

Examining the Benefits and Challenges of Implementing Total Quality Management Practices in Manufacturing Small and Medium-Sized Enterprises in Ghana

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ABSTRACT

Micro, Small and medium-sized enterprises (MSMEs) are important to national development as they produce a huge percentage of the national output and provide an even greater proportion of employment. They play a significant role in economic growth, innovation, poverty alleviation and raise standard of living. Research has shown that most manufacturing SMEs that adopt and implement TQM practices exhibited a significant positive relationship and confirmed that TQM practices are indicators of firm performance. The study examines the benefits of TQM implementation, and the challenges these manufacturing SMEs face in their attempt to implement TQM practices. The study which was exploratory in nature used descriptive survey and a structured interview to collect data from the SMEs who were purposively selected for the interview. The study purposively selected fifty (50) owner-managers for the interview, but due to the COVID-19 health pandemic, only five (5) participated in the interview. A sample size of 5 respondents were selected for exploratory study in Accra metropolitan area of the Greater Accra region to respond to the interview instrument. The tool for qualitative data analysis was NVivo version 11. The study discovered that manufacturing SMEs adopted and implemented TQM practices in their organisations. The TQM practices which were analysed were: organisational leadership; strategic planning and development; customer focus; human resource focus; continuous improvement and process management. The study established that effective implementation of TQM practices led to financial performance of these manufacturing SMEs as there was a significant positive relationship between the TQM practices and firm performance. The study although confirmed a direct positive relationship between quality management practices and firm performance, there were numerous challenges that serves as barriers to TQM implementation in the organisations. The challenge of downsizing was the most reported among the SMEs. It is recommended that manufacturers in the SME sector must be aware of the prospects of quality management practices since the success of its implementation depends largely on its awareness. It is also recommended that SMEs identifies challenges that face its implementation of TQM, so as to eliminate any barrier to its implementation.

Keywords: Benefits and Challenges, Total Quality Management Practices, Manufacturing Small and Medium-Sized Enterprises (SMEs), COVID-19 Pandemic.

INTRODUCTION

Micro, Small and medium-sized enterprises (MSMEs) are vital to a nation's development as they produce a huge amount of the national output. They provide an even higher proportion of employment to the country, and they play a major role in economic growth, innovation, poverty alleviation and creation of wealth. (Amoah & Amoah, 2018).

Globally, SMEs play a vibrant role in economic development. This has made many nations aware that SMEs give the necessary resources that helps achieve the competitive advantage they want with a more significant aim (Aremu, & Adeyemi, 2011; Nwachukwu, 2012; Gade, 2018; Mganda, 2018; Kaplinsky, & Morris, 2019).

With most developed nations, SMEs usually represents the majority of all the enterprises, and accordingly, they are the main force of entrepreneurship activities. The Ghanaian SME sector is acknowledged as the engine of growth in the economy. Statistics available in Ghana shows that SMEs make up 90 per cent of all registered businesses. Research has revealed that they provide 85 per cent of manufacturing employment, contributes about 70 per cent to Ghana's Gross Domestic Products (Abor & Quartey 2010; Oppong et al. 2014; Adu, 2016).

In Ghana, the manufacturing sector is a subsector of the SME industry. It makes up 16 of the 33 sub-sectors in the international standard classification of industries (ISIC). Manufacturing Value Added (MVA) was 5.6313% of GDP in 2016. The sector over the years has experienced a sustained decrease in its share of GDP throughout the past decade. They lost more than 40% of its share in 2006 at 10.2%.

Nevertheless, GDP from the Manufacturing sector in Ghana averaged 2173.25 GHS million from 2006 to 2017, reaching a high of 2543 GHS million in 2017. The government initiative of 'The One District One Factory' brought exciting prospects for the industrialisation of the Ghanaian economy. This policy, among others, was to establish a factory in each of the 216 districts in Ghana and would build reliable value chains around critical industries such as automobiles and other high-value products such as cocoa, shea nuts, cashew and others for exports.

In 2003, an industrial census conducted in Ghana, about 26,000 manufacturing establishments were employing about 243,500 persons. About 55% of the establishments were micro-businesses, using less than four persons; 40% were small businesses, employing between 5 and 19 persons; 5% were medium businesses, employing 20– 99 persons; and only 1% were sizeable Diagnostic Study of Light Manufacturing in Ghana 6 businesses, using 100 or more persons. Micro firms in Ghana accounted for 15% of manufacturing employment; small and medium enterprises contributed 51% of jobs; large businesses accounted for 34% of employment. Greater Accra and Ashanti regions have more establishment in Ghana. Greater Accra had 25.7% of establishments and 27.9% of employees, while Ashanti had 24.7% of establishments and 24.3% of employees. According to the 2003 Industrial Census, almost 50% of manufacturing employees were apprentices or unskilled workers. About 5% were professional, and managerial staff and 40% were skilled workers.

The report indicated that, they are wood processing, pharmaceuticals, textiles, metal fabrications, metal works, chemicals, quarrying, construction, polymers, petrochemicals and printing. Their fuller geographic spread and higher capacity of labour place them high on

economic development. Therefore, boosting the competitiveness of the manufacturing sector in Ghana is imperative, considering the role that the industry plays in the economy of the country.

In recent times, globalisation and ever-changing customer demands and intense competitions have significantly changed the business environment, which has led to quality becoming a growth factor within organisations (Mukherjee, 2018). In the context of globalisation, competitive markets, continuous advancement in technology and increasing customer demand for higher quality products and better services, quality has become one of the important elements of making firms competitive. Researchers have identified total quality management as a successful management philosophy in the manufacturing industry, and superior performance for competitive advantage comes as a result of management strategies aimed at improving quality product and services. (Kaur, Singh, & Singh, 2019; Owusu, & Duah, 2018).

The total quality management practices are adopted both by small and medium scale industries as well as large scale industries. For this purpose, many African countries, including Ghana, have adopted ISO standards and certification, which is an application to any organisation, including the manufacturing sector, and is an indication that drives performance improvement. (Sanni, 2018; Amui et al. 2017). Many manufacturing firms seek to adopt and implement a sort of quality practices that have been successful elsewhere as consultants and practitioners say improved quality improves business or organisational performance (Fening, Amaria, & Frimpong, 2013).

According to Saleh, Sweis, and Saleh, (2018), due to an increase in demand and product quality, organisations are forced to improve their quality of products or service and operations since organisations depend on customers to do business because without them there is no business. Every customer requires products and services of a given quality to be delivered at a given time and be of a price that reflects its value for money. In theory, the improved quality will increase customer demand and increase production and hence profits. (Chen, et al.,2017).

A study in Ghana (Amoako-Gyampah et al. 2019) found several significant relations between quality management variables and firm performance. According to Mardi, (2019), TQM is used as a tool to enhance performance measurement of SMEs in Ghana. The survey revealed that firstly, the customer's concern must be addressed to improve the performance of SMEs in Ghana. It is for this reason that the current study aims at contributing to the ongoing debate on TQM as a strategic tool for performance.

The purpose of this study, therefore, is to explore, develop and proposed the conceptual framework and research model of quality management practices implemented with business performance. Especially, it aimed to identify the challenges encountered by the SMEs in the implementation of quality management practices in their firms. The study aims to examine the current quality management practices in manufacturing industries in Ghana. The focus is on the benefits and challenges of quality management practices in organizations.

Literature shows that formal quality management practices are important tools that contributes to the growth and development of SMEs. Research shows that most SMEs lose a proportionate amount of revenue as a result of not paying attention to quality. (Rezaei,

Kothadiya, Tavasszy, & Kroesen, 2018). This suggest that formal quality management practices are important indicators contributing to growth and development of SMEs.

The lack of manufacturing SMEs ability to practice total quality management has been identified as one of the reasons why SMEs fail. The literature revealed that research have indicated most SMEs failure is as a result of firm's inability to employ quality management practices as a competitive advantage. Many researches have validated total quality management practices and firm performance as positive, whereas others came out with inconclusive results. (Kaur, Singh, & Singh, 2019; Owusu, & Duah, 2018).

SMEs have been slow to adopt and implement quality management as compare to large firms in less developing countries. (Sahoo, & Yadav, 2018). They consider implementation of quality management as daunting and expensive with high ongoing operational cost. While some firms are unable to correlate the organisational context with the kind of TQM programmes to implement, others are unable to sustain it. Others blame their inability to adopt TQM practices on the fact that its implementation is vague. Most of the studies on TQM implementation focused on advance countries, with few emerging inconclusive results in developing countries like Ghana. The study looks at the benefits and challenges of implementing total quality management practices in manufacturing SMEs in Ghana.

LITERATURE

Total Quality Management

There are several studies carried out regarding quality management, both by quality practitioners and academicians. It has become increasingly important to organisations as key management issue due to increased levels of competition in the global marketplace and consequently Total Quality Management. (Mardi, 2019. Sahoo &Yadav, 2018; Ebrahimi, & Sadeghi, 2013).

Total quality management has spread its wings in every sphere of the global corporate world, and Ghanaian manufacturing companies are no exception as they can measure the success of their organisation from the quality of goods and services (Appiah, 2016; Michael et al. 2015; Fred et al. 2015; Fening et al., 2008). In Ghana, TQM can have an important and beneficial effect on employee and organisational development. This can be done by having all employees focus on quality management and continuous improvement. TQM involves everyone's effort in the organisation to improve performance and stay in business for long. Companies in Ghana can establish and uphold cultural values that creates long-term success to both customers and the organisation itself. Research has shown that if total quality management practices are well applied, it can assist the industry in improving performance. (Sahoo and Yadav, 2018).

The understanding of total quality management has become difficult as different definitions of quality may not apply to all organisations in all industries. Many writers on the subject have meanings to suit their own beliefs, prejudices, business and academic experiences. (Sallis, 2014). Inconsistency has resulted in a proliferation of various and unique definitions giving different dimensions that have shaped total quality management. TQM surfaced in the 1980s and began to have a significant impact on management and approaches to long term success for customer satisfaction. TQM depends on the involvement of all members of the organisation, by improving processes, products, services and the culture in which they work. According to

Day (2016), the term TQM was initially coined by Naval Air Systems Command in 1985 to describe its Japanese style of management approach to quality improvement. The origination of the idea was from the USA manufacturers.

Components of Total Quality Management

After a thorough examination of past researches, which includes a critical look at the most esteemed quality award such as MBNQA (1999), six-element of TQM practices were used to signify the primary TQM practices in this research study which are: Organisational leadership, Process management, Customer focus, Strategic planning and development, Human resource focus, Continuous improvement – which has been acknowledged by TQM researchers and practitioners and have been regarded as crucial practices of TQM in both manufacturing and service industries by previous researchers and scholars (Prajogo and Sohal, 2003; Hoang et al., 2006; Sadikoglu & Olcay, 2014).

Organisational Leadership

The degree of vision and support that management provides in implementing a total quality management environment is significant to the adoption of TQM. Top management commitment participation in TQM practices are the most critical factors for the success of TQM practices. (Sadiloglu & Olcay, 2014). The process of leaders influencing others towards the accomplishment of organisational goals. The leader triggers the will to do, shows the direction and guide the group members towards the achievement of goals. (Prajogo & Sohal, 2003; Prajogo & Sohal, 2004). The success of any TQM initiative depends mostly on the leadership style of the entrepreneur or management who should focus on creating an organisational culture that is conducive for its implementation and should demonstrate more leadership qualities as leadership is a factor that can affect TQM practices in an organisation.

Strategic Planning and Development

An essential part of the management of quality is the degree at which the organisation have a complete vision, mission and long-term plan and quality policy. Strategic planning is formed by taking into account the quality concept. It sets the long-term direction of the organisation in which it wants to proceed in future. When employees are considered as inputs in developing the firms' vision, mission, strategies and objectives, it facilitates the acceptance and support of strategic quality plans. (Sadikoglu & Olcay, 2014). This process, strategic planning includes the formulation of a strategic plan that integrates quality as a core component which suggests that effective planning can have effect on TQM practices.

Customer Focus

The customers of an organisation are the judges of a company's products, and therefore their interest should be put first. To have a well-satisfied customer is one critical objective of every organisation. Addae-Korankye, (2013) posits that customers satisfaction should be the primary goal of every organisation as TQM purpose is the meeting of exceeding customer satisfaction so that customers are delighted. TQM firms focus on serving the external customer well. The customer decides the level of quality, no matter what an organisation does to foster quality improvement. If firms know the customer expectation and requirement, they can offer the products and service accordingly. The company must understand the needs, wants and desires of their customers, and end-users of their services and products to serve them better. The

action encourages the firm to produce high quality and reliable products and services on time with increase efficiency and promptness. (Sadikoglu & Olcay, 2014).

Therefore, firms must develop and manage strong customer relationship for a long term and know the customer's need and future expectations as the customers are a determining factor in effective TQM practices. The need to develop strategies to evaluate the requirement of customers and monitor changes in their preferences can lead to quality goods and services. (Hoang et al. .2006).

Human Resource Focus/Employee Focus

People management or HR focus is a critical factor in the success of TQM implementation as TQM cannot succeed unless employees are involved in various business processes. The employee focus is the degree of the wide-ranging management process that the company must design and incorporated into the firm's strategy. It is the total involvement of every person at all levels in the organisation. (Talib, Rahman, & Qureshi, 2011). Most researchers suppose that human resource (people) is essential to the implementation of quality management practices since people are often the key elements in business operations. (Sahoo, &Yadav, 2018).

According to Sadikoglu and Olcay, (2014), for companies to implement TQM successfully, they must develop a long-term relationship of loyalty and trust with their employees. The essence of employee involvement at all levels means that if the employees are closer to problems or opportunity, they will be in the best position for making effective decisions in quality improvement if they are part of the improvement process. Pakdil & Leonard (2017) argue that higher employee involvement means more responsibility that demands a higher level of skill and commitment. They opined that by having all employees focus on quality management, companies can create long-term success to both customers and the company.

Process Management

In all organisations, there are processes by which work is performed. According to Crosby (1979), all activities carried out within an organisation can be broken down into fundamental tasks or procedures, and those fundamental processes connect in a quality chain. He opined that this approach helps the organisations to put their customers' needs at the centre of their operations so that when customers demand new products or services, they can deliver quickly by meeting their requirements through the adjustment of their processes.

A process is a line of steps that take information from suppliers and transforms them into outputs and deliver to customers. A process is defined as a combination of inputs and actions to follow to produce outputs. Process management emphasis on adding value to operations, increasing quality levels, and developing programmes to reduce wasted time and costs in all internal process. (Slack & Brandon-Jones, 2018; Jeston, & Nelis, 2014).

Kaynak, (2003) in TQM practices opined that the focus to study these processes and by implementing them effectively would provide customers with a quality product or services that are of value and at the same time have a lower cost. The working processes of the organisation must well be defined in writing. By doing so, everyone at all levels knows about the procedures and their responsibility towards its achievement.

Continuous Improvement

Researchers have defined TQM as a philosophy based on the desire for progress and continual improvement in the cost, reliability, quality, innovation, efficiency and business effectiveness. (Mehra, Hoffman, & Sirias, 2001; Addae-Korankye, 2013). TQM is defined as a continuous learning process which never ceases and is cyclic and iterative. Research has shown that continuous improvement is a critical element in the TQM implementation as in the new era of the business environment, remaining competitive means providing better products quicker and with less cost through more collaboration, better communication and more significant commitment. (Sun, Zhao, & Yau, 2009). For organisations to achieve success, there should be constant continuous improvement as a factor in TQM implementation.

Benefits of TQM Implementation

According to (Fox, 1993; Sahoo, & Yadav, 2018), the benefits of introducing TQM into a firm makes the firm focus clearly on the needs of its market. TQ is essential for a firm to survive in a competitive market. It helps in achieving a top-quality performance in all areas, not only in the final product or service quality. The fact is achieving top-quality performance in all TQM areas shows substantially on the end product or service quality, since quality is a continuous chain. Again, TQM implementation assists in implementing the simple procedures necessary for the achievement of quality performance and also helps, critically and continuously, in examining all processes to remove non-productive activities and waste. They opined that it also determines the required improvements and develops a measure of performance.

Another benefit of TQM implementation is that it provides a full, detailed understanding of the competition and develops an effective competitive strategy and also promotes the team approach to problem-solving.

TQM implementation in the firms also helps the firm to establish reasonable procedures for communication and recognition of outstanding work. The implementation also helps to reduce the cost of products, delivery times, employee turnover and waste of inventory, among others. (Antony et al., 2002; Huq, Z., 2005)

Apart from the above benefits, Oakland, (2012) mentioned that the implementation of TQM brings about reviews continuously that helps the processes to develop the strategy of never-ending improvement.

TQM practices also helps in management objectives, such as customer satisfaction, meeting specifications, more significant market share, higher productivity, zero defects, increase in sale and decrease in costs, can be achieved by embodying TQM ethics in all aspects of the organisation.

Challenges of TQM Implementation

The reason for implementing TQM practices is to improve customer satisfaction, quality product/service, productivity, employee performance and market share. (Michael et al. 2015). Total quality management implementations require changes in an organisation culture. Changing organisations culture faces resistance as TQM is a paradigm shift.

TQM implementation means replacing rather than modifying organisational culture. Lack of leadership commitment has been a major problem to implementation processes as evidenced by their failure to practice TQM. (Talib, Rahman, & Qureshi, 2011; Mosadeghrad, 2014).

Sahoo and Yadav (2018) mentioned that too many changes in too short are one pitfall in its implementation. Another challenge they said was the expectation of immediate results after the TQM implementation. They opined that despite the immediate expectation of results, too little assistance in redefining roles is also a challenge.

Another challenge is the little positive feedback on individual performance, while criticism and negative feedback are many. The failure to put proper monitoring mechanism for monitoring and managing overall progress of the TQM implementation also becomes a challenge.

TQM is also bound to fail where there is no provision of skill training immediately before its application which is also a significant challenge. (Sahoo & Yadav, 2018).

METHODS

The study aims at finding out how manufacturers are using TQM in Ghana, its benefits and the challenges faced in its implementation. The philosophy underpinning this study is a positivist philosophy and uses exploratory method. For this study, the exploratory approach using descriptive survey design was adopted, which design is one of the most popularly used designs to generate primary data. The objective of descriptive research is to portray an accurate profile of persons, events or situations (Creswell, 2009; Saunders et al., 2014). As widely accepted, the descriptive nature of research is a fact-finding study that involves adequate and accurate interpretation of findings.

The researcher adopted qualitative approach to research. A face-to-face standardised interview schedule, was the primary tool for data collection to tap the accrued opportunity in having divergent views on issues addressed by this study. The research used the Greater Accra region, precisely Accra metropolitan area as research location. Accra metropolis has most of these manufacturing establishments located, as Accra is the capital and the most popular city in the country.

For this study, the researcher defines SMEs using the NBSSI definition of SMEs as those employing between 0-99 employees. (NBSSI, 2004). A data from the National Board for Small Scale Industries suggests that there were 1633 registered manufacturing firms in Greater Accra as of March 2019. The firms selected for this purpose are those producing products require to have high-quality demand as manufactured goods are tangible and can easily be measured by quality characteristics. The purposive sampling technique was purposively used to select respondents scheduled for the interview. The study purposively selected fifty (50) owner-managers for the interview, but due to the COVID-19 health pandemic only five (5) participated in the interview.

RESULTS AND DISCUSSION

For the current study, five (5) selected small and medium enterprises were used for the study. The enterprises used for the study fall within these categories of businesses, food and beverage,

agro processing, agro industry services, fabrication and repairs wood processing, textiles and garment and handicraft.

The interview was conducted to find out in the first place if TQM is practiced and its benefits in the organisation. It also looked at the challenges that confront the implementation of total quality management practices by the manufacturing SMEs. The study purposively selected fifty (50) owner-managers for the interview, but due to the health pandemic only five (5) participated in the interview.

Demographic profile of SMEs

This section provides information on the interview conducted. In this study five (5) respondents were used for the interviews. Respondents were selected based on their willingness to form part of the interview scheme. The result as indicated in Table A shows that three respondents were females and two males. The average age of the participants is approximately 41years, with the minimum age representing 37 years while the maximum age is indicating 45 years.

The result shows that respondents deal in building & glass materials through to manufacturing as showed in the table. Information on years of experience was obtained and the result suggest that the average years of experience is estimated to be approximately 9 years, with the 6 and 12 years representing the minimum and maximum years of experience respectively. Two of the respondents were general managers whilst three respondents were in the position as Owner-managers. The analysis shows that there is one company whilst the rest operated as sole proprietorship form of business ownership as indicated in the table.

Table A. Demographic profile of Respondents

<i>I</i>	<i>Gende</i>	<i>Age</i>	<i>Nature of Business</i>	<i>Years of</i>	<i>Position</i>	<i>Type of</i>
<i>d</i>	<i>r</i>	<i>(Years)</i>		<i>Experienc</i>		<i>Business</i>
				<i>e</i>		
1	Femal	42	Building & glass	8	General manager	Company
2	Femal	42	Mechanics &	7	General	Sole
3	e	47	Electronic	12	manager	Proprietorship
	Femal		Production of Water		Owner	Sole
	e					Proprietorship
4	Male	43	Clothing	10	Owner	Sole
5	Male	39	Manufacturing	6	Owner	Proprietorship
						Sole
						Proprietorship

Source: Researchers' fieldwork 2020

Exploring of the interview data

Data was explored using query procedure to know the kind of words that frequency used by the interviewees during the interview. Table B shows the most frequent words used by respondent during the interview processes. The table summarize the top six (6) most frequent used words. It shows that organization accounted for about 4.77% (21), management accounting for 3.64% (16), practices accounting for 3.64% (16); quality accounting for 2.50% (11); customer been mentioned for about 2.05% (9) while total mentioned for about 1.82% (8)

Main Interview Questions

Q1. What quality management practices are implemented in your organization, and how effective

Figure 2 shows the relationship that exist between the participants and the responses they provided on quality management practices that are implemented by the selected respondents. From the figure it could be observed that all respondents indicated that they are customer focus.

It could also be observed from the Figure 2 that majority of the respondents were involve in continuous improvement as indicated by respondents two, also customer focus as highly indicated by respondents 1. Process management approach was one of the factors that ensure quality management practices as indicated by respondent 2.

The result shows that majority of the quality management practices are been implemented by the selected firms used for the interview.

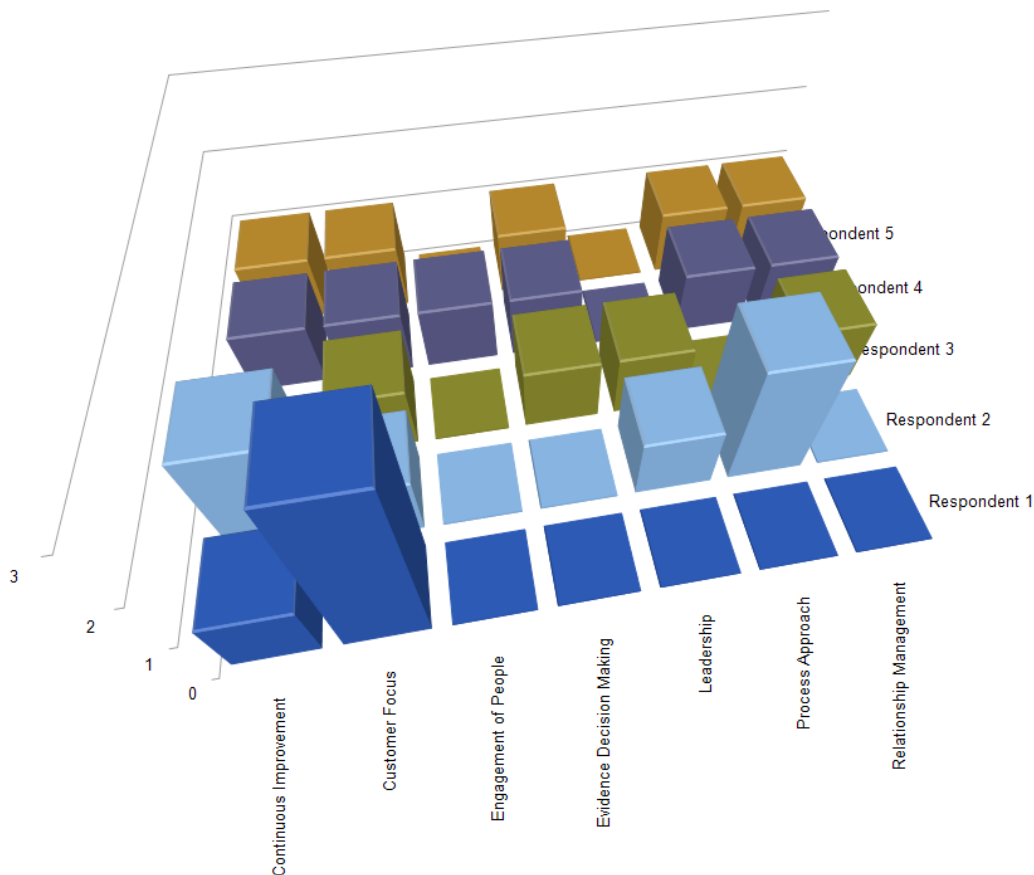


Figure 2. Participants by Quality Management Practices
 Source: Researchers’ Fieldwork 2020

Q2. What is the effect of total quality management practices on the performance of your organization?

Figure 3 provides the summary result on effect of TQM practices on firm performance. From the result, it shows that respondent 1 and 2 were on the view that TQM practices will enable

them to produce within specification or limits and improved upon their product as illustrated on the figure.

Some of the respondents were on the view that TQM practices help to improve products and ensuring that products are produced at a very high quality.

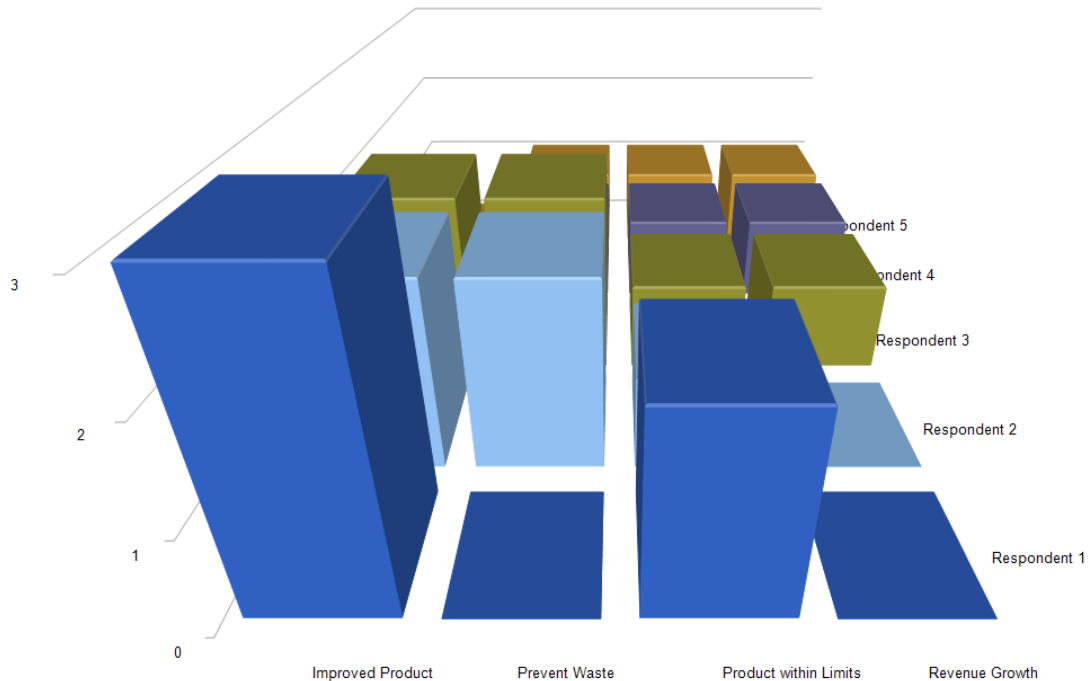


Figure 3 Effect of total quality management practices
Source: Researchers' Fieldwork 2020

Q3 What are the challenges you face as an organization in the course of implementing the total management practices in the organization?

Figure 4 depicts the challenges confronting the implementation of total quality management practices in business organization. The figure 4 summarize the challenges as follows; almost all respondents indicated that inadequate firm structure, inadequate planning, inadequate TQM information, lack of employee involvement and limited resources on the part of the organization impede the implementation of total quality management practices in the organization.

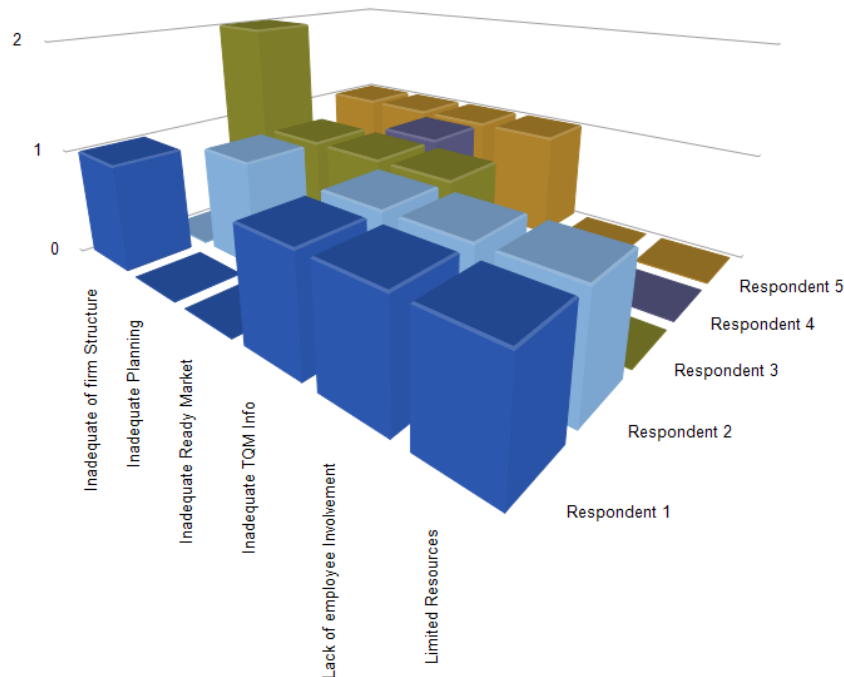


Figure 4 Challenges of implementing total quality management practices
Source: Researchers' Fieldwork 2020

Conclusions from Interview

The results of the interview analysis showed that manufacturing SMEs do implement the TQM practices of organisation leadership, strategic planning and development, customer focus, employee focus, process management, and continuous improvement in their organisations.

It is observed that there is a positive relationship between TQM practices and their financial performance. The main findings of the interview conducted was that answers to the question one shows that most of the manufacturers implement TQM in their business operations.

The result shows that majority of the quality management practices are been implemented by the selected firms used for the interview.

Some of the respondents were of the view that TQM practices help to improve products and ensuring that products are produced at a very high quality. What this study found was that participants were of the view that TQM practices will enable them to produce within specification or limits and improved upon their products.

Further analysis of the interview conducted in the Ghanaian manufacturing SMEs indicated that there are challenges in the implementation of TQM. For the challenges, almost all respondents indicated that inadequate firm structure, inadequate planning, inadequate TQM information, lack of employee involvement and limited resources on the part of the organization impede the implementation of total quality management practices in the organization.

It is suggested that quality management should be systematic and effective. Both management and employee training and education on TQM practices to ascertain the importance of TQM in an organisation.

The study on the issue of challenges faced by the manufacturing SMEs in implementing the TQM practices, it found out that there were numerous challenges. The result obtained indicated that SMEs in the manufacturing activities faced difficulties as part of their operations. Although they have challenges, it was reported that these challenges based on the estimated relative importance index means medium to low effect on their business operations.

For the challenges of TQM implementation, the result shows that downsizing was the most ranked in order of importance by the respondents, followed by lack of access to data, and results accounted for ineffective implementation of TQM. Some managers interviewed also mentioned the challenge of ineffective measurement of quality improvement and insufficient resource provision. The issue of lack of understanding of TQM and improper training and preparation were some of the challenges of TQM implementation. Yet the overall results found that TQM practices have a significant influence on the performance of manufacturing SMEs. They implement them in their organisations as a strategic management tool that led to their superior performance.

CONCLUSION AND RECOMMENDATIONS

The study established that the manufacturing SME firms adopts and implements TQM practices such as organisational leadership, strategic planning and development, customer focus, employee involvement, continuous improvement and process management.

The study, although confirmed a direct positive relationship between quality management practices and firm performance, numerous challenges serve as barriers to TQM implementation in the organisations. The challenge of downsizing was the most reported among the SMEs. Others also, lamented on lack of access to data and result to help them implement effective TQM in the firm.

The study further discovered that ineffective measurement of quality improvement is a challenging factor the SMEs, likewise insufficient resource provided.

The utmost challenge discovered by this study is the lack of understanding of TQM to these entrepreneurs and manufacturers in the SMEs sector. Some firms do not consider the benefits of implementing the TQM practices and so do not give attention to its implementation.

The study discovered that although these challenges are there, their effect on the firm's operations was medium to low.

It also recommended that SMEs identifies challenges that oppose the implementation of TQM practices to help them eliminate any barrier to its implementation.

It further recommended that policy formulators should design support programmes and initiatives of quality management for manufacturing SMEs as well as set up a mechanism that enhances superior product offering through quality management practices.

Finally, it recommended that a national network for the dissemination of information on best practices through technical consultation and giving financial support to manufacturing SMEs in Ghana.

The study area is limited to only the Greater Accra region as the research could not cover all manufacturing SMEs in Ghana as a result of distance and time constraint. As a result, limited SMEs were covered. There are many SMEs across the country, and the research could have been expanded to include larger population but due to COVID-19 health pandemic only five (5) SMEs were captured.

Further, the participants for the structured interview were only five in number. Fewer respondents could participate in the interview, due to the incidence of the COVID-19, it was limited to only five to reduce personal contact.

Lastly, the study is limited to only manufacturing industries registered with the NBSSI in the selected research location and does not concern itself with those in the informal sector.

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