businesses, including manufacturing and services, have realised this. Scholars and practitioners have differing definitions of quality. Regarding the definition of quality, there is no agreement. While some define quality as achieving standards, others define it as delighting consumers or their requirements being met. So that corporation to accomplish their objectives and obtain a rivalry edge, quality has emerged as a critical factor and a top priority [6]. Over the past ten years, it is available a notable growth in investigation on quality management, particularly in the industrial sectors [7]. Nonetheless, there exist certain disparities in empirical studies about the application of quality management principles in large and small and medium-sized companies.

The usage of quality administration (QM) strategies ordinarily requires full or company-wide inclusion, counting best administration, who ought to make beyond any doubt the hones are effectively grasped over numerous parts of the organization's items, forms, and administrations. Applying QM tools throughout the entire organisation is crucial if businesses want to remain competitive. But most SMEs frequently find this difficult because they have to compete on a worldwide scale against big businesses that are already well-established players in the market. Continuous improvement and innovation activities are seeing a growing influence from QM methods [8].

Investigate on the utilize of QM apparatuses and strategies in SMEs, such as cause-and-effect examination, control charts, Pareto examination, conceptualizing, measurable handle control, and explore plan, has gotten a parcel of the consideration as a result of the realization of the potential of QM activities [9]. It has been discovered that QM tools are essential to the daily QM and control components of industry. The advantages of such tools and procedures in advancing knowledge of particular business and industry processes in SMEs were emphasised by Bamford and Greatbanks [10]. The enterprise having a method to perpetual refinement is recognized to be enhanced by tools and procedures that enable process monitoring, employee participation in process improvement, and the application of quality improvement lessons learnt to regular business operations. Total Quality Management (TQM) is typically exclusively used in large manufacturing organisations; several Small and Medium-Sized Enterprises (SMEs) are hesitant to use TQM. Mostly literature describes the traditional internal and external constraints that SMEs must overcome [11].

3 Discussion

Previous studies have tended to concentrate more on how QM practices are being adopted in developed nations than in developing one.Research on developing countries has been conducted in the following countries: Portugal [12]; Malaysia [13]; Pakistan [14]; Thailand [15]; Indonesia [16]; India [17]; Turkey [18]; and Jordan [19]. A few investigations were carried out in Africa. According to the majority of these research, SMEs have had difficulty breaking into international markets [20]. Suárez-Ortega [21], for example, noted that Senegalese SMEs encountered obstacles when they entered overseas markets, such as narrow-minded organized thought, rigidleaders, and a lack of arranged civilization.

The findings of Mutingi and Chakraborty's study from 2021 indicate that the primary reasons for the poor uptake of the tools are a lack of tool expertise and the high expense of training in Namibia. To bridge this gap, the study looks into how widely QM practices are used and what obstacles stand in the way of their application in Namibia. From the perspective of the developing world, the inquiry will offer important kind perception and method for the successful adoption of QM implementation in SMEs [22].

The execution on quality administration (QM) strategies ordinarily requires full or company-wide association, counting beat administration, who ought to make beyond any doubt the hones are effectively grasped over numerous parts of the organization's items, forms, and administrations. Applying QM tools throughout the entire organisation is crucial if businesses want to remain competitive. But most SMEs frequently find this difficult because they have to compete on a worldwide scale against big businesses that are already well-established players in the market. Continuous improvement and innovation activities are seeing a growing influence from QM methods [8]. Even for established SMEs, the failure rate of new businesses in Indonesia is comparable to that of startups: roughly 20% failure in the beginning of the year, 34% within two years, 50% in the fifth year, and just 25% survive for up to 15 years.

Field data indicates that Indonesia SMEs struggle during the planning stage, particularly when it comes to integrating the quality component into the manufacturing process. Limited access to raw materials and technology is the root cause of this predicament. The way of QC is typically carried out effectively by SMEs; however, the process of documenting a fresh response to the issue has not been backed up, which accounts for the high degree of variation in the quality dimension [23]. SMEs encounter ten primary obstacles, which include those related to competition, working capital availability, elevated energy prices, technological hurdles, inefficient production costs, macroeconomic factors, inadequate managerial abilities, subpar product quality, sales limitations, and scarce raw materials [24].

Gadenne & Sharma [25] state that quality management elevates a company to a world-class position and aids in achieving excellence in Australian SMEs. Numerous studies are carried out in industrialised nations like Singapore, the USA, Australia, and the UK. Numerous of these studies have focused on certain sectors, such as higher education, banking, retail, manufacturing, services, and construction [25]. The nation of Nambia mainly applied QM techniques at a modest level. The following were the primary excuses for not putting QM initiatives into practice: (a) unfamiliar tools in businesses; (b) challenges with data collecting; and (c) expensive training. Other words, many researches have offered empirical proof that quality management techniques improve organisational performance [26].

3.2 QM in the developing world

The major components of a successful TQM implementation, according to Abdullah and Abidin's [27] investigation into the factors enabling TQM adoption in Malaysian SMEs, are formalised arrangement method, technical pattern, and employee resource incorporation. Kureshi [28] used data from the Northern region of Pakistan to examine the consciousness of QM techniques in industry SME in undeveloped nations. The success of SMEs is positively impacted by the authors' demonstration of the usefulness of QM-related technologies. Similar to this, Kureshi [28] conducted a survey of QM practices across Pakistani manufacturing SMEs. Jirapattarasilp [15] looked at how QM practices were being implemented in Thai electrical and electronics SMEs, and found that the more commonly used implementation were in the areas of process administration, data collecting and analysis, top management involvement, and QM policy. Comparably, Sukwadi [16] examined the degree to which QM practices were applied in Indonesian SMEs, taking into account the stages of business quality, overall quality, system quality, process quality, and product quality.

Based on their quality development, SMEs can be categorised and preparing can be given at a few levels, such as essential, middle, and progressed, concurring to investigate discoveries approximately different device and strategy levels [22]. According to published research, SMEs must view grade refinement as an exploration and constantly work to raise standards by putting Lean and Six Sigma projects into practice and taking cues from larger businesses [29]. One of the main reasons small businesses fail in developing nations is that SMEs do not manage risk comprehensively [30].

According to study results, SMEs tend to use check sheets, histograms, and control charts as their go-go statistical quality tools when applying QM methods. Due to a lack of pertinent tool expertise, SMEs typically use fewer QM tools and procedures. Since the majority of these technologies require statistical understanding, appropriate training is required. This highlights the need for additional instruction and training to raise awareness of the advantages and possible gains from using high-quality equipment and methods. A small body of research examined the justifications for not implementing quality efforts, with a focus on theoretical evaluation in particular [31]. Rarely are empirical investigations conducted on the topic.

4 Conclusion

Previous research has demonstrated that SMEs can increase their competitiveness in the market, narrow their focus on the market, and make better use of their human and material resources when they implement quality management practices. However, SMEs have been slower to implement TQM and other quality management tools than large businesses. Despite a number of studies on quality management carried out over the past 20 years, the majority of the studies have concentrated on large manufacturing companies, making it difficult to understand how quality arrangement constructs are applied in SMEs and how they affect ventura achievement [32].

In general, Indonesian SMEs' quality practices ranged from "partially implemented" to "implemented". To boost their competitive edge and increase the effectiveness of their business processes, SMEs should be strongly encouraged to adopt quality initiatives. In general, there is little knowledge about the quality initiative and the related competitive advantages. Because they only adopt quality management partially, the majority of SMEs in Indonesia are unable to accomplish continuous improvement. In order to attain the most advantages for SMEs, the owners should make sure that these quality standards are adopted gradually. A baseline assessment of the quality procedures in SMEs can also be obtained from the previous study. Therefore, being aware of this baseline can aid in SMEs' performance development over time. The adoption of quality procedures by SMEs can provide them a competitive edge over other industries, particularly those dominated by large, international corporations.

Tambunan [33] recognized that low productivity, low quality products, insufficient knowledge of production improvement techniques, and difficulty in upgrading the products are among the challenges faced by Indonesian SMEs.Consequently, these issues may hinder the growth of SMEs in Indonesia and may also motivate the government to provide them with assistance. These features mean that SMEs in Indonesia still have a lot of room to grow by applying quality management principles to enhance their operations.

Other findings of the inquiry the causes of the failure to carry out initiatives. The results make it clear that the main causes are that organisations are not using these technologies, that data collection is challenging, that training is expensive, and that the process takes a lot of time. The majority of the results point to the necessity of an awareness campaign to spread knowledge about different high-quality instruments and their potential advantages to establish and preserve a rivalry benefit. Furthermore, it is basic to get assist preparing around the utilize of QM innovations and their conceivable affect on efficiency. To empower SMEs to contribute in preparing their human resources, the government might have to be finance preparing administrations since of the recognition that preparing is costly. But businesses should also think about creating long-term plans and make the appropriate investments [34].

The require of giving workers with advance instruction and preparing to upgrade their capability in quality devices and strategies, problem-solving capacities, information collecting and investigation, and principal factual approaches cannot be overstated by policymakers and decision makers. Numerous relevant works of literature echo this [35], [36]. Thus, in order to create training programs that enhance employee abilities and get them ready to embrace quality initiatives, government policymakers, higher education institutions, and senior management in SME organisations should collaborate. Knowing which quality procedures need to be improved is essential for SMEs' managers and investors having the quality method on the program. Making the wrong choice can cost businesses a lot of money. According to published research, SMEs must view quality refinement as a startegy and constantly work to raise standards by putting Lean and Six Sigma projects into practice and taking cues from larger businesses [29]. One of the possible causes of SMEs' struggles with growth and sustainability in emerging nations is a failure to manage risk.

Digital platforms have revolutionized the way business function in the last several years, particularly small and medium-sized firms (SMEs). Additionally, SMEs now find it simpler to automate procedures, streamline operations, and cut expenses thanks to digital platforms. These platforms facilitate the online sale of goods and services by SMEs by providing a variety of services, such as online payment gateways and e-commerce marketplaces. Additionally, SMEs can gather and evaluate client data via digital platforms, which can assist them in formulating well-informed marketing and sales plans. SMEs can also utilize the explanation to preferable customise their things and treatment to the requets of their clientele.

References

[1] Ghobadian, A., & Gallear, D. N. (1996). Total quality management in SMEs. *Omega*, *24*(1), 83-106.

[2] Ministry of Cooperatives and SMEs of the Republic of Indonesia, 2019

[3] Suzana, D., & Adela-Adriana, J. M. (2022). The Problem of Choice-advantages and Disadvantages of Smes vs. Multinational Companies in the Perception of Potential Employees in the Context of the Pandemic. *Annals of'Constantin Brancusi'University of Targu-Jiu. Economy Series/Analele Universităţii'Constantin Brâncuşi'din Târgu-Jiu Seria Economie*, (3).

[4] Araujo, L.N.P., 2018. Micro, Pequenas e Médias Empresas: Conceitos e Desafios. Delta Economics & Finance

[5] National University of Singapore Business School, 2022

[6] Talib, F., Rahman, Z., & Qureshi, M. N. (2013). An empirical investigation of relationship between total quality management practices and quality performance in Indian service companies. *International journal of quality & reliability management*, *30*(3), 280-318.

[7] Ooi, K.B., Cheah, W.C., Lin, B. and Teh, P.L. (2012) 'Total quality management practices and knowledge sharing: an empirical study of Malaysia's manufacturing organizations', *Asia Pacific Journal of Management*, Vol. 29, No. 1, pp.59–78.

Ratnawati, S. B. E., Murwani, F. D., & Wahyono, H. (2018). The role of SMEs' innovation and learning orientation in mediating the effect of CSR programme on SMEs' performance and competitive advantage. Global Business Review, 19(3_Suppl), S21–S38.

[8] Kim, D. Y., Kumar, V., & Kumar, U. (2012). Relationship between quality management practices and innovation. Journal of Operations Management, 30(4), 295–315.

[9] Zeng, J., Chi Anh, P., & Matsui, Y. (2013). Shop-floor communication and process management for quality performance: An empirical analysis of quality management. Management Research Review, 36(5), 454–477.

[10] Bamford, D. R., & Greatbanks, R. W. (2005). The use of quality management tools and techniques: A study of application in everyday situations. International Journal of Quality and Reliability Management, 22(4), 376–392

[11] Maupa, H., Jusni, J., Taba, M. I., & Baumassepe, A. N. (2019, December). PENERAPAN E-COMMERCE PADA USAHA KECIL DAN MENENGAH DI SULAWESI SELATAN. In *Proceeding of National Conference on Asbis* (Vol. 4, pp. 106-112).

[12] Sousa, S., Aspinwall, E., Sampaio, P., & Rodrigues, A. (2005). Performance measures and quality tools in Portuguese small and medium enterprises: Survey results. Total Quality Management and Business Excellence, 17(2), 277–307.

[13] Habibah Abdul Talib, H., Anuar Mohd Ali, K., & Idris, F. (2014). Critical success factors of quality management practices among SMEs in the food processing industry in Malaysia. *Journal of Small Business and Enterprise Development*, *21*(1), 152-176.
[14] Kureshi, N. I., & Mann, R. (2009). Quality management practices of SME in developing countries: A survey of manufacturing SME in Pakistan. Journal of Quality and Technology Management, 5(1), 63–89.
[15] Jirapattarasilp, K. (2008), "Quality management in electrical-electronics SMEs", Proceedings of the International MultiConference of Engineers and Computer Scientists, Vol. 2, Hong Kong, March 19–21
[16] Sukwadi, R. (2015), "The implementation of quality management practices in Indonesian SMEs", International Journal of Trade and Global Markets, Vol. 8 No. 3, pp. 207-222.Talib, F., Rahman, Z. and Qureshi, M.N. (2013) 'An empirical investigation of relationship between total quality management practices and quality performance in Indian service companies', *International Journal of Quality and Reliability Management*, Vol. 30, No. 3,
pp.280–318.
[17] Basu, R., & Bhola, P. (2015). Exploring quality management practices and its pattern analysis in Indian service SMEs. Journal of Enterprising Culture, 23(2), 199–235.
[18] Taner, M. (2012). A feasibility study for Six Sigma implementation in Turkish textile SMEs. South East European Journal of Economics and Business, 7(1), 63–71.
[19] Ali, B. J., & Abedalfattah, Z. A. (2013). The effect of quality management practices on organizational performance in Jordan: An empirical study. International Journal of Financial Research, 4(1), 93–109.
[20] Ratnawati, Soetjipto, B. E., Murwani, F. D., & Wahyono, H. (2018). The role of SMEs' innovation and learning orientation in mediating the effect of CSR programme on SMEs' performance and competitive advantage. *Global Business Review*, *19*(3_suppl), S21-S38.
[21] Suárez-Ortega, S. M., García-Cabrera, A. M., & Knight, G. A. (2016). Knowledge acquisition for SMEs first entering developing economies: Evidence from Senegal. European Journal of Management and Business Economics, 25(1), 22–35.
[22] Mutingi, M., & Chakraborty, A. (2021). Quality management practices in Namibian SMEs: An empirical investigation. *Global business review*, *22*(2), 381-395.
[23] Tejaningrum, A. (2019, April). Implementation the trilogy Juran in SMEs business case study in Indonesia. In *IOP Conference Series: Materials Science and Engineering* (Vol. 506, No. 1, p. 012031). IOP Publishing.
[24] Irjayanti, Maya, and Azis, Anton Mulyono, Barrier Factors and Potential Solutions for Indonesian SMEs, Procedia Economics and Finance, Vol. 4, pp. 3-12, 2012.
[25] Gadenne, D., & Sharma, B. (2005, January). Quality management factors in SMEs: An investigation of their effect on organisational performance. In *Proceedings of the 19th ANZAM Conference, ACT, December 7–10, Canberra* (pp. 1-13).
[26] Lakhal, L., Pasin, F., & Limam, M. (2006). Quality management practices and their impact on performance. *International Journal of Quality & Reliability Management*, *23*(6), 625-646.
[27] Abdullah, A. and Abidin, Z.Z. (2012), "Total quality management enablers for SMEs: a study of Malaysian companies", GSTF Journal on Business Review, Vol. 2 No. 2, pp. 71-72.
[28] Kureshi, N.I., Mann, R., Khan, M.R. and Qureshi, M.F. (2009), "Quality management practices of SME in developing countries: a survey of manufacturing SME in Pakistan", Journal of Quality and Technology Management, Vol. 5 No. 1, pp. 63-89.

[29] Kumar, M., & Antony, J. (2008). Comparing the quality management practices in UK SMEs. Industrial Management and Data Systems, 108(9), 1153–1166.
[30] Mthiyane, Z. Z., van der Poll, H. M., & Tshehla, M. F. (2022). A framework for risk management in small medium enterprises in developing countries. *Risks*, *10*(9), 173.
[31] Kumar, M., Khurshid, K. K., & Waddell, D. (2014). Status of quality management practices in manufacturing SMEs: A comparative study between Australia and the UK. International Journal of Production Research, 52(21), 6482–6495.
[32] Rahman, Abdul Aziz Abdu, Abdelrhman Meero, Nurul Mohammad Zayed, K. M. Anwarul Islam, Mustafa Raza Rabbani, and Venus Del Rosario Bunagan. 2021a. Impact of Leverage Ratios on Indicators of Financial Performance: Evidence from Bahrain. Academy of Strategic Management Journal 20: 1–12. Available online: https://www.abacademies.org/articles/Impact-of-leverage-ratios-onindicators-of-financial-performance-evidence-from-Bahrain-1939-6104-20-S3-011.pdf (accessed on 13 September 2022).
[33] Tambunan, T. (2007) 'Entrepreneurship development: SMEs in Indonesia', *Journal of Developmental Entrepreneurship*, Vol. 12, No. 1, pp.95–118.
[34] Mutingi, M., & Chakraborty, A. (2021). Quality management practices in Namibian SMEs: An empirical investigation. *Global business review*, *22*(2), 381-395.
[35] Green, T. J. (2012). TQM and organizational culture: How do they link? Total Quality Management and Business Excellence, 23(2), 141–157.
[36] Herzallah, A. M., Gutierrez, L. G., & Rosas, J. F. M. (2014). Total quality management practices, competitive strategies and financial performance: The case of the Palestinian industrial SMEs. Total Quality Management, 25(6), 635–649