

ISO 9001 IMPLEMENTATION STUDIES ON SMALL MEDIUM ENTERPRISE: MOTIVES, PROBLEMS, AND BENEFITS

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Abstract

The ISO 9001 implementation trend has spread to small and medium enterprise (SME) sector. Given this, the research aims to examine the motives, problems, and the benefits gained by the SME after applying that quality management system standard. The research uses a case study descriptive approach. The research object is a rubber processing SME. Data were gathered through informal interviews and discussions with the research object's ISO 9001 consultant and a review of quality documents and records that are owned by the research object. The research result shows that the research object's motives in implementing ISO 9001 is an external drive (customer requirement). The problems faced are financial limitations, lack of resources, and lack of human resource skills. Meanwhile the significance benefits gained are the mapped business processes, documented working methods, and fulfilled customer requirement. As a comparison, the findings were compared with similar research on a SME in Canada.

Kata kunci: ISO 9001, SME, motives, problems, benefits

Abstrak

Mechanical and Functional Performance Test of Room Germinator for Seed Germination Test

Tren penerapan ISO 9001 telah merambah sektor industri kecil dan menengah (IKM). Mengingat hal itu, penelitian ini bertujuan untuk menguji motif, kendala-kendala, dan manfaat-manfaat yang diperoleh oleh IKM setelah menerapkan standar sistem manajemen mutu ini. Pendekatan penelitian bersifat deskriptif studi kasus. Objek penelitian adalah sebuah IKM pengolahan karet. Data dikumpulkan melalui wawancara informal dan diskusi dengan konsultan ISO 9001, objek penelitian serta tinjauan dokumen dan rekaman sistem manajemen mutu yang dimiliki objek penelitian. Hasil penelitian menunjukkan bahwa motif objek penelitian dalam menerapkan ISO 9001 adalah faktor dorongan eksternal (persyaratan pelanggan). Kendala-kendala penerapan yang dihadapi adalah keterbatasan pendanaan, kekurangan sumber daya, dan kekurangan skill sumber daya manusia. Sementara manfaat utama yang diperoleh objek penelitian adalah terpetakannya proses usaha, metode kerja terdokumentasi, dan terpenuhinya persyaratan pelanggan. Sebagai perbandingan, hasil penelitian ini akan dibandingkan dengan penelitian sejenis yang dilakukan terhadap IKM di Kanada.

Keywords: ISO 9001, IKM, motif, kendala, manfaat

1. INTRODUCTION

ISO 9001 is an international standard widely accepted throughout the world. This standard has been used by 951.486 organizations in various business sectors (Souza Pouza et al., 2009).

ISO 9001 implementation for an organization is a response to demands for quality products and customer satisfaction. Magd and Nabulsi (2003) explained that to be competitive in the era of global economic and tight

competition of business environment, organizations must focus on satisfying customer needs in an effort to have the business advantage, and even survival.

ISO 9001 is a generic standard (ISO 9001, 2008). This means the standard is applicable to all organizations, whether big organization or small organization, any type of product produced, and in any sector organizations engaged (Van den Heuvel et al., 2005)

ISO 9001 implementation has spread to small and medium enterprise (SME) sector. This phenomenon is quite interesting considering that

ISO 9001 implementation and certification requires amount of cost. On the other hand, SME usually will be very careful in spending their money.

Therefore, this study aims to examine the ISO 9001 implementation in SME. More specifically, this study tried to identify motives, constraints, and benefits of ISO 9001 implementation for SME

2. LITERATURE REVIEW

2.1 ISO 9001 Standard

ISO 9001 standard was issued by ISO in 1987. This standard was subsequently revised in 1994, 2000, and 2008 (Souza Pouza et al., 2009).

ISO 9001 is an international standard on quality management system where an organization (ISO 9001, 2008). Need to demonstrate a consistent ability to meet customer requirements, regulations and legislation. Aims to enhance customer satisfaction through effective application system, including processes for continuous improvement system and guarantee customer suitability requirements, regulations, and legislation.

ISO 9001 standard based on the concept that a set of minimum characteristics of quality management system can be useful standardized, focused on customer satisfaction and suppliers as well as on the process rather than product-oriented (Magd and Curry, 2003). Many authors claim that ISO 9001 is a model for implementing Total Quality Management (TQM), among others Lewis et al. (2005), Vouzas and Gotzamani (2005), Piskar and Dolinsek (2006).

ISO 9001 has eight key principles which are customer focus, leadership, personnel involvement, process approach, system approach to management, continuous improvement, factual approach to decision making, and mutually beneficial relationships with suppliers (Lam, 2002). In addition, ISO 9001 also adopted the methodology of Plan Do Check Action (PDCA) (ISO 9001, 2008).

Organizations that want to be ISO 9001 certified should meets the requirements contained in the standard. This standard has five main requirements starting from clause 4 of the quality management system requirements. The other requirements are the management responsibility (clause 5), resource management (clause 6), product realization process (clause 7) and measurement, analysis and improvement (clause 8) (ISO 9001, 2008).

2.2 ISO 9001 Implementation Motives, Problems, and Benefits

The phenomenon of ISO 9001 implementation has attracted the attention of many researchers and has been studied extensively (Viadiou et al., 2006). Research topics on motives, problems, and benefits of ISO 9001 implementation have been studied by many researchers such as Magd et al (2003), Magd and Cury (2003), Van den Heuvel et al. (2005), Magd (2006), Singh and Nahra (2006), Prayogo and Amrik (2006), and Magd and Nabulsi (2007).

Sampaio et al. (2008) summarize the conclusions of those research results as follows. The organization motives and benefits of ISO 9001 implementation can be classified into two categories: internal motivation/benefit and external motivation/benefit. Internal motivation/benefit relates to the desire to achieve the improvement of the organization. While the external motivation/benefits associated with the issue of promotion and marketing, customer pressure, increase market share, etc.

On the other hand, the problem of ISO 9001 implementation ever encountered is the lack of top management involvement in the implementation process. In addition, other constraints include: high implementation and maintenance costs, despite of its decrease over time; lack of auditors's knowledge concerning specific industries; excessive auditors support over paperwork; different standard interpretations among auditors; and ethical issues related with certification bodies.

2.3 Previous Research

The research focused on efforts to investigate the motives, problems, and benefits of ISO 9001 implementation in SME is still limited. However, Bhuiyan and Alam (2005) and White et al. (2009) research are some of those rare research.

The previous research that will be discussed in this paper is Bhuiyan and Alam's research (2005), considering the research of White et al. (2009) worked on a non-profit SME. Meanwhile the undertaken research is a study of profit oriented SME.

Bhuiyan and Alam (2005) investigated the implementation of ISO 9001 on a SME in Canada that engages in designs and manufactures aquatic structures for recreational purposes, mainly for use in outdoor playgrounds. The investigation result indicates that the research object has three motives to implement ISO 9001. The first motive is the internal driven, while two other motives is external driven. The first motive was the desire to obtain the discipline

working climate and more consistent operating processes. Meanwhile two external motives are to meet customer expectations and as marketing tools.

The ISO 9001 implementation's problems are quality perception; lack of top management commitment, lack of resources, lack of training, and resistance to change. While the significance of ISO 9001 implementation benefits are the improved documentation, improved quality perception; and a disciplined work environment.

3. METODOLOGY

3.1 Research Design

This research using case study descriptive research (Kitazawa and Sarkiz, 2000). Case study research has a number of advantages: it enables researchers to develop grounded theories that are practical and relevant; inferences on causal relationships can be made with more validity due to the longer term observations available; comparative case studies allow for clarification of "multiple conjectural causation"; it provides a broad environmental picture (holistic patterns) of phenomena in real world settings; and it is a primary data collection tool that can be used to triangulate findings with other tools and techniques that are rigid and structured (e.g. questionnaires, secondary data acquisition) (Kitazawa and Sarkiz, 2000).

Our research is designed as in figure 1. The first stage aims to identify the purpose of this research. The second stage aims to find appropriate literature for research purposes. The output of the second phase is the understanding of research context and other SME research that would be useful for comparative analysis. The third stage aims to identify the motives, problems and benefits of ISO 9001 implementation in the SME by using a case study approach. The fourth stage aims at comparing the research findings and other research results. Last stage is the withdrawal of research conclusions.

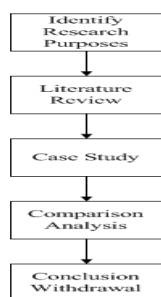


Figure 1 Research Design

3.2 Data Collection Methods

The research object is the CV. ABC. CV. ABC is a rubber processing SME. Its products are rubber composition and rubber SIR. The data collection method is using key informant strategy approach (Singh and Nahra, 2006). Data obtained through the CV. ABC's ISO 9001 consultant by informal interviews and discussions, as well as communication via e-mail/phone. The data was collected during March 2010.

4. RESULTS AND DISCUSSIONS

4.1 ISO 9001 Implementation Motives Constraints, and Bnenefit

The ISO 9001 implementation motive for the research object is to meet the requirement of its customer. The customer requires its supplier to get ISO 9001 certification if they want to continue their status as its supplier. In this context, the research object's motive is more external driven then internal driven.

The problems. The ISO 9001 implementation constraints were faced by research object are financial limitations, lack of resources, and lack of human resource skills. Financial problems faced by the research object primarily are related to costs that required for performing calibration of measuring instruments, purchasing additional infrastructure, and hiring trainer.

In the context of resources, for facilities and infrastructure, research object does not have a computer and printer. This condition makes difficulty in developing and revising the quality management system documents.

Meanwhile, for human resources, research object also does not recruit new human resources for system development even though the workload increases. In fact, the director also serves a management representative.

The limitation of human resources skills can be seen from the level of existing human resources education. Average education level of supervisors and managers is senior high school and diploma. This causes the difficulty of ISO 9001 requirements interpretation on research object business process.

The benefits. The ISO 9001 implementation benefits were gained by the research object are fulfilled customer requirement, mapped business processes and documented working methods.

Since the research object got ISO 9001 certificate, its status as supplier is maintained. The mapped business process makes research object top management can view the processes that overlap and simplify it. Meanwhile the useful of the working methods documentation is as knowledge sharing material in case there is a new employee.

4.2 Discussion

The ISO 9001 implementation main motive of this study are included in the category of external motivation. This means the quality awareness of research object is need to be increased. This finding also differs from the findings generated by Bhuiyan and Alam (2005) where the main motive to implement ISO 9001 is an internal motivation so that the acquisition of ISO 9001 certificate becomes less important. Nevertheless, this finding supports other research findings that motivate organizations to implement ISO 9001 can generally be divided into internal motivation and external motivation also applies to SME.

ISO 9001 implementation problems that are found in this study are similar to research findings obtained by Bhuiyan and Alam (2005). This means that SME has problem on financial, infrastructure, and human resource.

The fundamental difference between this study's findings with previous research lies in the involvement of top management in the implementation process. This research shows that top management fully engaged as a management representative. However, this is due more to the research object does not have human resources capable to be management representative rather than an awareness of quality management importance.

The organization motive will affect the implementation benefits were gained (Williams, 2004). Internal driven motive is more consistent with the objectives of ISO 9001 standard development rather than external driven motive (Singh and Nahra, 2006). This will make the benefits gained by internal driven organizations different with external driven organization. The findings of this study indicate that the research object that have external motive get less benefit than the Bhuiyan and Alam's research object (2005), which internally motivated.

5. CONCLUSION

Based on this research results, it can be concluded that the organization motive could be categorized as internal and external driven motives. In the context of this research object,

the motive is an external motive which is to meet customer requirements. Meanwhile the problems that faced in the ISO 9001 implementation of are financial limitations, lack of resources, and lack of human resource skills.

The organization motives influent the benefits were gained. The motive of this research object which is external motive lead them did not obtain significant benefits. However, the benefits obtained by the research object are the mapped business processes, documented working methods, and fulfilled customer requirement.

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