

# **The Roles of Employee and Management in the Application of Quality Management System (QMS) in South African Manufacturing Industry**

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## **Abstract**

Quality is an important aspect that all companies in world because it is the ability of satisfying the needs of the customers by providing items that meet their criteria. The management of quality is very important as it enable customer satisfaction at lower price and continuous quality improvement. Quality control is all about analyzing the project results to see if their meet the quality standards or not, finding the solution to eradicate the causes of the target standards' failure. Quality assurance main aim is to do regular and continuous assessment of the general project to meet quality standards. The research study focused on empirical testing and practical applicability of theoretical concepts of quality management system in manufacturing industry in South Africa. The study was conducted in South Africa and in Johannesburg specifically. This study covered only quality management in the manufacturing industry (manufacturing plant) and the warehouses as well as employees and their roles in the implementation of QMS. A quantitative method was used to conduct this study. The quantitative method was used for collecting and analyzing data. This means that the researcher used a well-structured questionnaire to collect data. Findings revealed that focus on client's satisfaction, focus on customer needs, involvement in the QMS application process, work as a team, attend training sessions, contribute to improvements, encourage and motivate other employees are the major roles of employee and management in the application of QMS in South African manufacturing organizations.

## **Keywords**

Quality control, customers, empirical testing, QMS, Manufacturing organizations.

## **1. Introduction**

The manufacturing sector is very essential to the economic health. This is because it promotes employment of a lot people of various skills, which contribute largely to the worldwide economy (Naude and Szirmai, 2012) .The main purpose of manufacturing companies is to satisfy customers. This is because customers will enable the company to remain into business as well as increase the company profit by reacting positively to fabricated products. Quality is an important aspect that all companies in world because it is the ability of satisfying the needs of the customers by providing items that meet their criteria. The management of quality is very important as its enables customer satisfaction at lower price and continuous quality improvement (Willard, 2014). Kapoor (2007) explained that the adoption of quality management in all companies including the manufacturing sector guarantee a better business advancement by providing good quality items at a constant and affordable price. According to Mane and Patail (2015) the management of quality management is made up of three steps which are quality planning, quality control and quality assurance. Quality planning is the phase the definition of the company quality standards and provides the framework on how the standards will be achieved. Quality control is all about analyzing the project results to see if their meet the quality standards or not, finding the solution to eradicate the causes of the target standards' failure. Quality assurance main aim is to do regular and continuous assessment of the general project to meet quality standards. Moodliyar (2008) infers that to better manage quality in organisations a quality management system (QMS) is required. QMS represents a system that helps in the documentation of procedures, processes and tasks needed to accomplish quality regulations and objectives for the success of manufacturing companies. According to Bengt (2010), the importance of a quality management system is a continuous improvement process that provides the right insights

to achieve the highest quality performance to improve the company's sustainable development capabilities. The main objective of QMS is to eradicate unprofitable elements from the production operations of the manufacturing industry. In manufacturing sector, the notion of quality management does not end in the factory (place of good production) only but also continues where produced items are stored (warehouse) to avoid the breakage of goods and other negative consequences that will affect customer satisfaction (Langevin and Riopel, 2005). This is because applying the quality management in the warehouse will boost and contribute to the advancement of the manufacturing sector by eliminating wastage and time waste as well as allowing materials availability. The manufacturing sector always struggle with how to improve products' quality by adopting of a higher product quality plan that will enable client's satisfaction at a reasonable cost, business continuity and debts' avoidance. In business, the client is the king and all efforts should be put in place to satisfy his or her desires. Therefore, this study will evaluate the roles of employee and management in the application of QMS in South African manufacturing organizations.

Many manufacturing organisations are under pressure due to the absence of quality management. The outcome of this work could help various companies on how to handle quality in order to benefit from the advantages that quality management comes along with. This provides manufacturing organisations with knowledge on how quality management works and how to implement it, the roles of employee and management in the application of QMS in South African manufacturing organisations, the barriers to the application of QMS in South African manufacturing organisations as well as the benefits of implementing it in South African manufacturing organisations.

The manufacturing sector always struggle with how to improve products' quality by adopting of a higher product quality plan that will enable client's satisfaction at a reasonable cost, business continuity and debts' avoidance. In business, the client is the king and all efforts should be put in place to satisfy his or her desires. The satisfaction of clients may be very complicated because it is difficult to receive best quality product at lower price which may be sometimes frustrating. Companies are forced to produce good quality product at lower cost especially in a period of high competitions from various people in the manufacturing business. From the problems stated above, manufacturing companies are looking for ways to accentuate quality issues to be more effective and competitive by sometimes reducing the production amount of certain items or reduce their profit margins to stay in business (Willard, 2014). Thus, the main objective of this research work is to help the South African manufacturing sector to find solutions of the stated problem about quality and customer requirements' satisfaction.

### **1.1 Research Objectives**

The objectives of this research are to:

Determines the roles of employee and management in the application of QMS in South African manufacturing organizations

Identify the barriers to the application of QMS in South African manufacturing organizations.

Establishes the benefits of the QMS in South African manufacturing organizations

## **2. Literature Review**

This chapter discusses the concept of quality management system, and the principles of quality management system. The study also reviews literature on empirical analysis and application of the role of employee and management in the QMS in the South African manufacturing organisations, as well as quality management system are discussed in this chapter.

### **2.1 Quality Management System**

A QMS are frameworks that offer the development of organizational via customer satisfaction and performance improvement through high quality items delivery (Ehtesham, 2016). Because the reputation of a company fully depends on the quality of the product quality, fast item delivery, and the type of service provided. The reputation of the company matters because a good or bad reputation easily spread at the national level (Oakland, 2014). Additionally, many studies have shown that significant improvement is seen through the use of QMS based on the employment increase, good management practices, and the increase in sales (Cai, 2009; Levine and Toffel, 2010 and Brennan, 2011). Koc (2007) added that QMS has a positive impact on business because it helps to handle businesses properly and smoothly. From the inception of QMS the erasing of mistake is main purpose (Flynn et al., 1994), expand the satisfaction of clients on a large scale (Moodliyar, 2008), enables competitive advantage (Kellen, 2003; Peris et al., 2015 and Juan et al., 2020) as well as measure productivity and efficiency (Juan et al., 2020). Tari et al. (2012) opined that the implementation of QMS benefit companies (Lo et al., 2007) on two aspects which are internal and

external. The internal aspects involve reduced workers' absenteeism, job satisfaction, on time delivery, cost saving and error reduction. External aspects are repeat purchase, performance of assets and sales, market shares, and clients' satisfaction (Tari et al., 2012). Additionally, this adoption highly depends on the size of the firm because small companies rarely implement QMS. Zimon (2015) suggested that there is a direct relationship between the factory and the warehouse, so in as much as the QMS will benefit the factory it will also benefit the warehouse. In various companies, the implementation and requirement set is represented by ISO 9001 (Abuhav, 2017). Furthermore, the ISO 9001 is defined as the managerial tool that promotes company continuous quality improvement. John et al. (2016) gives the different family of ISO 9000 standards, among which ISO 9004:2009 for QMS effectiveness and efficiency, ISO 9001:2015 for QMS' requirements, language and basic concepts, and also ISO 19011:2011 for QMS' internal audits guidelines. Levine and Toffel (2010) suggest that the implementation of QMS should be adopted in all companies that would like to advance their business.

## **2.2 Concept of Quality Management System**

Nowadays all organizations are concerned on how to keep the business going through the satisfaction of their customers. One of the best ways to stay in business is to provide a good quality services and operation which are reliable at a reasonable cost and also keep constant the price of services (Nanda, 2005). The reliability of the product or operation conveys an ideal reputation, a successful system or execution process without any setbacks. According to Fahmi (2020) the implementation of efficacious quality management on employees and organizational performance will enhance continuous improvement, thereby satisfying customer's expectation and demand and guarantee a good quality business improvement on the global markets. Creech (1994) put forward that the production good quality services should be the main motivation of every organization for successful business. Creech (1994) and Ghalayini and Noble (1996) stressed that quality procedures have to be put in place to produce services of better quality. Additionally, quality procedures adopted by the company should be unique and consistent with the public trading environment, commodity plans and rural areas. Oakland and Tanner (2006) transferred that these quality procedures' main aim is in accomplishing the objectives of the company by removing the unprofitable elements from the production operations. Quality procedures are important because they ensure good operation of the company by considering and surpassing the consumer's demand, cohere with security and sanitation rules, ordinance and received ideas with connection to production, tagging and delivery (Chapman, 2009). Evans and Lindsay (2000) pointed out that managers have to commit to quality procedures in the organization in order for it to be a success. Furthermore, workers need competent bosses to use a variety of techniques to improve quality and provide high-quality products.

*Kellen (2003)* stated that quality framework and operations control are among the numerous factors that help organisations growth. These two factors enable the direction and process of business operations and are used by executives to support and change the company's system design for growth. *Kellen (2003)* also added that quality models can help the organisation build business goals and systematically and continuously provide executives with development reports on achieving goals and shape competitive advantage. Organisations always have the desire to remain in business and have competitive advantage on rival companies through the elimination of customer dissatisfaction by improving services and quality performance. *Van der Wiele et al. (2005)* stressed that quality management master plan such as certificate authentication to ISO 9000 series and personnel evaluation against high quality style can help organisation advance toward greater level of high quality and improving complete performance of work and business. *Ghalayini and Noble (2010)* said that in order to ensure that the organisation achieve its goals and motivations, evaluating the organisation's control and improvement of the manufacturing process by the performance of quality tools is very crucial. Thus, implementing a QMS that will document procedures, processes and tasks required to fulfil quality regulations and objectives is the key for success. The adoption of quality management system involves team working, teaching teams to bring out the needed understanding of management systems, facts, and advance procedures, efficiently using facts as a device to flick and assess operations, using management systems to ensure the stability of good performance, involvement of the administration as well as top management (IBID, 2011). According to *Moodliyar (2008)*, organisations need to recognize the scope of improving QMS with the idea of expanding the satisfaction of customer's expectation and preference, getting the facts from the quality performance prescription plan, and using the improved facts to meet customer requirements to determine the scope of application. To successfully implement QMS, company should rely on their employees in filing or record keeping procedure rather than reply to outwards pressurisation from consumers and also stakeholders' participation in the procedure of achieving authentication is required to ensure the positive result and achievement (*Moodliyar, 2008*). *Flynn et al. (1994)* noted that the structured attempt of QMS is to attain and preserve perfect quality items or goods with the help of cherishing continuous improvement procedures and to erase mistakes that lead to poor quality.

## 2.3 Principles of Quality Management System

Quality management system is a framework applied in managing an operation to utmost the satisfaction of customer's expectation at a moderate price and enable continuous improvement of the operation (Moodliyar, 2008). Tricker (2008) stressed that there are principles that have to be respected in QMS. These principles involve the customer focus, leadership, engagement of people, procedure approach, bond management, quality improvement as well as the empirical based decision making. In customer focus, organisations need to link every business goals to consumer's expectation and to acknowledge that consumer must be a straight and unintended connection with the company, because consumer's expectation must be satisfied. The principle of leadership or authority emphasises that leaders must invest time, through active participation, active observation and planning, and company-wide participation in the quality concept, to ensure the accessibility of high-quality materials, and to contribute useful shining examples. In people's engagement, corporations must rely on competent and inspired employees and focus on empowering them, while ensuring that everyone participates in the QMS. In the procedure approach, the proposed approach procedure must be a part of a fully compatible organisation that can produce the expected results, develop revealing factors and flag all threats that have an impact on mission results. When it comes to management bond, the company should recognize the good opportunities for sustainable development, take immediate remedial measures for violations, and keep records of all development plans under continuous supervision and control. Quality improvement requires an ongoing commitment to developing responds to alternatives in external and internal situations by focusing on established root causes and preventative and remedial measures designed to design new opportunities. Finally, the empirical-based decision-making is based on analytical, qualitative evidence or factual issues it has considerable fairness, advantages, and productivity for the company, and can easily analyse the results of continuous development. This is depicted pictorially in Figure 1.



Figure 1. Quality Management System (QMS) Principles

## 2.4 The Roles of Employee and Management in the application of Quality Management System

Employees of all levels have various key roles in the application of QMS in the SAMS because without their implication QMS will fail. The various roles of the employee are:

### 2.4.1 Get Involved in the Quality Management Application Process

To succeed in the QMS application all employees should be involved in the process. This is because it will raise a cooperation atmosphere among employees, commitment to the growth which will motivate all the organisation to apply QMS and stimulate good quality operation while producing goods. Furthermore, this will show that each and every employee is concerned about the company success and clients' satisfaction through quality application which will lead to effective production (Juran, 2009).

### 2.4.2 Work as a Team

Working as a team is one of the factors that lead to a good and perfect QMS application all organisations without exception including the SAMI (Kristensen et al., 2015). This implies that there will fluent communications among workers, strengthening of the organisational integration spirit by making sure that all the workers are in the application together. Teamwork offers many advantages such as helping in the productivity increase, reduce employee

absenteeism level and turnover, enable to develop organisational problem solving skills, build trust as well as self-fulfillment (Mangi et al., 2015). Thus, teamwork in the SAMS is a crucial role that every employee should bear in mind for better QMS application.

#### **2.4.3 Take Ownership of the Company Success**

*Huq and Stolen (1998)* stressed that employees have a role to play in taking ownership of the organisational success by making sure that all the quality requirements are met while manufacturing items. Additionally, every individual employee should ensure that he/she fulfill its responsibilities and duties for the good of the company. Everyone safeguard and protect what is his or hers. Thus, by taking the application of quality management as a personal business, this will highly benefit the SAMC and the customers.

#### **2.4.4 Contribute to Improvements and Share Knowledge**

All employees have to attend the training sessions put in place to shape their knowledge and ability of contributing to quality improvement. Also employees are urged to provide ideas and thoughts based on their experience and knowledge to help in the continuous improvement of quality in the company (Juran, 2009). This is very important because two is better than one. Receiving opinions and skills on how to improve quality and performance from every employee will also help the company in being fruitful and achieving its objectives (Juran, 2009). Thus, all SAMS's employees need to adopt this factor to enable the continuity of business.

#### **2.4.5 Accept New Ideas and Change**

Accepting new thoughts will leave a room for quality and organizational growth in every company. Although quality management application challenges systems, cultures and individuals, employees should understand that it is all for the good and sake of the company progress and smooth production operations (*Schraeder, 2009*). For this reason, every employee in the SAMI should be free to share without fear his or her suggestions with others colleagues and accept ideas coming from others and also accept the quality management systems introduced through various training sessions and teachings. This specific role will enable all workers to take part in the improvement process, quality planning, important decision making which will make them feel relevant to the company and the quality management application (*Schraeder, 2009*).

#### **2.4.6 Focus on Customer Needs and Satisfaction**

In business the customer is king and all personnel must put all their efforts to please him/ her. Once the customer is pleased the business continuity is reassured. No other reason should be at the center of quality management application beside the requirements of the client. This is because if there are no clients in business and there will be no income and the company will be useless (Knowles, 2011). Therefore, every employee in the SAMI has the role to set his or her focus and energy on the client needs by applying quality management to endlessly satisfy the king of the business who is the customer.

#### **2.4.7 Share Responsibilities (Top Management) with Every Employee**

Listening to employee's ideas and the wise interpretation of those ideas or thoughts as well as taking action based on their suggestions (Kulkani, 2012). By doing this low level or even all the SAMS' workers will definitely be encouraged and motivated to give more ideas as they feel considered in the company. This will also push all employees to understand more the process and application of QMS as each and every individual employee is expected to share their understanding to improve and boost the application of QM. In addition, by requesting each employee's participation it is easy to spot the areas where the employee do not understand and provide clarification in the application of QM which will benefit the all organization (Kulkani, 2012).

### **3. Research Methodology**

A research design serves as an outline procedure for said research and is also used for choosing source and types of data facts (*Cooper and Schindler, 2011*). The way the researcher goes about answering the research questions is referred to the general plan, which is known as the research design, this describes that the research questions can be clearly defined as the research design that should contain the objectives specifying the sources in which data will be collected as well as deriving these research questions (Saunders et al. 2012). This study was conducted using a quantitative method because it enables researcher to have a comprehensive, in-depth, and comprehensive understanding of how to determines the roles of employee and management in the application of QMS in South African manufacturing organizations. This research on empirical testing and practical applicability of theoretical concepts of

QMS in the manufacturing industry was specifically conducted in Johannesburg, Gauteng, for the researcher's convenience as well as accessibility of nearby manufacturing locations. Moreover, the largest population and manufacturing organisations are concentrated in Gauteng. Furthermore, this study incorporates important manufacturing sectors' workers in both private and public sector. The targeted population are assemblers, general labourers, processing workers, material handlers, supervisors, managers, QM directors and operators working in manufacturing sector in South Africa. This is because of their knowledge level and ability to contribute to answering this research objective. This research is focused on professionals in the manufacturing industry in the province to enhance the area of improvement on empirical testing and practical applicability of theoretical concepts of QMS in the manufacturing company as an example for the purpose of primary data, fixing the time period as before and after the implementation of QMS in the organisation and owing to general constraints in covering the entire population a thoughtful stratified random sampling and applying two stage-sampling methods in the study by putting maximum efforts to reduce negative effects in the meaning and interpretation of the study. As for management respondents, fixing the sample size is 150 which was reached as a result of Covid-19 regulation and this number constitutes 90 managers and 60 employees working in the organisations during the period of study, and the second stage of this research study, that concentrates on the perceptions of employee respondents on the practice including the views of those respondents identified under the first stage, doing this idea was for employee respondents to enhance accuracy in responses and to compare with the views of management respondents. Collection of secondary data's was from publishing data and information, this idea was in addition to reading various related journals, newsletters, circulars, manuals and other documents published by said used manufacturing industries. The questionnaire was used for data compilation process in this study as primary data. The questionnaire comprises of two segments namely A and B in which A Section covers the background information of the participants of various organisations used and Section B covers the roles of employees and management in the application of QMS in South African manufacturing organisations. Pilot study was conducted in this study to determine the how correlated the listed variables in the research question were. This was helpful in identifying the ambiguous variables. The necessary adjustment was done to the research questionnaire by removing the ambiguous variables. Retrieved data of this study were analysed on Statistical Package for Social Science, Version 27 (SPSS V27). The results of the analyses were presented with Mean Item Score (MIS) and Standard deviation. Standard deviation was applied to the factors of the same MIS in which the lower standard deviation was ranked higher. The results for the reliability test of the research instrument using Cronbach's alpha shows the value of 0.946 which indicates good internal consistency as the value is above 0.70 (Tavakol and Dennick, 2011).

#### **4. Data Collection Approach**

This study used two types of data sources. First of all, the purpose of the source must be determined according to the nature of the research, in order to gain advantages in the research work and widely use these resources. Collecting major data sources for the first time and maintaining originality are very important in research. The proposed case study depends to a large extent on this source. Collection of secondary data's was from publishing data and information, this idea was in addition to reading various related journals, newsletters, circulars, manuals and other documents published by said used manufacturing industries. This research centres on determining the profile of a situation, and collecting the data from a large population. The content determination, form, and layout of questionnaires or interview questions must conform to the general development structure of questionnaires and interview questions, included in selecting the most appropriate interview method and providing specific information (Shukla 2009). The questionnaire was used for data compilation process in this study as primary data and having enough knowledge about the preparation of the questionnaire is to determine the respondents who are responding to the questions. Critical views tend to use questionnaires as a means of collecting research data. The selection of questions should be in line with their outline and expected evaluation, and adding value to the goals of the research and using the fact assembler as a link to email the questionnaire to the participants drawn to various organizations.

#### **5. Result of Findings**

##### **5.1. Section A: Demographic Information Result**

The purpose of the survey questions in this section was to establish the highest qualification level, age, job affiliation of the respondents, and experience of the respondents in the manufacturing industry. A multiple-choice nominal type of scale was used in this section, where only a single response is required per question to identify the demographic characteristics of the respondents. Out of the 150 responses used for analysis in the questionnaire survey conducted, it was revealed that 27.6% of the respondents have Bachelor's degree, 18.1% have Master's degree, 16.2% have Honours' degree, 14.3% have Post-Matric certificate, 10.5% each has Doctorate and Professional degree while Field

technician, Maintenance experts and Maintenance Officers were all tied at 1.0%. The findings show that 72.4% of the respondents have Bachelor as the least educational qualification. This is an indication that the respondents are academically sound to read and understand the survey research instrument and there by provide the valid information to achieve the objective of the study. For the respondents' age group, the highest group are 35-49years at 35.2% follows by 25-34years and 50-70years, both at 26.7%. 18-24years is the least age groups with 11.0%. Respondents' distribution according to job affiliation indicated 17.1% of respondents are Supervisors, 12.4% of the respondents are Assembler and Operators, 13.3% are Manager. General labourers and Processing workers are both tied at 11.4%. Equally, Material handler and QM director are both tied at 8.6%, 1.9% of the respondents are Field Technician while Admin, Maintenance officer and Self-employed cumulatively represents 3% of the total respondents, each with equal proportion. The findings show that most of the respondents are supervisors and managers. These are the tops managerial positions that have great impact on quality management. This is an indication that the data provided by the respondents are valid to achieve the objectives of the study. Based on the classification of the respondent's years of experience, findings revealed that 24.8% of the respondents have 1-5years of experience in the manufacturing industry. A total of 22.9.% of the respondents have 6-10years of experience, 21.9% have 11-15years of experience, 12.4% have 16-20years of experience while 10.5% of the respondents have more than 20years of experience in the manufacturing industry. The least is less than 1 year of experience with 3.0%. It can be deduced that 67.6% of the respondents have at least, 11years of experience in the manufacturing industry. This is adequately sufficient to provide the necessary information required for this study.

### **5.1.1. Section B: Result from analysis of the roles of employee and management in the application of quality management system in South African manufacturing organizations**

This section was aimed at determining the roles of employee and management in the application of QMS in South African manufacturing organizations. This section was intended to provide the answers for research question number one. The measurement scale used here provides solutions from a Likert rating scale of 1 – 5. Representation of the rating is described in each question. Table 1 presents the Mean value ranking and the Standard Deviation (SD) of the respondents' opinion on the roles of employee and management in the application of quality management system in south African manufacturing organizations. The respondents ranked the variables using a Five-point Likert scale where: 1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Strongly Agree. 'Focus on client's satisfaction' and 'Focus on customer needs' were both ranked first a joint mean value of 4.610 and SD of 0.5090; 'Involvement in the QM application process' was ranked third with a mean value of 4.552 and SD of 0.5367; 'Work as a team' was ranked fourth with a mean value of 4.543 and SD of 0.5194; 'Attend training sessions' was ranked fifth with a mean value of 4.476 and SD of 0.5206; 'Contribute to improvements' was ranked sixth with a mean value of 4.448 and SD of 0.5185; 'Encourage and motivate other employees' was ranked seventh with a mean value of 4.352 and SD of 0.5185; Share knowledge and skills was ranked eight with a mean value of 4.314 SD of 0.5060; 'Motivate colleagues in sharing ideas' was ranked ninth with mean value of 4.295 and SD of 0.5175; 'Take into consideration the shared ideas' was ranked tenth with mean value of 4.267 and SD of 0.4655; 'Accept change of cultures and systems' was ranked eleventh with mean value of 4.248 and SD of 0.4760. Table 1 further shows that 'Share their knowledge' and 'Accept new ideas from colleagues' were tied at the same mean value of 4.181 but SD of 0.4109, and 0.5332. Both factors were ranked twelfth and thirteenth respectively. The least and the fourteenth ranked was 'Take ownership of the company success with mean value of 3.981 and SD of 0.5880 (Table 1).

Table 1. Roles of Employee and Management in the Application of Quality Management System in South African manufacturing organizations

<b>Roles of Employee and Management in the Application of Quality Management System</b>	<b>Std.</b>		
	<b>Mean</b>	<b>Deviation</b>	<b>Rank</b>
Focus on client's satisfaction	4.610	0.5094	1
Focus on customer needs	4.610	0.5094	1
Involvement in the QM application process	4.552	0.5367	3
Work as a team	4.543	0.5194	4
Attend training sessions	4.476	0.5206	5
Contribute to improvements	4.448	0.5185	6

Encourage and motivate other employees	4.352	0.5185	7
Share knowledge and skills	4.314	0.5060	8
Motivate colleagues in sharing ideas	4.295	0.5175	9
Take into consideration the shared ideas	4.267	0.4655	10
Accept change of cultures and systems	4.248	0.4760	11
Share their knowledge	4.181	0.4109	12
Accept new ideas from colleagues	4.181	0.5332	13
Take ownership of the company success	3.981	0.5880	14

### 5.3. Discussion of Findings

The literature review identified fourteen roles of employee and management in the application of QMS. Among the identified roles, ‘focus on client’s satisfaction’ and focus on customer needs were respectively ranked as the top two roles. This implies that in business the customer is king and all personnel must put all their efforts to please him/ her. Once the customer is pleased the business continuity is reassured. No other reason should be at the centre of quality management application beside the requirements of the client. This is because if there are no clients in business and there will be no income and the company will be useless. This finding corroborates the study of (Knowles, 2011) who stated that every employee in the SAMI has the role to set his or her focus and energy on the client needs by applying quality management to endlessly satisfy the customer. The result for this objective also implies that all the listed roles are the associated roles of employees in the application of Quality Management System in South African manufacturing industry as the lowest role have a mean value of 3.981.

### 6. Conclusion and Recommendations

The study seeks to determine the roles of employee and management in the application of QMS in South African manufacturing organizations. It was revealed from the result of the primary data that focus on client’s satisfaction, focus on customer needs, involvement in the QMS application process, work as a team, attend training sessions, contribute to improvements, encourage and motivate other employees, share knowledge and skills, motivate colleagues in sharing ideas take into consideration the shared ideas, accept change of cultures and systems, share their knowledge, accept new ideas from colleagues, take ownership of the company success are the roles of the roles of employee and management in the application of QMS in South African manufacturing organizations the in order of priority. These findings support the general saying that clients or customers are the king of business. Without the consideration of customers, the business is subjected to fail. Although the South African manufacturing industry is making every effort to increase the applicability of QMS to enhance the continuous improvement of quality performance. It is important to point out a course of action to assist them in understanding how to channel their efforts in the right direction. Based on this submission, it is recommended that as it has been established that focusing on client need determines the continuity of the manufacturing industry, the managers and the supervisors should set a strict rule to place the requirements of the client at the centre of quality management application. Based on the limitation of this study to only Gauteng province of South Africa, future research that uses a larger sample size and broader the research location needs. In addition, other industries can be studied to ascertain if these results are applicable.

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## **Biographies**

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**Charles Mbohwa** was the University of Zimbabwe Pro-Vice Chancellor: Strategic Partnerships and Industrialisation since 1st July 2019. He was a Professor of sustainability engineering in the Faculty of Engineering and the Built Environment at the University of Johannesburg; Mechanical Engineer in the National Railways of Zimbabwe from 1986 to 1991; lecturer and senior lecturer at the University of Zimbabwe 1993 to 2007 and joined the University of Johannesburg as a senior lecturer in 2007. He was the Chairman and Head of Department of Mechanical Engineering at the University of Zimbabwe from 1994 to 1997 and was Vice-Dean of Postgraduate Studies Research and Innovation in the Faculty of Engineering and the Built Environment at the University of Johannesburg from July 2014 to June 2017. He was Acting Executive Dean in the Faculty of Engineering and the Built Environment from November 2017 to July 2018. He has more than 850 publications in peer-reviewed journals and conferences including morre than 20 book chapters and nine books. He holds a BSc Honours in Mechanical Engineering from the University of Zimbabwe in 1986; Masters of Science in Operations Management and Manufacturing Systems from University of Nottingham 1992; and a Doctor of Engineering from the Tokyo Metropolitan Institute of Technology2004.