

Repositório ISCTE-IUL

Deposited in *Repositório ISCTE-IUL*:

2023-10-31

Deposited version:

Publisher Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Pimentel, L. & Afonso, S. (2019). Key success factors and conditions for quality management implementation in micro-enterprises: A case study. In Jens J. Dahlgaard, Su Mi Dahlgaard-Park (Ed.), *Leadership and strategies for quality, sustainability and innovation in the 4th Industrial revolution: QMOD 2019 : Proceedings*. Krakow: Lund University Library Press.

Further information on publisher's website:

<https://www.ism.lu.se/en/qmod/history-qmod-icqss-conferences>

Publisher's copyright statement:

This is the peer reviewed version of the following article: Pimentel, L. & Afonso, S. (2019). Key success factors and conditions for quality management implementation in micro-enterprises: A case study. In Jens J. Dahlgaard, Su Mi Dahlgaard-Park (Ed.), *Leadership and strategies for quality, sustainability and innovation in the 4th Industrial revolution: QMOD 2019 : Proceedings*. Krakow: Lund University Library Press.. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

KEY SUCCESS FACTORS AND CONDITIONS FOR QUALITY MANAGEMENT IMPLEMENTATION IN MICRO-ENTERPRISES: A CASE STUDY

Luís Pimentel,

Ph.D. in Management, Associate Researcher, Assistant Professor

BRU (Business Research Unit), ISCTE-IUL (University Institute of Lisbon) (Portugal)

e-mail: luis.pimentel@iscte-iul.pt; luisvilelapimentel@gmail.com

School of Economic and Social Sciences, Universidade Europeia (Portugal)

luis.pimentel@universidadeeuropeia.pt

Soraia Afonso, Msc in Management, Researcher

School of Economic and Social Sciences, Universidade Europeia (Portugal)

e-mail: soraia.filipa@live.com.pt

Abstract

Purpose: The purpose of this paper is to examine if quality management can be implemented in a micro-enterprise. Indeed, very few studies have been found in literature analysing quality management in micro-enterprises. Additionally, this paper explores the key success factors for quality management implementation that are most likely found, and seeks also to identify the conditions linked to quality management implementation in a micro-enterprise setting.

Methodology: This investigation covers one micro-enterprise in Portugal (H3D is the name of the organisation). It operates in the hospitality and catering industry – equipment manufacturing and assemblage, and services provided. A qualitative methodology was used to conduct the research, supported on a case study. Data were collected from tape-recorded interviews and from written documentation provided by the company.

Findings: It was found that it is possible to implement a quality management system in a micro-enterprise, even being difficult to put in place. However, an actor is needed to trigger the process. Moreover, several key success factors identified in literature (particularly the Oakland revised model) were clearly seen in the organisation. Additionally, some quality management practices were found being deeply rooted in the company.

Research Implication: This paper shows that micro-enterprises can also implement quality management systems (visualized in key success factors), in an intuitive way, when an institutional entrepreneur acts. This conclusion is very important for academics and for practitioners.

Originality/Value: There is a gap in the literature regarding the implementation of quality management in micro-enterprises. Very little research has been conducted on this subject. This paper shows that micro-enterprises can also implement successfully quality management, under some specific conditions.

Keywords: Quality Management; Total Quality Management; Micro-enterprises; Case study

1. Introduction

Today, organisations need to look for strategies that allow them not only to satisfy the market, but also to achieve business success. In this context, quality management has been a guideline to be followed by companies focused on excellence (Tari, 2005). Total Quality Management (TQM) has been identified by researchers as the most relevant managerial system/framework regarding quality management, aiming to improve efficiency and achieve better results in organisations (Fitzgerald, 2007). Indeed, customers' and employees' satisfaction or innovation are, for example, key outcomes not seen in traditional financial performance (Johnson & Kaplan, 1991; Kanji, 1998). TQM implementation and the corresponding critical success factors have been the purpose of researchers, particularly because TQM and business excellence are strongly linked (Dahlgaard, Chen, Jang, Banegas, & Dahlgaard-Park, 2013; Duh, Hsu, & Huang, 2012; Erikson & Hansson, 2003).

This paper concerns an investigation about whether it is possible to implement quality management in micro-enterprises, trying to close a gap regarding very few studies that have been found in literature analysing quality management in micro-enterprises. Moreover, the research also intends to identify which critical success factors can be found in a micro-enterprise, regarding quality management system.

The investigation is based on a qualitative approach. A case study was conducted as research method. The subject of the case study is H3D, a Portuguese micro-enterprise working in the catering sector.

After the introduction, the paper is structured as follows. Literature review on quality management is presented in section two. Section three describes the methodology adopted in the investigation, identifying also the field site where the research was conducted. Section four presents the empirical study. Finally, section five presents a discussion of the findings and conclusions.

2. Literature Review

Organisations look permanently for business success, which implies the need of identification of the critical success factors and relevant information to support managers decision-making and constant monitoring (Veen-Dirks & Wijn, 2002; Khodaveysi, Mobarakabadi & Slambalchi,2016).

Critical success factors can be defined as ‘one of the several elements that consistently cause or produce success in any business or organisation’ (Lawrimore, 2011, p. 6). To achieve good performance, critical success factors must be viewed as interdependent and interlinked factors, to help companies to respond effectively to problems or challenges previously identified (Lawrimore, 2011). Critical success factors must have the following characteristics: i) the ability to support the planning process of the organisation; ii) the ability to provide useful and detailed information about the company and the competitive position in the market; and iii) the ability to carry out an analysis at all levels (Boynton & Zmud, 1984).

Regarding services companies, the critical success factors to assure the quality of the service provided are strongly linked to customers approach, as Zhang, Jin, Wang, Goh & He (2016) mention: i) interaction with customers; ii) constant assessment and monitoring of customers’ satisfaction, perception and needs; iii) adaptability of the organisation to the several changes in the customers’ values and needs; iv) added value to customers in all services provided; v) determined collaborators and able to communicate with the consumer; vi) team work; and vii) and a strategy with the aim of the customer’s satisfaction.

Customers have been increasingly pressuring companies, implying a response to meet the customers’ needs. Customers’ satisfaction is, today, one of the most important key success factors for quality management implementation. Indeed, quality management and TQM have been linked to organisational culture, considering the goals directed to customer’s satisfaction or efficiency of processes, oriented to increase the quality of products and services (Lo & Chai, 2012; Oakland, 2011; Rad 2006; York & Miree, 2004; see also Kanji & Yui, 1997, who introduce the concept of ‘total quality culture’).

Continuous improvement is the ‘umbrella’ that encompasses this approach, being considered by researchers a critical success factor for quality management implementation, strongly linked to innovation and strategic guidelines (Bessant, 1998; Bessant, Caffyn & Gallagher, 2001). Dahlgaard & Dahlgaard-Park (2006) go further and mention that core TQM principles (strong commitment, continuous improvement and focus on customers) are applied to the whole organisation (see also Dahlgaard-Park, 2011). Consequently, motivation and satisfaction of all collaborators and commitment of the Board of Directors are crucial for a successful quality management approach (Hietschold, Reinhardt & Gurtner, 2014).

Synthesizing and integrating these factors, some models in the sphere of quality management and TQM are viewed in literature. One of the first models associated with TQM was developed by Kanji (1998): four governing TQM principles that organisations must follow were identified: (i) delighting the customer, (ii) people-based management, (iii) continuous improvement and (iv) management by fact (Kanji, 1998). Later, Oakland (2004, 2011) mentioned that, to achieve excellence, TQM is the vehicle, and the model characterised by the four Ps and four Cs provides a framework for this: Planning, Performance, Processes, People, Customers, Commitment, Culture and Communication (Oakland, 2011, who propose a system for assessing and improving healthcare organisations based on leadership, people management, partnership/teams, processes and product/service results). A revised model was proposed by Pimentel and Major (2016), who added a fifth C – collective involvement and a fifth P – power. Additionally, leadership and top management sponsorship are considered critical success factors for organisations to achieve business excellence (Kanji, 1998; see also Dahlgaard, Petterson & Dahlgaard-Park, 2011).

Regarding people-based management (Kanji, 1998), the role of the actors in organisations is relevant for organisational success. The concept of institutional entrepreneurship is closely linked to this approach. Within the scope of institutional theory and institutional analysis, “new institutions arise when organized actors with sufficient resources (institutional entrepreneurs) see in them an opportunity to realize interests that they value highly” (DiMaggio, 1988: 14). In the same vein, Hinings, Greenwood, Reay & Suddaby (2004) state that institutional entrepreneurs are associated with the idea of actors who wittingly respond to opportunities, to capture advantage. Additionally, Battilana, Leca & Boxenbaum (2009) identified the needed

conditions for an actor to become an institutional entrepreneur: i) favourable field characteristics; ii) actor's social position; iii) creation of a vision for divergent change; iv) mobilization of allies behind the vision (Battilana *et al.*, 2009)

The quality management approach and the inherent quality management models must be translated into practice to create value added. Indeed, the application of quality management practices by companies provides them with an incomparable advantage, by focusing on continuous improvement (visualized at the levels of performance or business strategy), implying stronger capabilities to operate in the market (Reed, Lemak & Mero, 2000). Accurate quality management practices have also been found in organisations regardless the formal implementation of quality management frameworks or models (Pimentel & Mendes, 2018).

Moreover, quality management is considered, today, a crucial factor to achieve a better reputation, position and success in the market and, consequently, higher competitiveness. For organisations quality became a powerful weapon to manage the future, to act and to improve outcomes and performance, both internal and external (Oakland, 2004). Concretely, critical success factors for quality management efficiency are linked to TQM and must be clearly identified in organisations, to help to explain how companies can meet customer needs, implement a better decision-making process and, consequently, improve performance (Fatemi, Wei & Moayeryfard, 2016; Hietschold *et al.*, 2014; see also Seetharaman, Sreenivasan & Bonn, 2006).

Not many studies have been conducted in literature regarding quality management implementation in small and medium sized enterprises (SMEs) (Kaur & Sharma, 2014; see also Assarlind & Gemyr, 2014; Kumar, Khurshid & Waddell, 2014; Murphy, 2016; Oliveira, Corrêa, Balestrassi, Martins & Turrioni, 2019). Other few studies mention explicitly Lean implementation in SMEs (Bhamu & Sangwan, 2014; Hu, Mason, Williams & Found, 2015; Pimentel & Mendes, 2018). However, no studies have been found so far in literature regarding quality management implementation in micro-enterprises.

3. Methodology

3.1. The field site

H3D company is the object of study of the present research. The company was set up in 2009, and operates in the hospitality and catering industry, supplying equipment manufacturing and assemblage. The creation of the organisation resulted from an entrepreneur (currently the main shareholder and the CEO), who worked previously in the sector and had a detailed knowledge of the business. Thus, confidence and trust regarding the relationship with customers were the basis for the implementation of the company. Beyond supply of equipment, the company provides consultancy to hotels, developing projects and innovative studies, including maintenance and post-sales technical assistance and repair.

The mission of H3D is to provide an excellence service to customers. Being concerned on the customer`s satisfaction, the company focuses its activity on a quality service and continuous innovation, as the CEO mentions:

‘Our customers` success is our success’ (CEO, 2018.03.19).

Consequently, the company provides technical support to solve any problem raised by the customer, in a very short working time (24 hours). This service implies the establishment of very strong ties with customers, like confidence, direct contact, security, cooperation and loyalty. The company operates mainly in Lisbon area,

Nine collaborators work in the organisation and the turnover in 2018 was around 1.9 million euros (which means the classification of a micro-enterprise – European Comission, 2003). In 2018, the company obtained a net profit of around 50,000 euros. The organisational chart visualizes by four departments: production, business/projects, maintenance, and administrative. The production department appeared 3 years after the beginning of the business activity, after the recognition that customers often felt the need of tailor-made equipment in stainless steel.

3.2. Research methods

A qualitative and longitudinal case study was carried out in H3D, a micro-enterprise operating in Portugal to understand how quality management can be implemented in a micro-enterprise. The research was conducted between November 2017 and May 2018, period when data were collected and analysed. The main steps taken to develop the case study comprised research design, data collection, patterns identification and evidence assessing (Ryan, Scapens and Theobald, 2002; Yin, 2018). The researcher role was “Visitor” since several visits happened on the field site, where data were collected (through documentation and interviews) (Ryan *et al.*, 2002).

The first phase of the investigation consisted of analysis of documentation and a first exploratory interview to the CEO of H3D, to confirm the interest, the scope and the objectives of the research to be carried out. After the confirmation, two research questions were posed: i) Is it possible (and how) to implement quality management in micro-enterprises?; ii) what are the key success factors for quality management implementation in micro-enterprises?

Globally, 11 interviews were conducted, lasting 6 hours and 10 minutes (see appendix). Most of the interviews were tape-recorded and transcribed. The interviewees comprised the organisational structure of the company – the CEO, manufacturing technicians, maintenance and sales heads, and administrative collaborators. All collaborators were interviewed. A customer was also interviewed. All interviews were semi-structured, followed a guide and ended with open questions. The average was 34 minutes per interview. To meet the need to combine different sources, a way to increase the possibility to know how true the data are (Scapens, 1990; Yin, 2018), data were also collected from direct observation (three operational meetings) and archival documentation: i) organisational chart and functions; ii) brochure containing the history, the mission, the vision and the values of the company; iii) SWOT analysis; iv) annual activity reports; v) annual reports and financial statements.

4. Empirical study

From the beginning of its operational activity, H3D was always focused on satisfying accurately the demands from customers. This approach was crucial to justify the decision to produce tailor-made equipment, instead of commercial intermediation. Own production provides the company with the ability to answer, in a more rapid and personalized way, according to the demands of its customers. Accordingly, The CEO states:

‘From the beginning, our customers’ success is our success and that is why the quality is an obvious objective. Indeed, the idea of creating this company came from suggestions of customers managed by me in a different company where I worked previously, who were very satisfied by the way I used to deal with their needs. Consequently, we provide products and services directed to customers’ needs, and that is why we decided to produce tailor-made equipment, as a value-added difference, needing a very accurate planning process; consequently, we can respond, in a more rapid and personalized way, to the demands of our customers’ (CEO, 2017.11.02).

Additionally, the CEO and founder of H3D identified the key factors for a change in the operating business, mainly associated with a very close and tight relationship with customers. Indeed, providing consultancy and after-sales services (technical assistance, maintenance or repair) implies a very close and tight connection to customers. Satisfaction of customers was, clearly, the trigger that originated the creation of the company by the entrepreneur, as mentioned by the CEO in an interview:

‘The CEO and company founder is always concerned about transmitting confidence to customers, establishing easily friendship relationships; from the beginning he had the vision of creating a business based on trust and confidence. We accepted easily those ideas and, today, I may say that we have a very close relationship with our customers; we are always in contact and, if the customer

needs some help or some intervention, we are at their disposal, which makes them feel comfortable. We create often friendship ties with them' (Maintenance department head, 2018. 03.06).

The company started operating in the market with 3 collaborators, and increased twice the activity in the following years up to the current facilities situation (in 2016). New shareholders also appeared in the business. Today, the facilities comprehend a manufacturing area, a sales and after-sales space and a shop, divided by three floors. The development of the business always followed the guarantee of well-being among customers and collaborators:

'Whenever we thought about extend and develop our activity, we were always concerned about customers' satisfaction and collaborators well-being, beyond the quality of products and services provided. We think quality and innovation are essential factors for business success' (Projects and sales manager, 2018.03.01).

'H3D is a company that was always concerned about quality, not only regarding the products and services, but also the accomplishment of lead time to customer requirements. In the hospitality and catering sector, the failures in the equipment can happen at any time and on the worst day and, if that is the case, it must be immediately repaired. H3D always succeeds in meeting my needs and that is why I continue to be its customer' (Customer, 2018.03.15).

Indeed, the entrepreneur and initial shareholder was aware of the relevance of people management as a crucial support for business success:

'I was always very concerned about collaborators feeling and involvement; team building and team work are essential for goals and customers' requirements achievement; thus, a great attention was given to collaborators recruitment, and I was always personally involved in collaborators selection and recruitment, assuring they are in the same vein; human resources management is closely linked to customers' needs' (CEO, 2018.03.19).

Being a very small company, management involves permanently all collaborators. Consequently, the concern about customers' satisfaction and performance covers everyone. Consequently, commitment and collective involvement are visualized every day and at every moment of the business, as the CEO mentions:

'I do my best to make them responsible for their tasks, to make them be more independent to take decisions and make them feel more confident about their work, which motivates them much more` (CEO, 2018.03.19).

All collaborators are concerned about achievement of goals required by customers and the inherent performance of our organisation. The good atmosphere in the company and the availability of resources also influence the motivation and commitment of employees, as some collaborators state:

'The work team is highly motivated, always bearing in mind the company's objectives, to provide an accurate and complete service, always according to the customers' needs; we work in a family atmosphere (Technician 3, 2018.03.08).

'I feel grateful, because all that is required – car, tools, materials – is supplied and that is why we don't find obstacles in our work. Whenever I have a good performance, I am rewarded, and so I can say that I feel grateful` (Technician 2, 2018.03.08).

'I am grateful to my colleagues, to my boss and, mainly, to the customers. It is very important to hear: 'I feel happy with your work`, 'That is why I only buy in your company, not because of money'. That is why I feel motivated' (Maintenance department head, 2018.03.06).

The culture of the organisation is a culture based on values – honesty, professionalism, devotion and always bearing the customer in mind. The culture of the company implies the possibility of new practices, innovating and developing the business. Quality is crucial to the

business success, which means that all collaborators are ready to accept innovative proposals to improve the operational procedures and the customers' satisfaction. For example, the CEO mentions:

‘Yes, of course the culture of H3D is always ready to accept innovative changes, which will be relevant for the company’s development and growth. Everybody is involved in quality requirements and is qualified to accept changes, that can occur and influence the company’s quality and performance’ (CEO, 2018.03.19).

Regarding a similar approach, another collaborator states:

‘Yes, we are all receptive to new ideas and continuous improvement. We are all always ready to evolve professionally and adopt changes to benefit the company’ (Administrative technician, 2018.03.01).

Complementarily to the practices previously mentioned, the company has established actions in the field of the costs reduction. This need increased from 2014, when taps and economic lamps to avoid waste were installed. Other organisational techniques have also been adopted with the aim of reusing the available resources, minimizing the waste, such as: i) decrease of ‘remakes’, due to the good communication between departments; ii) optimization of fuel consumption; iii) optimization of energy consumption regarding advertising posters; iv) quick reply to customers’ requirements on equipment parts, implying stocks reduction. Not compromising quality, the CEO says that the practices of cost reduction in H3D aim to ‘do more with less’ (CEO, 2018.03.19).

Quality management is not formally rooted in the organisation. However, all collaborators feel, in an intuitive way, the relevance of acting accurately to meet customers’ needs, to accomplish lead time, to assure quality in the products and services. Thus, the CEO is thinking, today, of the possibility of organizing training sessions regarding quality management structured framework and, sequentially, a ISO 9001 certification:

‘So far I have not been concerned about creating a quality management organisational function. In my previous work, we received training sessions and a quality manual was implemented, Thus, I’m familiar with the framework, but never used it in practice. Resulting from our practices directed to customer’s needs, and based on and quality of products and services and on collaborators commitment and involvement, the business has running OK and goals have been achieved. However, as we want to continue growing, perhaps it is time to organize quality management training sessions, just to consolidate the concept among employees; later, we must evolve to ISO 9001 certification, to improve the positioning and image of the company in the market’ (CEO, 2018.03.19).

5. Discussion and conclusions

Considering the findings identified in the empirical study, and the practices developed by H3D, it is possible to conclude that the organisation is running a successful business. From the beginning of operational activity of H3D (in 2009) the concern with good practices regarding customers’ and collaborators’ satisfaction was present in the way the CEO created and developed the company. Collaborators in general recognize that the CEO and company founder is always ‘concerned about transmitting confidence to customers, and establishing easily friendship relationships’. Thus, communication is seen in the field site (cf. Oakland, 2011). On the other hand, the CEO presents clearly characteristics of leadership, also sponsoring initiatives regarding quality management (cf. Kanji, 1998).

Being a micro-enterprise, quality management is not formally visualized in the organisation, and is not easy to put in place. The CEO and founder of the company had previous contact with a quality manual in the former company where he worked, as he states: ‘in my previous work we received training sessions and a quality manual was implemented’. The remaining employees were not formally familiar with the framework. However, good practices have been seen in H3D, rightly from the beginning of the operational activity. Concretely, following customer satisfaction (cf. Dahlgaard & Dahlgaard-Park, 2006; Kanji, 1998; Oakland, 2011; Zhang *et al.*, 2016) is clearly seen as a key success factor in the company (‘from the

beginning, our customers' success is our success and that is why the quality is an obvious objective'). Moreover, the idea of creation of the company business results from former relationship between the CEO and some customers ('the idea of creating this company came from suggestions of customers managed by me in a different company where I worked previously').

But other good practices linked to quality management were found. Collaborators satisfaction and people-based management are permanent concerns of management (cf. Kanji, 1998; Hietschold *et al.* 2014), when the CEO mentions 'I was always very concerned about collaborators feeling and involvement; a great attention was given to collaborators recruitment'. Moreover, a culture of quality management and continuous improvement is present in the organisation ('the culture of H3D is always ready to accept innovative changes ... that can occur and influence the company's quality'; 'we are all receptive to new ideas and continuous improvement') (cf. Bessant, 1998; Dahlgaard & Dahlgaard-Park, 2006; Kanji, 1998).

Quality management has not been formally seen in the organisation. However, all collaborators apply daily quality management procedures in an intuitive way. The attention translated by the CEO to personnel recruitment is surely the reason for such a pro-active approach. Indeed, the good practices involving quality management encompass the whole organisation, implying a collective involvement ('everybody is involved in quality requirements and is qualified to accept changes') (cf. Pimentel & Major, 2016), The culture of the organisation translates this concern ('the culture of H3D is always ready to accept innovative changes, which will be relevant for the company's development and growth') (cf. Kanji & Yui, 1997).

The statement presented by the CEO, mentioning that 'I do my best to make them responsible for their tasks, to make them be more independent to take decisions and make them feel more confident about their work', implies the visualization of commitment to achieve goals and fulfill customers' requirements (cf. Dahlgaard & Dahlgaard-Park, 2006; Oakland, 2011).

On the other hand, planning, performance and efficiency are a crucial concern of the employees. These findings are seen when the collaborators mention 'needing a very accurate planning process' or 'do more with less', or when some examples of costs reduction (always maintaining quality) are evidenced in the empirical study.

Findings indicate clearly that the quality management critical success factors seen in the organisation, result from the action of the CEO and founder of the company. Indeed, the CEO founded H3D company, and triggered a new approach regarding quality management practical concepts and requirements. Evidence shows that those intuitive and perceived quality management practices were only possible due to the CEO, who acted as an institutional entrepreneur. Indeed, the CEO presented the needed characteristics seen in literature for an actor to be an institutional entrepreneur (Battilana *et al.*, 2009). Indeed, favourable field characteristics are seen (the foundation of new company, based on favourable relationship with customers). Second, as the CEO and founder is the institutional entrepreneur, the actor's social position is also visualized. Third, the CEO presents a vision for divergent change ('from the beginning he had the vision of creating a business based on trust and confidence'), Finally, the CEO mobilized allies when he 'was always personally involved in collaborators selection and recruitment, assuring they are in the same vein'. Confirming this approach, the CEO is an actor who wittingly responded to opportunities, to capture advantage (the creation of the new company) (cf. DiMaggio, 1988; Hinnings *et al.* 2004).

Findings and evidence previously presented allow the response to research question number one: yes, it is possible to implement quality management in micro-enterprises. However, some specific conditions are identified: i) an institutional entrepreneur (actor who triggers a change or innovative process) must exist; ii) quality management procedures and practices are intuitive, being possibly later translated into a formal approach.

Many of the key success factors for quality management identified in literature were found in the field site. Particularly, most of the Oakland revised model (Oakland, 2004; 2011; Pimentel & Major, 2016) success factors are visualized: Customer, Commitment, Culture, Communication, Collective Involvement, Performance, People, Planning. Additionally, the critical success factors identified by Zhang *et al.* (2016) were found in the organization, highlighting the customers' approach: i) interaction with customers; ii) monitoring of customers' satisfaction, perception and needs; iii) adaptability of the organisation to the several changes in the customers' values and needs; iv) added value to customers in all services provided; v) determined collaborators and able to communicate with the consumer; vi) team work; and vii) a strategy with the aim of customer's satisfaction. Moreover, leadership (cf. Kanji, 1998) and

continuous improvement (cf. Bessant, 1998; Dahlgaard & Dahlgaard-Park, 2006; Kanji, 1998) also visualized as key success factors. These findings allow the identification of the key success factors for quality management implementation in a micro-enterprise, allowing the response to research question number two.

Considering that a gap exists in literature regarding quality management in micro-enterprises, more studies are needed to identify if and how quality management is possible in these organisations, confirming or not the evidence and conclusions of this study.

References

- Assarlind, M., & Gremyr, I. (2014). Critical factors for quality management initiatives in small- and medium-sized enterprises. *Total Quality Management & Business Excellence*, 25(4), 397-411.
- Battilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: towards a theory of institutional entrepreneurship. *The Academy of Management Annals* 3(1), 65-107.
- Bessant, J. (1998). Developing continuous improvement capability. *International Journal of Innovation Management*, 2(4), 409-429.
- Bessant, J., Caffyn, S., & Gallagher, M. (2001). An evolutionary model of continuous improvement behaviour. *Technovation*, 21(2), 67-77.
- Boynton, C. A., & Zmud, W. R. (1984). An Assessment of Critical Success Factors. *Sloan Management Review*, 25(4), 17-27.
- Dahlgaard, J. J., & Dahlgaard-Park, S.M. (2006). Lean production, six sigma quality, TQM and company culture. *The TQM Magazine*, 18 (3), 263-281.
- Dahlgaard, J. J., Chen, C.-K., Jang, J.-Y., Banegas, L. A., & Dahlgaard-Park, S. M. (2013). Business excellence models: Limitations, reflections and further development. *Total Quality Management & Business Excellence*, 24(5-6), 519-538.
- Dahlgaard-Park, S. M. (2011). The quality movement: Where are you going? *Total Quality Management & Business Excellence*, 22(5), 493-516.
- Dahlgaard, J.J., Petterson, J., & Dahlgard-Park, S.M. (2011). Quality and lean health care: A system for assessing and improving the health of healthcare organisations. *Total Quality Management & Business Excellence*, 22(6), 673-689.
- DiMaggio, P. (1988), *Interest and agency in institutional theory*, in L. Zucker (Ed.), *Institutional Patterns and Organisations*, Cambridge, MA: Ballinger, 3-22.
- Duh, R.-R., Hsu, A. W.-H., & Huang, P.-W. (2012). Determinants and performance effect of TQM practices: An integrated model approach. *Total Quality Management & Business Excellence*, 23(5-6), 689-701.

Erikson, H., & Hansson, J. (2003). The impact of TQM on financial performance. *Measuring Business Excellence*, 7(1), 36–50.

European Commission (2003). European Commission Recommendation, C(2003) 1422, (2003/361/EC), *Official Journal of the European Union*, L 124/36, 36-41.

Fatemi, M. S., Wei, C. C., & Moayerifard, H. (2016). CSFs for Total Quality Management (TQM) in Service Organisations: Review. *International Journal of Academic Research in Business and Social Sciences*, 6(1), 254-264.

Fitzgerald, L. (2007). Performance measurement. In T. Hopper, D. Northcott, & R. Scapens (Eds.), *Issues in management accounting* (3rd ed., pp. 223–241). Edinburg Gate: Pearson Education.

Hietschold, N., Reinhardt, R., & Gurtner, S. (2014). Measuring critical success factors of TQM implementation successfully – a systematic literature review. *International Journal of Production Research*, 52(21), 6254-6272.

Hinings, C.R., R. Greenwood, T. Reay and R. Suddaby (2004), *Dynamics of change in organisational fields*, in Poole, M.S. and A.H. Van de Ven (Eds.), *Handbook of Organisational Change and Innovation*, New York: Oxford University Press, 304-323.

Johnson, H. T., & Kaplan, R. S. (1991). *Relevance lost: The rise and fall of management accounting* (2nd ed.). Boston, MA: Harvard Business School Press.

Kanji, G. K. (1998). An innovative approach to make ISO 9000 standards more effective. *Total Quality Management*, 9(1), 67–78.

Kanji, G. K., & Yui, H. (1997). Total quality culture. *Total Quality Management*, 8(6), 417–428.

Kaur, P., & Sharma, S.K. (2014). Evaluating the relationship and influence of critical factors of TQM on business performance: evidence from SMEs of manufacturing sector. *IUP Journal of Operations Management*, XIII(4), 17-30.

Khodaveysi, S., Mobarakabadi, H., & Slambolchi, A. (2016). An overview of critical success factors. *Advanced Social Humanities and Management*, 3(2), 22-28.

Khumar, M. Khurshid, K.K., & Waddell, D. (2014). Status of quality management practices in manufacturing SMEs: a comparative study between Australia and the UK. *International Journal of Production Research*, 52(21), 6482-6495.

Lawrimore, E.W., (2011). *The 5 Key Success Factors - A Powerful System for Total Business Success*. Charlotte, USA: Lawrimore Communications Inc.

- Lo, Q. Q., & Chai, K. H. (2012). Quantitative analysis of quality management literature published in total quality management and business excellence (1996–2010). *Total Quality Management & Business Excellence*, 23(6), 629–651.
- Murphy, W.H. (2016). Small and mid-sized enterprises (SMEs) quality management (QM) research (1990-2014): a revealing look at QM's vital role in making SMEs stronger. *Journal of Small Business & Entrepreneurship*, 28(5), 345-360.
- Oakland, J. S. (2004). *Oakland on quality management*. Oxford: Elsevier Butterworth-Heinemann.
- Oakland, J. (2011). Leadership and policy deployment: The backbone of TQM. *Total Quality Management & Business Excellence*, 22(5), 517–534.
- Oliveira, G.S., Corrêa, J.E., Balestrassi, P.P., Martins, R.A., & Turrioni, J.B. (2019). Investigation of TQM implementation: empirical study in Brazilian ISO 9001-registered SMEs. *Total Quality Management & Business Excellence*, 30(5-6), 641-659.
- Pimentel, L., & Major, M. (2016). Key success factors for quality management implementation: evidence from the public sector, *Total Quality Management & Business Excellence*, 27 (9-10), 997-1012.
- Pimentel, L., & Mendes, M.R. (2018). A Journey towards Lean: The case of a small and medium sized enterprise (SME), Paper presented at the 20th QMOD Conference, Cardiff, UK.
- Rad, A. M. M. (2006). The impact of organisational culture on the successful implementation of total quality management. *The TQM Magazine*, 18(6), 606–625.
- Reed, R., Lemak, J. D., & Mero, P. N. (2000). Total quality management and sustainable competitive advantage. *Journal of Quality Management*, 5, 5-26.
- Ryan, B., Scapens, R. W. & Theobald, M. (2002), *Research Method & Methodology in Finance & Accounting*, 2nd edition, London: Thomson.
- Scapens, W.R. (1990). Researching Management Accounting Practice: The Role of Case Study Methods. *British Accounting Review*, 22, 259-281.
- Seetharaman, A., Sreenivasan, J., & Bonn, P. L. (2006). Critical Success Factors of Total Quality Management. *Quality & Quantity*, 40(5), 675-695.
- Tari, J. J. (2005). Components of successful total quality management. *The TQM Magazine*, 17(32), 182–194.
- Veen-Dirks, P., & Wijn, M. (2002). Strategic Control: Meshing Critical Success Factors with the Balanced Scorecard. *Long Range Planning*, 35(4), 407-427.

Yin, K. R. (2018). *Case Study Research and applications: Designs and Methods*. (6th). California, Thousand Oaks: Sage Publications.

York, K. M., & Miree, C. E. (2004). Causation or covariation: An empirical re-examination of the link between TQM and financial performance. *Journal of Operations Management*, 22, 291–311.

Zhang, M., Jin, B., Wang, A., Goh, N. T., & He, Z. (2016). A Study of Key Success Factors of Service Enterprises in China. *Journal of Business Ethics*, 134(1), 1-14.

Appendix – Interviews

No.	Interviewee	Date	Duration
1	CEO	2017.11.02	70 min
2	Administrative technician	2018.03.01	35 min
3	Projects and sales manager	2018.03.01	25 min
4	Maintenance department head	2018.03.06	30 min
5	Technician 1	2018.03.08	20 min
6	Technician 2	2018.03.08	25 min
7	Technician 3	2018.03.08	25 min
8	Technician 4	2018.03.08	20 min
9	Customer	2018.03.15	40 min
10	Accounting technician	2018.03.19	30 min
11	CEO	2018.03.19	50 min
Total			370 min (6 hours and 10 minutes)
Average			34 min