The Importance of Quality Management System and Leadership in the South African Restaurant, Fast Food and Catering Sector – Case of the Gauteng Region

S.C. Mukwakungu, A.K. Lumbwe, D. Niati and C. Mbohwa

Department of Quality and Operations Management
University of Johannesburg
Johannesburg, South Africa
sambilm@uj.ac.za

Abstract

South Africa, being a developing country, experiences the impact of global competition which has pushed many organizations to develop plans to respond to a continuous competitive global market. The restaurant, fast food, and catering sector is broad within the service industry involving independent restaurants, quick service restaurants and fast food outlets, outsourced catering companies, just to name a few. This study's objective is to establish the importance of focusing on the fundamentals of quality management practices and the usefulness of leadership practices in the management process of the above-mentioned sector. This study included a quantitative research method under which an empirical investigation was executed following the literature review. The study consisted of the analysis of data collected from questionnaires administered to 65 restaurants in Gauteng, South Africa. After results analysis and interpretation, it is concluded that the functions of management were not well integrated, mainly the leadership functions. Hence, a need to improve specific aspects of the foundations of management approaches in the restaurant, fast food and catering sector is required.

Keywords

Quality Management System, Leadership, Restaurant, Management.

1. Introduction

The restaurant, fast food and catering sector comprises all institutions that supply the public with food and beverage. It provides a large collection of employment and profession which vary based on to the kind of service in each establishment. For instance, the jobs executed in a fast food store are very different from those performed in a restaurant or in hotel establishments (Magris and McCreery 2001).

In the 21st century, managers are faced with a number of trials related to guaranteeing organizational success in the world economy. These trials comprise leaders and competing on a global scale, improving the quality of goods and services, as well as drawing and keeping an experienced and diverse personnel (Cooper 2005).

1.1 Background, Rationale and Value of the Study

The failure rate of management commitment characterized by fast change should become an aspect of great concern to the managers of modern companies. Theoretically, the significance of this study lies in the fact it explores the implication of leadership as an element of the quality management system (QMS) and it explores the failures of a management system in an organization.

Practically, this study is significant because the current system specifies that the organization does not demonstrate the ability to consistently provide employees with the necessary resources needed to meet customers' satisfaction. The value of QMS should encompass the assessment of how well an organization, whether manufacturing or service exceeds customer's expectation.

1.2 Aim, Objectives and Scope of the Study

This research has the aim of establishing the significance of concentrating on the fundamental of the practices of quality management within restaurant businesses. Therefore, the resolve of this research is to provide a response to the management enquiry along the lines: "What is the understood function of leadership in the fundamental of quality management in the South African food industry and restaurants business?" By responding to this enquiry, the research will also determine the limitations of leadership within the context of QMS. This shall be achieved in order to present guidelines for the successful application of management responsibilities generally and in the food industry, as drivers of involving leadership.

The study was conducted within the restaurant, fast food and catering sector in Gauteng, South Africa, looking at the how important QMS and leadership are perceived to be by both managers and employees. The study specifically focused on independent restaurants, quick service restaurants, fast food outlets, franchised restaurants, coffee shops as well as outsourced catering companies. To be classified as part of this sector, an outlet needs to ensure that the sale of food that is prepared and the sale of drink form part of the core business of the company to such an extent that it accounts for at least 50% of the gross value of products sold as well as the services rendered. The study excluded hotel restaurants and bars.

1.3 An Overview of the South African Restaurant, Fast Food and Catering Sector

The restaurant, fast food and catering sector in South Africa encompasses businesses that received global accolade in recent years such as the Wolfgat which was named the world's best restaurant at the 2019 World Restaurant Award, or The Test Kitchen and La Colombe in Cape Town, The Tasting Room at Le Quartier Français in Franschhoek and Restaurant Mosaic at the Orient in Pretoria (Who Owns Whom, 2019). The sector also boasts home-grown food service brands that have been successfully exported globally such as Nando's, Steers, Spur Steak Ranches, Ocean Basket and RocoMamas (Who Owns Whom 2019). Worthy of note are the global brands operating in the local market, including Kentucky Fried Chicken (KFC), McDonald's (and McCafé), Burger King, Subway, Starbucks Coffee Company, Pizza Hut and Domino's Pizza, just to name a few (Who Owns Whom 2019).

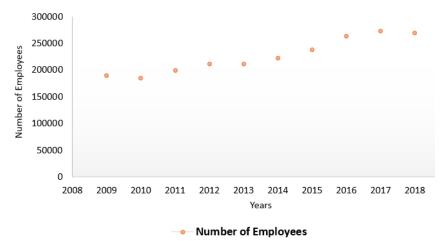


Figure 1. The South African Market Insights - South Africa's Food and Beverages Sector (2019)

According to Stats SA (2019), South Africa has been appraised to have a restaurant and hospitality sector that employed around 268 300 people in 2018. Figure 1 shows how the employment numbers within that sector in South Africa has been steadily growing for the past ten years (The South African Market Insights 2019).

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The restaurant and hospitality sector is described as one that is highly dynamic on the African continent. Considering the influx of new operators during the past decade, it is important to state that many businesses have not survived, yet many have prospered and held their ground. However, the loos of business cannot be unnoticed, therefore, many role players allocate the relatively high business failure rate to the challenging operating environment, which is compounded by the intensely competitive nature of the local market, hence the need to investigate the current state of affairs with regards to QMS, leadership and management implications within the industry.

2. Literature Review

According to McNamara (2009), management team (comprising of supervisors and managers), both from an individual capacity and as a collective, determine and achieve goals by implementing interrelated activities: planning, organizing, staffing, leading, controlling, and coordinating various information, materials, money, and people.

A literature review was conducted to identify the following aspects concerning top managers showing their commitment on the hierarchy of the management functions. Furthermore, the importance of leadership in an organization. Therefore, some aspects of and definition of leadership and the role of leaders in an organization is provided.

2.1 Management

Management is variously defined however all the definitions are complementary as noted Shenhar and Renier (1996). Bateman and Snell defined management as working with employees and materials to achieve organizational ambitions (Bateman and Snell 2007). Skilled and competent managers effectively and efficiently achieve organizational goals. To be effective and efficient is to meet the targets set with the smallest possible waste of resources, that is, to make the best possible use of money, time, and management of another (Kreitner and Kinicki 2004).

Management also refers to the process of monitoring individuals and resources in the organization using specific management functions (Lumen 2018). These functions, as highlighted by Scutariu (2015) and later through Lumen (2018), are implemented through a process of bringing individuals together to achieve set objectives and goals by making use of resources that are available, although scarce, in an efficient and effective way.



Figure 2. The Typical Management Process

Nowadays, in the business world, the executives not only adapt to changing conditions but also apply rigorously and with discipline, the overall management process (Cortada 2001). A typical management process, as depicted above in Figure 2, involves: planning, organizing, leading and controlling (Warui and Gongera 2014; 123helpme.com 2018).

2.2 Quality Management System

Quality management system (QMS), involves establishing organizational structures, methodology, processes, and materials required to guarantee the quality of products or services of an organization. The key benefits of QMS, which

have been highly documented as shown in the Table 1 below, include improved process and product or service quality, improved customer satisfaction, clear objectives, and reduced product or service defects.

Table 2 – Benefits of QMS Implementation

Authors	Context of the Study	Identified Benefits of QMS
Poksinska et al. (2004)	Three case studies of small organizations were investigated to establish the benefits of QMS after implementation.	Standardization of organizational procedures and putting in place operating habits and directives. Workers' expanded learning and mindfulness about hierarchical procedures and what really may influence quality.
Kafel and Sikor (2011)	An empirical assessment of the food industry in terms of QMS certifications in Poland.	 The internal benefits that is most frequently identified which do result from implementing and acquiring the certification of management systems include: improved food (service) quality; increased food health safety and customer orientation, improved internal communication and documentation. Improvement of company brand and image as the QMS is sued as a marketing tool.
Presot <i>et al.</i> (2013)	A quantitative and descriptive study conducted in 12 CPqRR/Fiocruz regional center of Fiocruz research laboratories based in Belo Horizonte, Minas Gerais, Brazil. All laboratories that took part to the study had been involved in QMS application.	 QMS implementation brought major improvements in the quality culture within the laboratories. QMS reinforces ethical practices and enables employees to perceive their work has highly meaningful which impacts positively on their overall performance.
Psomas <i>et al.</i> (2013)	The study examines the dual make-up of Total Quality Management ("Soft" and "Hard") in 90 organizations that produces food from a Greek perspective to determine their impacts on the advantages of QMS.	 The quality management system directly impacts on quality improvement, employee benefits and customer satisfaction. TQM as a quality management system is effectively adopted by companies with high-leadership competencies, consequently these companies are able to produce higher quality products and services.
Caravalho et al. (2015)	The study is a case study conducted in three units of a large Brazilian steel industry. The units surveyed implemented QMS, followed by ISO 9001 accreditations.	 QMS yields many benefits such as a better understanding of customer requirements, a reduction of customers' complaints and nonconforming products, reduction of time spent on reworks as QMS brings in a reduction errors in process or poor quality of raw materials. QMS enables improvement of employees' satisfaction through their involvement as well as the ownership of the work which leads to higher degree of empowerment. An integrated system with regards to QMS yield the following perceived benefits by managers from the units surveyed in the study: integrated procedures, higher focus on activities, easy overview of the entire system, unified standards, single audit, integrated policies, just to name a few.
Khan and Farooquie (2016)	The study provides a pragmatic evidence on SMEs' inspiration to chase after ISO 9001 QMS and the gains they attain from the certification. 115 companies participated to the study by providing responses to questionnaires distributed to a total of 800 SMEs.	 External benefits of QMS: it grants access to newer markets, improves corporate image, improved market share, improved customer relationship, increased competitive advantage as well as improved customer satisfaction. Internal benefits of QMS: increased personnel motivation, decreased product defect rate, increased quality awareness.
Zimon (2016)	Online survey conducted with 150 SMEs in Poland investigating the effect of consistent QMS based on ISO 9001.	Improved integration of suppliers with positive relationships, Improved procedures that support collaboration with suppliers through the standardization of systems. In the standardization of systems.
Ćoćkalo and Bakator (2018)	The impact of ISO 9001 on business performance is investigated through a review of 25 peer-reviewed papers.	• ISO 9001 accreditation can advance operational, financial and overall business performance, and eventually customer satisfaction.

Through leadership, managers can establish a working environment where employees completely participate and in which a QMS can operate effectively.

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The QMS principles can be used by top management in order to fulfil their specific role (ISO 9000 2005). The following can be applied by managers with regards to OMS:

- Create, implement, and control the quality policy and goals of the organization to increase motivation and involvement.
- Ensure awareness of customer needs throughout the organization.
- Establish suitable procedures and processes to fulfil customer needs as well as quality objectives of the organization.
- Establish effective and efficient quality management system.
- Ensure the availability of necessary resources the quality management system required periodically.
- Select actions concerning the quality policy and quality objectives.
- Select actions for improvement of the quality management system.

2.3 Leadership

Leadership refers to influencing and directing of the behavior of subordinates so that they are willing to strive to accomplish goals of the business (Beukmen 2005; Ali 2012). To exercise leadership means to influence and direct the behavior and actions of people in some particular direction management has to understand the most important components of its leadership role (Cronje *et al.* 2000).

Leadership is a fundamental factor to management and organizational behavior. It is one of prerequisites for organizational success. Leadership is the first category in the Malcom Baldrige National Quality Award. This model singles out leadership as the key driver for successful quality improvements efforts (Nephawe 2008).

Leadership involves social influence process in which the leader tries to obtain the willful involvement employees in order to meet organizational objectives (Nanjundeswaraswamy and Swamy 2014; Mohammed *et al.* 2014; Bhatti *et al.* 2012). Successful leaders promote change, take advantage of opportunities, motivate their followers to higher level of productivity, improve poor performance and lead the organization toward its objectives. The goal of leadership should increase output and simultaneously bring the pride of workmanship to employees through empowerment (Iqbal *et al.* 2015; Oschman 2009).

The efficiency and success of a commercial kitchen depends upon the application of good management principles (education.vic.gov.au 2018). The manager or the leader of a restaurant operation has to first decide upon the direction the business will take and to set the objectives. Secondly, determine how these objectives should be achieved; this involves determining what tasks need to be allocated to employees as stated by Ernst *et al.* (2004). And thirdly, encourage and motivate staff to their tasks efficiently and to reach and maintain high standards of performance (Dobre 2013). Consequently, the manager must also control costs by constantly comparing planned performance with actual performance in order to ensure that the objectives are being achieved.

2.4 Menu Planning

The menu planning which involves four major areas which are of prime importance to food production management and which employees should be aware of are standardized recipes, portion control, costing a recipe and menu pricing (Barnard 2009):

- The menu determines what a service operation offers. If developed and designed correctly, all aspects of the food production can be determined that the equipment needed, staffing and food. An efficient menu should utilize staff and facilities. It should take advantage of the resources available to it locally, and it should offer variation and flexibility to accommodate changing consumer tastes, seasonal availability, food costs and competition.
- Portion control is the control of serving sizes and the quantity of food served for each customer. Portion control is an important necessity of any catering establishment. Portion control is helpful in terms of calculating the initial cost of each dish on the menu, and therefore the final selling price.
- When standard recipes and portions have been compiled, the next stage is to calculate the standard cost of each recipe. This is implemented by totaling the costs of all ingredients used. The portion cost can then be calculated by dividing the recipe cost by the number of portions the recipe yields

• Once the costs of running the food service operation have been determined the selling prices of individual menu items aretcafculated. In addition to food cost there are labor costs (wages), overheads (all other expenses such as rent, rates, electricity) and a margin of profit.

3. Research Methodology

The research used a quantitative method. An organized mail survey which was self-administered was utilized for the collection of data from the sample. The study utilized survey methodology in order to attain its objectives and reach a deduction on the research statement. What is suitable for research questions about beliefs that are self-reported or about the conducts, point of views and attitudes of persons is survey methodology.

The study was subject of an empirical investigation. The fundamentals of management was placed into context in the literature. Leadership, specifically in the context of the management of an organization was investigated as well, and the particular main performances of strategic leaders and their parts in the efficient management of an organization was also reviewed. The study determined the research methodology that was observed during first-hand research. The objective is to analyze and assess the results of the study which has been conducted and thereafter to make conclusions based on the results.

3.1 Research Design

Confirmatory Investigation Confirmatory Investigation TYPE I TYPE II Qualitative Data Qualitative Data Statistical Analysis Qualitative Analysis **Exploratory Investigation Exploratory Investigation** TYPE IV TYPE III Quantitative Data Qualitative Data Statistical Analysis Statistical Analysis Confirmatory Investigation **Exploratory Investigation** TYPE V TYPE VI Quantitative Data Quantitative Data Qualitative Analysis Qualitative Analysis

Table 2. Mixed Methods Types

This investigation pursued a Mixed Methods Research approach which in this examination licenses abstract discoveries to clear up quantitative outcomes as needs be while improving the authenticity and steadfastness of the investigation. For this specific examination, a TYPE III Mixed Methods has been utilized. Worthy of note is the fact that a TYPE III is an exploratory investigation without forecasts or theory (Tashakkori and Teddlie, 1998) as delineated in Table 2. As verified by Mukwakungu and Mbohwa (2016) who referred to Rocco *et al.* (2003) by showing that this sort of investigation blueprint can use both emotional and quantitative data gathering and data examination (Rocco *et al.* 2003).

3.2 Data Collection Method

Ten questionnaires were distributed to 85 restaurants in Gauteng, South Africa. The questionnaires were developed in two categories: (1) for managers and (2) for waiters. Two questionnaires for managers and eight questionnaires for waiters were disseminated to all 85 restaurants. A participation rate of 76% was observed which means that 65 restaurants participated. A total of 650 questionnaires were received from the participants. It is important to indicate that only restaurants from which all ten questionnaires were returned were considered for the analysis.

The outcomes acquired from the questionnaires utilized in this research are shown in this section. The answers from sections A and B of the questionnaire were analyzed and explained in order to achieve the primary as well as the secondary objectives of the research and attempting to attain a deduction on the study. The respondents were guaranteed that their answers will be confidential. The essential information originated from an organized review as a survey and auxiliary information originated from information related to production, out of stock report, verifiable information and data.

3.3 Data Analysis

The instrument used in this study was planned utilizing the Likert scale which is a scale that is commonly engaged with those studies utilizing polls. It is the most utilized methodology to the extent scaling responses in review studies are concerned. The term Likert scales is regularly reciprocally utilized with rating scale, however there are different sorts of rating scales. When utilizing this scale, respondents are approached to react to each announcement by picking an answer from the couple of decisions proposed to them (Javadia *et al.* 2013). In the wake of gathering the information, they were altogether exchanged from paper (study apparatus) to an electronic arrangement utilizing Microsoft Excel for further investigation utilizing SPSS version 25.

3.4 Data Validity and Reliability

Validity indicates the degree to which the research tool measures, what it is intended to measure. According Leedy and Ormrod (2001), validity, which can also be referred to as "utility", is defined by as the soundness and the viability of the estimating instrument. Kothari (2004) further states that validity is the degree to which contrasts found with an estimating tool reflect genuine contrasts among those being assessed.

Reliability is referred to as the amount to which scale leads to dependable outcomes, when recurrent extents are made. Maree (2007) explains that reliability is the degree to which a research tool has the ability to be consistently repeated and used in other studies. Maree further states that there should be an extensive level of similarity among the items being formulated to measure a certain construct. Trochim (2006) has stated that Cronbach's Alpha is one of the most commonly used coefficients for assessing internal consistency and measuring how reliable Likert scale questions are. Maree (2007) provides the guiding principle below related to Cronbach's Alpha Coefficient:

0.70 – low reliability

0.80 – moderate reliability

0.90 – high reliability

Studies have shown that a coefficient of 0.7 or higher that research tool's validity can be considered "acceptable". Therefore, since the validity test yielded a value of 0.751, the study is deemed reliable.

4. Findings and Interpretations

4.1 Section A – The Fundamental of Management

This area presents results from the survey as far as examination of inquiries structured utilizing the Likert Scale; questions concentrating on possibility and filter questions. The Likert Scale was utilized for simple examination of results and possibility and filter questions were utilized to check the conclusions of the respondents to illuminate their reactions.

Although managers at times constantly make decisions, it is imperative to note that some of these decisions are quite complex as well as difficult. They also make countless smaller decisions that affect day-to-day operations and organizational procedures (Bateman and Snell 2007). Be that as it may, paying little respect to how perplexing or little a choice may be, basic leadership is critical to management procedure (Pušeljić *et al.* 2015) as it is an action for recognizing and evaluating opportunities (Kelly and Dorian, 2017), reflecting the vital methodology of the initiative on how data is utilized and how the eventual fate of the organization is anticipated (Al Shra'ah 2015).

The results of the survey, as depicted in Figure 3, shows that the majority (68%) of the managers from the sixty-five restaurants in the study use command to make their decisions. While 18% of the managers who responded from the sixty-five restaurant indicate that they use a consultative approach to managerial decision making, 9% of managers who responded indicate that they make decisions based on consensus, lastly only 5% of the managers who responded indicated that they use other approaches to decision making.

The results also indicate that 64% of the respondents feel comfortable with their working environment, while 36% of the respondent did not feel comfortable. Most organizations provide opportunities to improve the quality of working

life. These opportunities include career development, recreational or cultural activities, and daycare. 76% of the respondents agreed that managerial meeting was often conducted while 20% said very often, and 4% said never. 56% of the respondents believed that the assembling and coordinating the human, financial and other resources needed to be a competitive business were poor, 36% believed it was good and 8% believed it was very good.

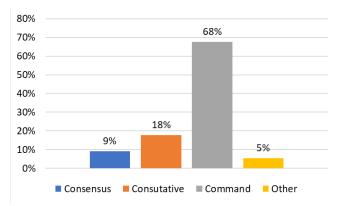


Figure 3. Type of Managerial Decisions (Managers Responses)

The literature review shows that revising the menu is crucial as it involved with food costs which are labor costs and overheads costs such as rent, rates, electricity. When one looks at the menu revising, 48% of the respondents stated that management did not often revise the menu, 32% responded that the management has never review the menu, it could be perhaps new employees who assessed that and 20% responded that the management did often review the menu.

Moreover, the literature review shows the responsibilities and the duties employers have towards their employees. An interesting fact to take note of is that 56% of employees were very poorly not allocated with responsibilities while 44% were poorly allocated. Job analysis involves defining a detailed description of a job's task, determining the relationship of a certain job to others, and ensuring that employees acquire the knowledge, skills, and abilities necessary to successfully perform the job. The results show that 68% of the respondents clearly understand what they are required to do in the organization while 32% are not.

The questionnaire also focused on the roles of managers toward their employees and customers. The results of the questionnaire indicates that in terms of the organization providing employees with all the necessary resources to perform their tasks when it comes to contact with the customers such as card machines, equipment in the kitchen etc., 72% of the respondents were not satisfied and 28% were.

With regards to food safety requirement, as depicted in Figure 4, a cumulative percentage of 88% rated that the organization is conforming to food safety requirements.

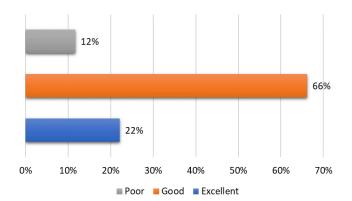


Figure 4. Food Safety Requirements

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This study also revealed that based on the restaurant feedback from their customers, it is evident that customers were very satisfied with their food. According to the results obtained, 62% of the respondents affirmed that their customers were satisfied with the quality of food, while 26% reported on customer dissatisfaction. Only 12% reported not knowing the level of satisfaction of their customers.

On the other hand, 65% of respondents assert that customers often complained about the level of service quality. 33% of respondents affirmed that customers did not often complain and the other 1% assert that customers have never complained. Worthy of note is the fact that the questionnaire aimed at the waiters is designed to gather data that will assist in determining how the sixty-five restaurants deal with poor performance. It is revealed that 56% of respondents were self-trained. The other 44% expressed that poor performance was to deal with threats of dismissals.

4.2 Section B – The Fundamental of Leadership

The literature review shows the gap between leadership and management. From the analysis of the survey responses from the employees, it is evident that 80% of the respondents expressed that their managers were seen as bosses not as leaders. As stated by Bateman and Snell (2007), leaders should avoid dominating or allowing another individual to dominate others. The other 20% expressed that their managers were seen to be acting as leaders. The results of this study also determine whether any leadership style was displayed in all the organizations that took part in the survey. It was found that 56% of the respondents did not perceive any leadership style that could be explained by the fact that the top management did not clearly appoint any food safety leader, whereas the other 44% expressed that leadership style was poorly perceived.

In addition, 60% of the respondents disagreed with the fact that, at their establishments, a leader creates and publishes to all employees a statement of the objectives and purpose of the organization, it can be explained that most of the respondents also asserted that top managers were perceived as leaders, the other 40% agreed with the statement. Another finding that is of importance is that 60% of the respondents disagreed that their managers allow employees to take responsibility and assume ownership of problems or opportunities, to be proactive in implementing improvements and making decisions in the best interests of the restaurant, while the other 40% agreed. Finally, 63% disagreed that managers help to build the culture of the organization through key decisions and symbolic actions, 8% of the respondents strongly disagreed and 29% agreed.

5. Conclusion and Recommendations

First it can be concluded that there are indeed foundations of quality management and leadership issues that should be addressed within the organizations. As organizations expanded and became more multifaceted, slight adjustments in the tactics of quality management resulted in remarkable growth in the quality and the quantity of production. Based on evidences gathered from the main study, there seems to be a connection existing between leadership and the process of quality management. This connection has brought about a company that is paying more attention to the procedures of quality and the demands of customers. The main study's results indicated that a big part of the organization did not succeed in the application of this relationship and did not achieve superior organizational performance.

Employees have expressed some levels of dissatisfaction when it comes to making sure that leadership ensures that the organization is doing the right things, leaders generate and sustain the in-house atmosphere where individuals have the possibility of becoming totally implicated in attaining the objectives of the organization. Moreover, it was implicitly expressed that the managers need to delegate leadership or decision-making ability to their staff in order not only to exert more efforts in forming professional but also create a friendly relationship with the staff in order to be more productive and to avoid or efficiently tackle customers' complaints.

The researchers recommend that the organizations delegate personnel to state issues in with regards to food safety management. The team dealing with food safety shall have a fusion of multi-disciplinary information and experience in the development and implementation of the system of food safety management. This comprises but does not need to be restricted to the organization's goods, procedures, gear and food safety risks within the limits of the bounds of the system of food safety management. Organizations should conduct audits to guarantee the success of their food

safety system in line with their quality management system. As stated in the ISO 2200 (2005), the organization shalt perform internal audits at scheduled time intervals to establish the system of food safety management.

The researchers further recommend that the organizations should incorporate the Theory X and Theory Y by Douglas McGregor (1960). Based on McGregor, managers in Theory X presume employees are negligent and lazy and need continuous supervision and outside incentive in order to attain organizational, while managers in Theory Y presume personnel want to work and are capable of directing and controlling themselves goals (McGregor 1960, Arslan and Staub 2013). McGregor encouraged a Theory Y perception, proposing that leaders who support contribution and allow openings for individual challenge and creativity would accomplish greater accomplishment (Sahin 2012).

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References

- Al Shra'ah, A.E.M., The Impact of Decision-Making Styles on Organizational Learning: An Empirical Study on the Public Manufacturing Companies in Jordan. *International Journal of Business and Social Science*, vol. 6, no. 4, 2015
- Ali, A., Leadership and its Influence in Organizations–A Review of Intellections. International Journal of Learning and Development, vol 2 no. 6, pp.73-85, 2012.
- An Introduction to Management. Boundless Business, Courses.lumenlearning.com, Available: https://courses.lumenlearning.com/boundless-business/chapter/an-introduction-to-management/, May 19, 2018.
- Arslan, A. and Staub, S., Theory X and theory Y type leadership behavior and its impact on organizational performance: Small business owners in the Şishane Lighting and Chandelier District. *Procedia-social and behavioral sciences*, vol. 75, pp.102-111, 2013.
- Babbie, E., The practice of social research, Belmont, CA: Wadsworth Cengage Learning, 2016.
- Barnard, B., A Case study to examine the application of food cost theories in menu pricing and cost control management within a new restaurant operation. University of Nevada, Las Vegas, 2009.
- Bateman, T.S., and Snell, S., Management, leading and collaborating in the competitive world, 8th Edition, Mc Graw-hill/ Irwin. International edition. pp 19-104, 2007.
- Beukman, T.L., The Effect of Selected Variables on Leadership Behavior within the Framework of a Transformational Organisation Paradigm, University of Pretoria, Pretoria, unpublished Doctoral dissertation, available at http://upetd.up.ac.za/thesis/available/etd11082005-083347/, December 22, 2005.
- Bhatti, N., Maitlo, G.M., Shaikh, N., Hashmi, M.A., and Shaikh, F.M., The impact of autocratic and democratic leadership style on job satisfaction. International Business Research, vol 5, no. 2, p.192, 2012.
- Botha, T., Van Rensburg, M., Du Toit, G.S., and Motlatla, M. D. C., *Introduction to business management*. Edited by Barney Erasmus, Johan Wilhelm Strydom, and Sharon Rudansky-Kloppers. Oxford University Press Southern Africa, 2016.
- Carvalho, K.M., Picchi, F., Camarini, G. and Edna, M.Q.O., Benefits in the implementation of safety, health, environmental and quality integrated system. *International Journal of Engineering and Technology*, vol. 7, no. 4, p.333-338.
- Ćoćkalo, D. and Bakator, M., Improving Business Performance With Iso 9001: a Review Of Literature and Business Practice. *The European Journal of Applied Economics*, vol. 15, no. 1, pp.83-93, 2018.
- Cooper, C.l., Leadership and management in the 21st century, Oxford: Oxford university press, 2005.
- Cortada, J.W., 21st Century Business.' London Financial Times. USA: Prentice Hall, 2001.
- Dobre, O.I., Employee motivation and organizational performance. Review of Applied Socio- Economic Research, vol 5, no. 1, pp 1-8, 2013.
- Ernst, A.T., Jiang, H., Krishnamoorthy, M., and Sier, D., Staff scheduling and rostering: A review of applications, methods and models. European journal of operational research, vol 153, no. 1, pp.3-27, 2004.

- Functions of Management in A Domestic Environment: Management Functions Leadership Organization, 123helpme.com, Available: http://www.123helpme.com/functions-of-management-in-a-domestic-environment-view.asp?id=165155, May, 19, 2018.
- Goddard, W., and Melville, S., Research methodology, Kenwyn, South Africa, Juta & co, 2011.
- Iqbal, N., Anwar, A., and Haider, N., Effect of Leadership Style on Employee Performance. Arabian J Bus Manag Review 5:146, 2015.
- ISO 2200, Food safety Systems-requirements for any organization in food chain, 1st Edition, South Africa National Standard, 3-4, 2005.
- ISO 9000, Quality Management System, 3rd Edition, South Africa National standard, pp 5, 2005.
- Javadia, A., Kootanaee, K., Badu, K., and Talari, H., Just-in-time manufacturing system: From introduction to implement, Electronic journal, 2013.
- Kafel, P. and Sikora, T., Benefits of implementation and certification of management systems in the food industry enterprises. In *5th International Quality conference*, vol. 20, pp.625-630, 2011.
- Kelly, L. and Dorian, M., Doing Well and Good: An Exploration of the Role of Mindfulness in the Entrepreneurial Opportunity Recognition and Evaluation Process. *New England Journal of Entrepreneurship*, vol. 20, no. 2, pp.26-36, 2017.
- Khan, A. and Farooquie, J.A., Motives and benefits of ISO 9001 Quality Management System: an empirical study of Indian SMES. *Brazilian Journal of Operations & Production Management*, vol. 13, no. 3, pp.320-329, 2016.
- Kothari, C.R., Research methodology: Methods and techniques. New Age International, 2004.
- Kreitner, R., Kinicki, A., Organizational behaviour, 6th Edition, New York McGraw Hill: pp 592 630, 2004.
- Kuada, J., Research methodology: A project guide for University students, 1st Edition, Sam funds literature, Frederiksberg, 2012.
- Leedy. P.D and Ormrod. J.E., Practical Research: Planning and Design. 7th edition. New Jersey: Prentice Hall, 2001. Loyd's Register, Available: http://www.Irqa.co.za/quality/, Accessed: June 3, 2018
- Magris, M, McCreery, C., An introduction to food beverage studies, hospitality press (in Australia), pp 1-3. 2001.
- Maree, K, First steps in Research. 1st edition. South Africa: Van Schaik Publishers, 2007.
- McGregor, D., Theory X and theory Y. Organization theory, vol. 358, p.374, 1960.
- McNamara, D.E., From Fayol's Mechanistic to Today's Organic Functions of Management. American journal of business education, Vol 2, no. 1, pp.63-78, 2009.
- Mohammed, U.D., YusufSanni, M.O., Ifeyinwa, I.M., Bature, T.N., and Kazeem, A.O., The relationship between leadership styles and employees' performance in organizations (a study of selected business organizations in Federal Capital Territory, Abuja Nigeria). Leadership, vol 6, no. 22, 2014.
- Mukwakungu, S. and Mbohwa, C., The Culture of Continuous Improvement at a South African Short-Term Insurance Company-State of Affairs on the Extent of the Use of Lean's Tools for Continuous Improvement. In *Proceedings of the 18th Annual International Conference of the Global Business And Technology Association*, pp. 16-20, 2016.
- Nanjundeswaraswamy, T.S., Swamy, D.R., Leadership styles. Advances in management, vol 7, no. 2, p.57, 2014.
- Nephawe, R., The importance of employee involvement in total quality management in South African companies. pp 6, 2008.
- Oschman, J.J., A framework for the implementation of total quality management in the South African Air Force (Doctoral dissertation), 2009. Canteen management, Available: http://www.education.vic.gov.au/Documents/school/principals/management/gfylmanmgt.pdf, Accessed: May 19, 2018.
- Poksinska, B., Eklund, J. A. E. and Dahlgaard, J. J., ISO 9001:2000 in small organizations. International Journal of Quality & Reliability Management, vol. 23, no. 5, pp.490-512, 2006.
- Presot, I.M., Soares, R.P.P., Madureira, A.P., Bicalho, K.A. and Modena, C.M., Quality perception in research laboratories from Fiocruz after QMS implementation. *Revista de Administração Pública*, vol. 48, no. 1, pp.237-252, 2014.
- Psomas, E., Vouzas, F. and Kafetzopoulos, D., Quality management benefits through the "soft" and "hard" aspect of TQM in food companies. *The TQM Journal*, vol. 26, no. 5, pp.431-444, 2014.
- Puseljic, M., Skledar, A. and Pokupec, I., Decision-Making As A Management Function. *Interdisciplinary Management Research*, vol. 11, pp.234-244, 2015.
- Rocco, T. S., Bliss, L. A., Gallagher, S., Pérez-Prado, A., Taking the Next Step: Mixed Methods Research in Organizational Systems, Information Technology, Learning, and Performance Journal, vol. 21, no. 1, pp. 19 29, 2003.

- Şahin, F., The mediating effect of leader–member exchange on the relationship between Theory X and Y management styles and affective commitment: A multilevel analysis. *Journal of Management & Organization*, vol. 18, no. 2, pp.159-174, 2012.
- Scutariu, P., Forecast, Organization-Coordination and Motivation in Local Public Administration Management. The USV Annals of Economics and Public Administration, vol. 15, no.21, pp.278-285, 2015
- Shenhar, A., Renier, J., How to define management: a modular approach, Management Development Review, vol. 9, no. 1, pp. 25-31, 1996.
- Tashakkori, A. and Teddlie, C., Mixed Methodology: Combining Qualitative and Quantitative Approaches, Sage, Thousand Oaks, CA, 1998.
- Trochim. W.M., Research Design: Social research methods. 1st edition. Leeds University, 2006.
- Warui, S.K., Gongera, E.G., An Analysis of Strategic Management Styles in Public Secondary Schools Principals on Academic Performance: Case Study of Langata Constituency, Kenya, European Journal of Business and Management, vol.6, no.19, 2014.
- Zimon, D., 2016. Analysis of the impact of standardized quality management system for the improvement of cooperation in the supply chain on the basis of small and medium-sized organizations. *Journal of positive management*, vol. 7, no. 2, pp.36-45, 2016.

Biography

Sambil C. Mukwakungu is an award-winning academic who has been lecturing Operations Management to first year students, Food Production, and Quality Management at the University of Johannesburg since 2009. His passion for teaching and learning has allowed him to make a difference in at least one student's life every year. He is a young researcher who is still establishing himself in knowledge creation with keen interest in Quality Management Systems, Service Operations Management, Lean Operations, Continuous Improvement, as well as business innovation and innovation in Higher Education. He was awarded Best Track Paper Awards at the 2016 IEOM Conference in Rabat, Morocco, also at the 2018 2nd European Conference in Paris, France, and he is together with his team from the IEOM UJ Student Chapter a recipient of the 2018 IEOM Outstanding Student Chapter Gold Award for exceptional chapter activities and contributions to the field of industrial engineering and operations management.

Alice Kabamba Lumbwe is a master's student in the Faculty of Engineering and Built Environment at the University of Johannesburg, South Africa. She has a National Diploma and a Bachelor of Technology (with distinction) in Operations management. She was a first-year top achiever and qualified as a UJenius Club member. She is a young researcher which research interests are in quantitative techniques, project management, continuous improvement, and operations management.

Dorcas Niati is currently conducting a master's degree in the Faculty of Engineering and the Built Environment, University of Johannesburg. She holds both a National Diploma and Bachelor of Technology in Operations Management from the University of Johannesburg, South Africa. Her research interests involve cost of poor quality, supply chain management and production management. She has been awarded many academic awards including the First Year Top Achiever and the Dean Honors' Roll.

Prof Charles Mbohwa is a Professor at the Faculty of Engineering and the Built Environment at the University of Johannesburg (UJ). As an established researcher in the field of sustainability engineering and energy, Prof Mbohwa's specialisations include sustainable engineering, energy systems, Life-Cycle Assessments (LCA's) and bio-energy/fuel feasibility and sustainability with general research interests in renewable energies and sustainability issues. Prof Mbohwa's current research in sustainability engineering includes: Social and climate change comparison of bio-diesel life cycle impacts in Brazil and South Africa; Life Cycle Assessment and Comparisons of Rail and Road Freight Transportation in China and South Africa; The Potential, Energy and Environmental Impacts of Bio-energy in the Sugar Industry in South Africa; and the Economic, Energy and Environmental Evaluations of Biomass-based Fuel Ethanol based on Life Cycle Assessment. He is a co-author of the second chapter of the United Nation's Environmental Programme's (UNEP) Global Guidance Principles for Life Cycle Assessment Databases: A Basis for Greener Processes and Products 2011. In addition, he is Project Leader for the Development of the Climate Change Response Strategy and Action Plan for the Gauteng Department of Agriculture and Rural Development: Use of indigenous knowledge.