

Quality Management System (QMS) Accreditation and Market Performance: evidence from Small Training Providers in KwaZulu-Natal

Robert Walter Dumisani Zondo

Durban University of Technology (DUT)

dumisaniz@dut.ac.za

<http://orcid.org/0000-0003-0214-860X>

ABSTRACT

South Africa has 21 sector-based Education and Training Quality Authorities (ETQAs) responsible for accrediting training providers. They are, in turn, accredited by the South African Qualification Authority (SAQA) for the purpose of monitoring and auditing training achievements in terms of the National standards and qualifications. Such Sector Education and Training Authorities (SETAs) administer education and training within their industrial sectors. In order for training providers to be accredited, they should implement and use Quality Management System (QMS) assuring that they provide quality service to learners. Hence, this study evaluates the influence of QMS accreditation on market performance of small training providers in KwaZulu-Natal.

For the study to achieve its objectives, the ETQAs provided a sample frame of accredited training providers in KwaZulu-Natal. These authorities were affiliated to 12 different SETAs. From 89 small training providers identified for participation, 81 participated in the study. The study indicates that QMS accreditation increases market share. Market share increases in direct proportion with small training providers who operate in accordance with QMS objectives. Small training providers should determine the right market performance measures during QMS implementation in order to find new markets and increase competitiveness.

Keywords: business operations, ISO 9001, market performance, quality management system, small training providers; QMS accreditation.

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INTRODUCTION

QMS in education and training is designed in accordance with industry quality models of ISO 9001 and the techniques ensure quality in skills development (EDUTEL, 2011). It is a framework recognised by organisations and governments around the world and has consequently grown into the *de facto* standard for management systems (Quazi & Jacobs, 2004). The system establishes continuous improvement mechanisms for all the dimensions and processes in the institutions of learning and, ultimately, improves their performance (CEDEFOP, 2011). Thus, QMS accreditation of training providers is a consequent of QMS implementation and use. It is an approval

or certification granted by the relevant Sector Education and Training Authority (SETA), representing the interests of both the public and students, to an institution on account of it having programmes and quality assurance systems that ensure the provision of set qualifications and educational standards for a particular period of time (Manyaga, 2008).

QMS has been implemented in educational institutions in many countries around the world. In the case of Spain, as in other countries, the use of QMS in education began in universities, and was later applied to primary and secondary schools (Fernández, Egido & Rafael, 2016). Many

institutions of learning apply QMS to their daily activities (Dumay, 2009). These systems, adapted to the specific objectives established by the educational institutions, as well as their customers and suppliers are an attempt to establish systematic, structured and continuous quality assurance processes to ensure their sustainability and improvement (Luneburg, 2010). Whilst the main objective of the institution of learning is to guarantee student learning, previous studies in the quality arena have highlighted quality system elements that impact on organisational performance. Carlsson and Carlsson (1996) identified better processes and customer relations as benefits of implementing ISO 9000 in Swedish organisations. Lee and Palmer (1999) cite monitoring day-to-day adherence to documented procedures and understanding of the corrective action processes as significant QMS challenges. The increased widespread application of QMS has often been surrounded by intense debate since the relevance they may have in education and the appropriateness of the models used for the actual situation in institutions of learning is often questioned (Doherty, 2008). The research to date has not unequivocally validated the usefulness of QMS in institutions of learning (Stensaker, Langfeldt, Harvey, Huisman & Westerheijden, 2011). While some studies pointed out that they help achieve considerable educational improvements (Stensaker, 2007), other studies indicated that their effects were irrelevant, or even harmful, for educational centres (Fernández, *et al.*, 2016). Hence, this study attempts to get additional insights into the following research questions:

- Is there a significant influence of QMS accreditation on market performance of small training providers?
- Does QMS accreditation influence business operations in small training providers for market performance?

Organisations incur significant costs in obtaining accreditation, making it worthwhile to study the process to better understand the pertinent measures of accreditation success (Zondo, 2018). QMS accreditation requires a focus on performance measures underscoring that an organisation's management system is a valuable, non-tangible asset (Piskar & Dolinsek, 2006). According to Zondo (2018), the right business performance measures help focus QMS to achieve desirable and required results in accordance with QMS certification standard. Lapointe and Rivard (2006)

found that the relationships between quality and profitability were less established because of the many other variables affecting return on investment (ROI) measures. In one of the studies that relates to the impact of quality on business performance, Sousa and Voss (2002) established a strong relationship between productivity (both labour and capital) and quality, and between profitability and quality. Relatively little research was conducted into the market performance of QMS on the accredited small training providers in various sectors of the South African economy (Zondo, 2018). Hence, this study evaluates the influence of QMS accreditation on the market performance of accredited small training providers in KwaZulu-Natal.

PROBLEM STATEMENT: the lack of exploiting QMS' real purpose by small training providers in South Africa

When training providers set up a QMS, they do so for the sole reason of showing quality of their training services through an accredited certification (Manyaga, 2008). The system should be able to improve their business operations. However, training providers do not exploit the system for its real purpose, such as learner satisfaction which may lead to an increase in profit, improvement in process efficiency, as well as long-term market growth. Leonardo (2011) explains that one of the reasons for the lack to exploit QMS is the absence of quantitative measurement methods that is used by many big companies. The lack in the use of such measurement techniques makes owners of training providers unable to recognise QMS benefits in a tangible way. They either prefer not to use QMS or, if they do use it, they merely want to reach the stage of obtaining accreditation without the conviction that it could be a profitable venture for the organisation beyond accreditation (Zondo, 2018). Hence, this study assesses the influence of QMS accreditation on market performance of small training providers in KwaZulu-Natal.

The rest of the study discusses the theoretical overview considered, the methodology, study results, discussion, as well as the implications of results for policy and practice. It also discusses the limitations of the study and the conclusion.

THEORETICAL CONSIDERATIONS

This section presents a brief overview of QMS accreditation. It discusses the effects of QMS on

business operations, as well as the market implications of QMS accredited organisations.

QMS accreditation: brief overview

The traditional method of QMS accreditation was to count the number of successes in each accreditation area to show excellence (Lunenburg, 2010). However, the current approach, for many QMS accreditation bodies, is to show a continuous improvement process. The independent external accreditation and certification body provides service providers and customers alike with assurance that the quality and standard of what is offered complies with established professional standards (Mak, 2011). The services offered and the means of service provision, the systems and processes that enable and support this, would have been assessed with reference to acceptable standards deemed to present what is regarded as the industry or professional norm (Manyaga, 2008). Hence, any one individual assessment may exist on a continuum ranging from unsatisfactory to exemplary. This assessment distinguishes the quality of what is provided and ensures that the acceptable minimum professional standards are satisfactorily met. For the customer, QMS accreditation and certification holds the potential to reduce information asymmetry and risk, providing reassurance about the standard of what to expect and, thereby, serving to foster trust (Piskar & Dolinsek, 2006). A wide range of accreditation bodies are responsible for establishing professional standards and accreditation criteria (Mak, 2011). Examples include legal and regulatory bodies, professional or industry associations, and independent bodies, including the International Organisation for Standardisation (ISO).

The effects of QMS on business operations

There are two opposing developments in lifelong quality regimes that can be observed. On the one hand structures, accreditation, rules and regulations gain importance, mainly with the rise of New Public Management approaches (Manyaga, 2008). On the other hand, the interest in quality culture as the underlying concept for organisational improvement in lifelong performance is a dominant theme in much of the available management literature (Löffler, 2005). The important emerging message is that an emphasis on values, norms and culture in an organisation is easily combined with the question

of organisational accountability and performance (Mak, 2011). Thus, there is a need to introduce an understanding of quality in education from a more comprehensive perspective than just analysing single isolated factors.

Reports on the results of a QMS mail survey, administered in four Far Eastern countries, namely Japan, South Korea, Hong Kong and Taiwan, showed the following benefits of QMS certification: improved corporate image, quality improvement, increased customer satisfaction, and improved internal procedures (Pan, 2003). Juran (1991) wrote that in order to attain quality improvement of a certain product or service, a quality leap is needed in order to decrease weaknesses and reach a new level of quality control. Unfortunately, management does not always feel responsible for improvements. If management does its job well (that is, providing long-term company policy, education, as well as interdepartmental communication and cooperation), the system is likely to improve the company's market position, and people would be willing to cooperate and exploit their abilities and knowledge, as well as creativity (Sampaio, Saraiva & Rodrigues, 2011b). Owing to many external and internal positive effects of a quality system on the organisation's business activities, companies should use a quality system as a business model for improving their market performance (Mak, 2011). This means that all business decisions regarding vision, values, mission, company strategy, investments and business indicators derived from the quality system must be supported by data.

Market implications of QMS accredited organisations

The majority of QMS users indicates that the advantages of using QMS outweigh the disadvantages (Tsekauras, Dimara & Skuras, 2002). Small organisations that have implemented QMS are motivated by marketing and competitive advantages (Quazi & Jacobs, 2004). In addition, McAdam and McKeown (1999) in Quazi and Jacobs (2004) reported that in Northern Ireland, QMS certification resulted in the better control of business, increased sales, reduced costs, increased productivity, and fewer customer complaints. They also reported that businesses that were gaining most from Total Quality Management (TQM) implementation had started with QMS and focused on both external (for example, customer

satisfaction), as well as internal measures (Piskar & Dolinsek, 2006). These organisations had full management commitment, as well as high levels of employee participation and training. In the same vein, Sun (2000) found that in Norwegian companies, implementation of the ISO 9000 standard was significantly correlated with the reduction of bad quality products and customer complaints, and business performance such as profitability and productivity. Quazi and Padibjo (1998) in Quazi and Jacobs (2004) found that QMS accredited small and medium size enterprises in Singapore reaped a number of benefits. These includes an increased customer preference, improved company quality image and competitiveness in the market, compliance to customer requirements, streamlined procedures and documentation, increased consciousness for preventive and corrective actions, and the provision of a foundation in the pursuit of TQM.

However, Sun (2000) found that the QMS certification had little influence on market position and competitiveness, and had no influence on employee satisfaction and environment protection. Contrary to the above-mentioned study, Heras (2002), in a study involving 400 QMS certified companies and 400 non-certified companies in the Basque autonomous community, reported a positive association between QMS certification and superior financial performance. Such performance has a direct link to their market performance. Sun and Cheng (2002) found that the SMEs implement QMS because of market and customer demand or external pressure rather than from internal initiation. They found no significant relation between QMS certification and improvement of business performance. In a study of organisations with less than 250 employees in Australia, Wiele and Brown (1998) found that most SMEs seemingly felt forced to go for QMS certification and did not move further down the quality path. Goh and Ridgway (1994) reported a very similar finding on SMEs in the UK. Their study revealed that the QMS

certification was considered the end-point in the quality journey of the sampled companies. As a result, specific benefits of QMS certification that have been reported by various authors, including improved quality of work life, increased customer preference, improved company quality image and competitiveness in the marketplace, higher productivity and export sales, better control of business, reduced costs, fewer customer complaints, streamlined procedures and documentation, and increased consciousness for preventive and corrective actions have been lost.

As a result of the prominence of the above benefits, the following QMS “elements” have been chosen for this section and include:

- 5.2 Customer focus.
- 8.2.1 Customer satisfaction.
- 8.5.1 Continual improvement.
- 8.5.2 Corrective action to reduce customer complaints.

The above elements were chosen based on their relevance to the objective of this study. That is, the influence of QMS accreditation on the market performance of small training providers.

METHODOLOGY

The method used in this study includes the target population, brief background of enterprises that participated in the study, sampling method, the data collection method, as well as the measurement and analysis.

Target population

The target population for this study comprised of 89 small training providers that operate in KwaZulu-Natal province who were accredited by Sector Education and Training Authorities (SETAs). While the study focuses on small training providers, the following Table 1 illustrates the schedule of size standards of small businesses in South Africa.

TABLE 1: schedule of size standards of small businesses in South Africa

| Type of business | Number of full-time employees | Turnover (maximum Rand values) | Balance sheet |
|------------------|-------------------------------|--------------------------------|----------------|
| Small | 1-49 | R13 million | Max R5 million |

Source: Olawale and Garwe (2010)

Previously accredited small training providers who had their accreditation withdrawn by SETAs were

excluded from the study. Exclusions also include medium and large training providers in KwaZulu-

Natal. According to Olawale and Garwe (2010), the medium-sized businesses are entities that have between 51 and 200 full-time employees, while large businesses have more than 200 full-time employees. To avoid double counting, providers that had more than 50% courses under a particular SETA were counted once in the study.

Brief background of businesses that participated in the study

Businesses that were registered as close corporations, private companies and non-governmental organisations participated in the study. Close corporations constituted 60% of the businesses, 30% from the private companies and 10% non-governmental organisations.

Sampling method

The study only focused on small training providers whose number of full-time employees ranged between zero and 50, as in Antonites, de Beer, Cant and Jacobs (2008). Hence, 81 training providers

that participated in the study had between two and 23 full-time employees. A sample frame was provided by the ETQAs affiliated to 12 different SETAs. This includes the Manufacturing, Engineering and Related Services; Energy; Construction; Services; Wholesale and Retail; Education, Training and Development; Health and Welfare; Bank; Transport; Agriculture; Media, Information and Communication; as well as Safety and Security. The criteria used for selecting study participants include business size, the location (that is, small training providers operating in KwaZulu-Natal province), as well as the ability to access both fax facilities and electronic mails. Recruitment of the participants was undertaken with the aim of ensuring a representative spread of small training providers from the different sectors of the South African economy. A simple random sampling method was used and each small training provider in the KwaZulu-Natal population had an equal likelihood of being selected (Welman, Kruger & Mitchel, 2009). Table 2 shows the percentage of the total of small training providers that participated in the study as per their SETA accreditation.

TABLE 2: small training providers that participated in the study (as per their SETA accreditation)

| SETA represented in the study | Percentage of small training providers that participated in the study |
|--|--|
| Manufacturing, Engineering and Related Services SETA | 3 |
| Energy SETA | 7 |
| Construction SETA | 3 |
| Services SETA | 7 |
| Wholesale and Retail SETA | 7 |
| Education, Training and Development SETA | 7 |
| Health and Welfare SETA | 7 |
| Bank SETA | 3 |
| Transport SETA | 13 |
| Agriculture SETA | 10 |
| Media, Information and Communication SETA | 27 |
| Safety and Security SETA | 7 |

Source: Research data (2020)

Sector Education and Training Authorities (SETAs)

The Media, Information and Communication SETA at 27%, Transport SETA at 13% and the Agricultural SETA at 10% had the highest number of small training providers that participated in the study.

Data collection method

A structured questionnaire was used to collect data from 89 owners of small training providers. These

were distributed through electronic mail. Consequently, the completed questionnaires were sent back to the researcher using electronic mail or fax. Eighty-one questionnaires were returned and this represented a 91% response rate. This was considered high compared with the norm for survey responses (Baruch & Holtom, 2008). The main reason for this high response rate was due to the invitation letter sent to the small training providers for participation.

Measurement and analysis

The study was quantitative in nature. Bryman and Bell (2007) explain that the quantitative approach involves the use of statistical procedures to analyse the data. In line with the research framework, the study used the questionnaire to measure eight variables. On the influence of QMS accreditation on market performance, the study employed a Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Regarding the influence of business operations of QMS accredited small training providers on market performance, respondents had to affirm or not affirm with the statement using yes, no or unsure. Hence, the descriptive and chi-square analysis were used on the influence of QMS accreditation on market performance. A Spearman’s Rho correlation analysis was also applied on the influence of business operations of QMS accredited small training providers on market performance.

- **Influence of QMS accreditation on market performance:** Four items measured this variable. The items are based on the significance of QMS accreditation on market performance (Goh & Ridgeway, 1994; Sun & Cheng, 2002; Piskar & Dolinsek, 2006; Quaz & Jacobs, 2004). These include business reputation, finding new customers, increasing competitiveness, as well as increasing market share. Reliability analysis of QMS accreditation on market performance reveals a Cronbach’s alpha value of 0.672. The value indicates an internal consistency and reliability of the variables on the market performance of QMS accredited small training providers.
- **The influence of business operations of QMS accredited small training providers on market performance:** Four items that include business

reputation, finding new customers, increasing competitiveness, and increasing market share (Goh & Ridgeway, 1994; Sun & Cheng, 2002; Piskar & Dolinsek, 2006; Quaz & Jacobs, 2004) were measured with business operations variable.

Reliability analysis on the business operations of QMS accredited small training providers on market performance reveals a Cronbach’s alpha value of 0.850. This value is above 0.7 and indicates an internal consistency and reliability of the variables on the influence of QMS on business performance.

The tool used for the analysis of data was the Statistical Package for the Social Sciences (SPSS) version 23.0.

STUDY RESULTS

This section used the descriptive analysis to assess small training provider’s achievements from QMS accreditation. Chi-square tests were also used to analyse the significance of QMS accreditation on market performance. It also employed correlation analysis to determine the influence of business operations of QMS accredited small training providers on market performance.

Achievements from QMS accreditation on market performance

The descriptive analysis was used to establish whether the expectations of small training providers were achieved from QMS accreditation on market performance. According to Bryman and Bell (2007), the descriptive statistics describe the data in a sample and provide measures of central tendency. The following Table 3 presents results on the achievements from QMS accreditation on market performance.

TABLE 3: Achievements from QMS accreditation on market performance

| Small training provider’s expectation variables | Percentage response on: | |
|---|------------------------------|---|
| | the reasons to implement QMS | the achievements from QMS accreditation |
| Improves business reputation | 86.2 | 65.5 |
| Finds new customers | 55.2 | 44.8 |
| Increases competitiveness | 83.3 | 56.7 |

| | | |
|----------------------------|------|------|
| Increases the market share | 66.7 | 46.7 |
|----------------------------|------|------|

Source: Research data (2020)

Small training providers provided the reasons to implement QMS for market performance. They also indicated whether the reasons to implement QMS were achieved. The results (in percentages) on the reasons to implement QMS in Table 3 have response rates that are above 50%. Hence, the reasons to improve business reputation and increase competitiveness have high response rates of 86.2% and 83.3%, respectively.

The expectations were also achieved from QMS accreditation on the variables relating to the improvement of business reputation and increase competitiveness. Their response rates were 65.5% and 56.7%, respectively.

The following Table 4 presents results on the influence of QMS accreditation on market performance.

TABLE 4: the influence of QMS accreditation on market performance.

| | Improves business reputation | Finds new customers | Increases competitiveness | Increases the market share |
|-----------------------|------------------------------|---------------------|---------------------------|----------------------------|
| Chi-Square | 19.232 | 9.454 | 15.437 | 43.702 |
| Df | 12 | 12 | 12 | 24 |
| Asymp. Sig. (2 sided) | 0.083 | 0.664 | 0.218 | 0.008 |

Source: Research data (2020)

Chi-square is significant at the 0.05 level (2-tailed)

The majority of QMS accreditation variables in Table 4 do not statistically have significant relationships with small training providers' market performance (at $p > 0.05$). These include variables for improving business reputation, finding new customers and increasing competitiveness. However, QMS accreditation has the ability to increase small training providers' market share (at $p < 0.05$).

The influence of business operations of QMS accredited small training providers on market performance

The influence of QMS accreditation on market performance

Pearson Chi-square tests were used to find any significant relationship between study variables. The decision to use the non-parametric test was due to the fact that there were no specific assumptions regarding the study population (Welman, Kruger & Mitchel, 2009). However, Saunders, Lewis and Thornhill (2012) define the chi-square as a statistical test that determines whether there are statistically significant associations between the observed and expected frequencies of two variables. It reveals the association between contrast statements and the objective of the study.

The study used Spearman Rho correlation to find any significant relationship between study variables (Cooper & Emory, 1995). This non-parametric test was used to determine the direction and strength of the variables. Correlation can reveal the significance of correlation; if significant, whether it is positive or negative (that is, the direction of correlation), as well as the strength of the correlation.

The analysis on the significant relationships between the variables for business operations of QMS accredited small training providers were tested with market performance variables. These include business reputation, finding new customers, increase competitiveness, as well as market share.

TABLE 5: the influence of business operations of QMS accredited small training providers on market performance

| Market performance variables | | Business that operates in accordance with QMS objectives |
|------------------------------|-----------------|--|
| Improves business reputation | Correlation | -0.157 |
| | Sig. (2-tailed) | 0.416 |
| | N | 78 |
| Finds new customers | Correlation | 0.104 |
| | Sig. (2-tailed) | 0.592 |
| | N | 78 |
| Increases competitiveness | Correlation | -0.011 |
| | Sig. (2-tailed) | 0.955 |
| | N | 78 |
| Increases market share | Correlation | 0.555 |
| | Sig. (2-tailed) | 0.002 |
| | N | 78 |

Source: Research data (2020)

Correlation is significant at the 0.05 level (2-tailed)

The majority of market performance variables in Table 5 do not statistically have a significant relationship with business that operates in accordance to QMS objectives (at $p > 0.05$). These include market performance variables to improve business reputation, find new customers and increase competitiveness. However, the market performance variable relating to an increase in market share and the variable for a business that operates in accordance with QMS objectives have a coefficient r -value of 0.555. This is a directly proportional but medium correlation between the two variables. This indicates that market share increases with a direct proportion of the small training provider that operates in accordance with QMS objectives.

DISCUSSION

The main objective of the study was to examine the influence of QMS accreditation on small training providers in KwaZulu-Natal. It established whether QMS accreditation has an influence in increasing the market performance of accredited small training providers. According to Zondo (2018), QMS

accreditation is not exploited for its real purpose such as learner satisfaction leading to increased profit and improved process efficiency, as well as long-term market growth. Leonardo (2011) explains that one of the reasons is the absence of quantitative measurement methods used by many organisations. The lack on the use of this type of measurement technique makes owners of training businesses unable to recognise QMS benefits in a tangible way. As a result, the influence of QMS accreditation to improve business reputation, find new customers and increase competitiveness is lacking. However, both the chi-square and correlation study results revealed that QMS accreditation leads to an increase in market share. Participants indicated that market share increases with a direct proportion in small training providers operating in accordance with QMS objectives. Hence, Sampaio, Saraiva and Guimaraes (2011a) concur that the motivations of QMS accreditation can be classified according to one of two main categories: internal and external. Internal motivations are related to the goal of achieving organisational improvement, whilst the external motivations includes the promotional and marketing goals, customer pressures, as well as an improvement in market share. Some of the

performance measures used to quantify the impact of QMS accreditation include sales increase and market share. There is also a consensual opinion by Corbett, Montes-Sancho and Kirsch (2005); Conca, Llopis and Tari' (2004) that when companies implement QMS based mostly on external motivations, improvements obtained are then mainly of an external nature (such as promotional and marketing goals, as well as market share increase).

IMPLICATIONS OF RESULTS FOR POLICY AND PRACTICE

The study established that small training providers benefit from QMS in increasing their market share. However, they do not take full advantage of QMS accreditation to promote their businesses.

Apart from the achievements of QMS accreditation on market performance, the following recommendations can be made:

- 1) Accredited small training providers should develop and implement an effective marketing strategy in order to get new customers using QMS accreditation status.
- 2) They should be able to identify new opportunities and develop training programmes that are demanded by the market. This will, subsequently, increase their competitiveness and enter new markets.

LIMITATIONS OF THE STUDY

The usefulness of results is constrained by small sample size (Zondo, 2018). Small training providers who were previously accredited but had had their accreditation withdrawn were excluded from the study. However, the respondents were geographically dispersed within KwaZulu-Natal and represented a wide range of cross-section of industrial sectors.

CONCLUSION

The majority of variables for QMS accreditation in small training providers have no relationship with market performance. These includes business reputation, to find new customers and increase competitiveness. It is crucial that small training providers determine the right market performance measures during QMS implementation in order to find new markets and increase competitiveness. They need market performance indicators that measure the market impact of accreditation. Small

training providers should take advantage of QMS accreditation status for their businesses' market performance.

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