

# Implementing the ISO 9000 steps at the local level: A survey of Malaysian local authorities

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#### Abstract

The implementation of the ISO 9000 quality management system within the Malaysian local government organizations has involved multiple steps and the consideration of multiple aspects. This study identifies and discusses the preferred steps used by Malaysian local authorities in implementing the ISO 9000. Quantitative data were obtained through a questionnaire survey of randomly sampled 53 local authorities. Results from the analysis show that most of the Malaysian local authorities were inclined to use the 11 implementation steps that have been proposed by the government as a guide to implement ISO 9000 within their respective organizations.

Keywords: ISO 9000, ISO 9000 certification process, ISO 9000 implementation steps, local authorities, local government, management modernisation

#### Introduction

Local government (LG) organizations or also known as the local authorities are government agencies that are responsible for providing various forms and types of services to the population at the local or district level. Through the legal provisions of the Local Government Act 1976, the administration of LG is under the jurisdiction of the respective state governments. However, by virtue of being a government agency, LG are obliged and required to abide and comply with the guidelines and policies set by the federal government. As such, the government directive issued regarding the necessity for all agencies to implement ISO 9000 involves these LG as well. The ISO 9000 Quality Management System is in actual fact an approach introduced by the government to ensure there is a continuous improvement in the levels of quality within the services rendered by its agencies. It is also introduced as a means to establish the continuity of the government's efforts to enhance the existing quality systems present in all its agencies including the LG. For the purpose of implementing ISO 9000, the government has provided a host of facilities to its agencies, for example by providing a specific implementation guide as well as appointing the Modernization and Management Planning Unit (MAMPU) as consultants for the implementation process.

Nevertheless the implementation of ISO 9000 within an organization in the public sector or specifically within the LG is not an easy task. The implementation processes involved need to be planned and executed precisely and consistently. It is therefore pertinent that necessary focus and due concentration be given towards the formulation of these implementation steps. The failure to do so will undoubtedly hinder the ISO 9000 implementation process itself and may even halt the intentions of the LG in obtaining the required quality system accreditation.

#### **Research background**

Various specific approaches have been put forth by the government in the hopes of ensuring quality assurance and excellence in the services rendered by its agencies. Among the approaches that were introduced are the Work Procedure Manual (WPM), Desk Files (DF), Micro Verification System (MVS), Total Quality Management (TQM), Client Charter as well as various other measures. In line with this effort, the government also introduced another approach which was believed would be able to enhance the quality of the services, namely the implementation of the ISO 9000 Quality Management System. This approach is a quality standard based on the internationally practiced ISO 9000 Quality System.

According to the implementation schedule prescribed by the government, all agencies were required to implement the ISO 9000 Quality Management System within their respective organizations by the year 2000 (Government of Malaysia, 1996). This directive clearly demonstrates the government's dedication in ensuring that the level of the public service quality rendered and provided is always continuously improved. The process of getting accreditation and certification of the ISO 9000 Quality Management System is an endeavor that should be well planned and carried out systematically. This is largely due to the fact that a quality management system is a standard of quality which has a series of prerequisites in place that need to be conformed to prior to any organization being awarded certification. The difficulty in obtaining the accreditation is not only felt by the public sector organizations but also those from the private sector. In view of these complications in accreditation, it is therefore pertinent that the activities of formulating, finalizing and planning the implementation stages of ISO 9000 be given the utmost consideration.

As one of the government agencies that provide various types of services to the local communities, LG were also obligated to implement the ISO 9000. The Civil Administration Improvement Circular, series 2, year 1996 titled "The Guideline for Implementing MS ISO 9000 in the Civil Service" which was issued by the Prime Ministry's Department outlined 7 basic steps which were proposed to be adopted by any government agency intending to implement the quality management system. However in 2002, the government issued another Civil Administration Improvement Circular, series 2, year 2002. In this new circular, the government announced that the MS ISO 9000:1994 standard was revoked and superseded with a newer version, the MS ISO 9000:2000 standard in line with the amendments made by the international ISO governing body. Through this circular, 6 new steps were proposed as well to be the implementation process for the ISO 9000. These steps were to act as a basic guide to assist and ease the LG in implementing and subsequent obtaining accreditation of the ISO 9000. Latest, since ISO 9000:2000 was then updated to the 2008 version, the government once again instructed its agencies, including LG organizations to update the ISO implementation according to the latest version. This directive was stated in the MS ISO 9001:2008 Implementation Guidelines for the Public Sector, dated January 1<sup>st</sup>, 2010. Through this guideline, the government has listed 11 steps as a method in implementing ISO 9000:2008 in their agencies. As a guide, the presence of these steps was not meant to be irrevocable but rather a framework that could be molded and modified according to the needs and suitability of the LG itself. In other words, the LGs still had the chance to forward theirown versions of the implementation steps in meeting the directive of implementing the ISO 9000 Quality Management System.

Nevertheless, until the end of 2005, only a very small number of LA managed to get the ISO 9000 accreditation. Through the records presented in the Ninth Malaysia Plan, only 8 LG managed to achieve the required accreditation. This scenario begs the question of whether the LA had fully utilized the implementation steps as put forth by the government or did they adopt a totally different approach. In tandem with this issue, the objective of this research is to identify the various types of steps preferred or adopted by the LA in Malaysia in the process of seeking ISO 9000 accreditation. The hypothesis of this study is as follows:

 $H_0$ : The ISO 9000 implementation steps utilized by the LGs have the tendency and inclination to fully adopt the approach prescribed by the government through their related circulars.

H<sub>1</sub>: The ISO 9000 implementation steps utilized by the LGs are consisted of steps that have been modified and revised by the quality management teams of the Local Government to be in sync with the needs of the respective Local Government organizations.

### **ISO 9000 Quality Management System**

The ISO 9000 Quality Management System is a quality standard that is based on international standards. Internationally, this quality standard is known as the ISO 9000. ISO is the acronym for the International Organization for Standardization which is an affiliated organization with the National Standard Bodies which involves the grouping of members from 91 nations. The main task of ISO is to produce various standards, such as specifications, testing methods, definitions and terminologies as well as symbols for all kinds of industries. In 1987, a technical sub-committee under the ISO introduced a quality standard known as the ISO 9000, which was the result of the revision and modification done on the a few relevant existing quality standards such as the British BS 5750 and the Canadian CSA Z299. The designation of this ISO 9000 quality standard differs from country to country, for example in European nations, it will be known as the EN 29000 and in Malaysia for instance, it is designated as the MS ISO 9000. The different names and designations adopted by these various countries however do not implicate any change in the concept, principles, characteristics and the purpose of the standard which remain similar the world over.

ISO 9000 is basically a "written standard that prescribes and lists the fundamental elements that are required within an organization's quality system to ensure the services provided are able to fulfill clients' requirement" (Prime Minister's Department, 1996). Based on this definition, the ISO 9000 can be seen as quality management system which encompasses specific measurements in achieving a form of quality assurance in an organization. Therefore, ISO 9000 will function as a kind of monitoring system that requires every organization to identify the respective requirements of their clients, plan and control the necessary processes involved in fulfilling these requirements. Apart from this, it also provides a suitable and effective training program that would be given to the involved employees. ISO 9000 also requires that auditing activities be performed on every implemented process as a means of review to gauge the effectiveness of the processes as well as evaluating the level of achievement.

As a quality standard, ISO 9000 was introduced in the public service sector to satisfy a number of reasons. According to the Prime Minister's Department (1996), an organization generally implements the ISO 9000 to fulfill the needs of the client who desire a certain organization to implement this quality standard in hopes of contributing towards improvement and enhancement efforts in developing the effectiveness and efficacy of that organization. Through these aims, it can be deduced that the implementation of ISO 9000 is obviously a necessary step in meeting the demands of the community who in turn are the actual parties being serviced by the public sector. Furthermore, the implementation of ISO 9000 is generally accepted as being capable of upgrading service effectiveness and as a means of improvement, especially in terms of service quality. The Modernization And Management Planning Unit (MAMPU) (1997) has stressed the fact that the main objective of implementing ISO 9000 in the civil service sector is to develop a quality management system which is efficient and effective in its efforts to provide the best available service consistently to the communities and public. This objective is certainly within grasp as the implementation of ISO 9000 will undoubtedly create a process that will improve continuously towards the level of quality is the relevant services. It must also be stated that when ISO 9000 has been implemented as a comprehensive system, the continuous improvement attributed to systematic and well planned process as well as methods will be more easily achieved (Mohd Yusoff, 1997).

Based on these reasons discussed here, it is clear that the aim behind the implementation of ISO 9000 actually delves into the achievement of three main targets, namely enhancing competency and efficacy, creating continuous improvement and increasing satisfaction levels of clients. The implementation of ISO 9000 is seen as being able to meet these targets as ISO 9000 is basically a quality system which is

developed to create a form of control towards the levels of quality in the related services. ISO 9000 also proposed a basic system that can be used to by any organization wanting to increase its quality levels (Mohd Yusoff, 1997). The principles of preventive measures, continuous review, creating a consistent way of working, documentation and auditing which are inscribed within the implementation processes of ISO 9000 are in actual fact vital mechanisms that can be used to build up the levels of quality in services inside any organization. According to the Government of Malaysia (1997), ISO 9000, being a quality system which is based upon these principles, can be used to enhance the capabilities of the management in making decisions with more precision, controlling the inputs used in the processes, managing more efficiently costs involved in rectifying repetitive and low quality works, minimizing wastages and finally increasing productivity.

#### Implementing ISO 9000 within the Local Government Organization

The implementation of ISO 9000 in the public sector undeniably brings about more benefits and advantages. According to Halim and Manogran (1999), the implementation of ISO 9000 will be able to increase the confidence level of the clients and consumers towards a certain organization, enhance the levels of advancement, supervision and productivity, identifying with more clarity the demands of the clients and service objectives, achieving and maintaining a quality standard with the specific aim of fulfilling client requirements either expressed or implied, proving the capability of the organization, increasing the confidence of the management and to raise credibility and self image. As a government agency, LGs are directly responsible for implementing ISO 9000 in their respective organizations. In meeting this responsibility, LGs should plan a clear, precise and systematic implementation process. These implementation processes should include steps which are detailed and comprehensive but at the same time easily applicable by all concerned parties.

Reviewing the implementation of the ISO 9000 at the international stage, there are in actual fact a number of various implementation methods which have been practiced or proposed to be used by any interested organization. According to Alcock (1995), generally in order to implement ISO 9000 within an organization there are 10 steps which can be adopted, which are deciding why the firm needs to acquire ISO 9000 accreditation and certification; examining the current situation; the forming of an implementation committee; creating a clear action plan; providing the necessary training; documenting the quality system; implementing the quality system; nurturing awareness and the training of auditors; auditing the quality system; and the readiness to be evaluated by an accreditation body.

Meanwhile, Wilson (1996) has underlined 8 implementation stages in executing ISO 9000. These eight steps are committing to implement; evaluating the current conditions of the organization; defining the needs gap; developing an implementation plan; implementing the documentation process; executing other related and necessary activities; confirming the organization's conformance towards ISO requirements; and audit by a certified body. Yeoh and Lee (1996) on the other hand, have listed 11 implementation steps that they feel should be used by any construction based companies which have the desire to implement ISO 9000 in their organizations. These steps are the decision to pursue ISO 9000 implementation by the managing director; electing a quality assurance manager and forming the implementation committee; preparing an implementation plan and identifying the allocation of resources; applying for ISO certification in order to set the evaluation and review date; preparing the Quality Manual; the preparation of flow charts which graphically represent all the main related processes; documenting the Work Procedures and Project Quality Plans; implementing the documentation process and quality system; conducting internal audits; performing reviews before external audits are done; and auditing by a accredited body.

According to the Civil Administration Improvement Circular, series 2, year 1996, initially there were 7 basic steps of implementation that were proposed for the adoption of any government agency wanting to seek ISO 9000 accreditation. These steps were namely, to acquire full commitment from the top management; to establish a ISO 9000 implementing team; to provide training; to evaluate existing quality

systems; to formulate an action plan; to implement the quality system; and to carry out quality audits (Government of Malaysia, 1996). However in tandem with the amended version of the ISO 9000, the Civil Administration Improvement Circular, series 2, year 2002 was distributed by the government. This new circular lists new revised implementation steps that can be used in the pursuit of ISO 9000 certification. This new proposal involves steps that consist of acquiring training; conducting gap analysis, the preparation of ISO 9000:2000 documentation; conducting documentation audits; implementing a quality system based on the ISO 9000:2000 Quality System documents; and the application for certification. After the ISO 9000 version has changed to version 2008, there 11 steps have been suggested as a comprehensive method in implementing ISO 9000:2008 documentation, implementation of quality management system, internal audit training, executing internal audit, management review meeting, level one audit, level two audit, level three audit and reevaluation audit.

Apart from these proposed steps, 8 stages of implementation were also proposed by the Modernization and Management Planning Unit (MAMPU) as a process towards ISO 9000 accreditation for government agencies. These stages are building top management commitment; identifying the main processes for ISO 9000:2000 implementation; providing skills and training to the implementation team; conducting gap analysis; preparing the ISO 9000 documents; training all officers and staff; implementing the documented procedures; implementing ISO 9000; and finally accreditation and certification. Based on the implementation stages proposal discussed here, it is discovered that the ISO 9000 implementation process in the public sector can be undertaken in various ways and methods. This is largely due to the fact that there are no specific guidelines made mandatory by the government in order to achieve accreditation. In actual fact, these proposed steps act more as a general guideline to assist government agencies, including LGs, in implementing MS ISO 9000.

However, when thoroughly scrutinized, it is found that these steps and implementation methods as discussed here have been formulated and developed within mutual dimensions such as commitment, training, evaluation, monitoring and conformance. Commitment here relates to the processes involved in the willingness and earnestness which should be shown by all concerned parties involved in the ISO 9000 implementation process, especially the top management, implementation teams and the support staff. Training is concerned with the steps involved in providing guidance, comprehension and education to all vested parties. The evaluation dimension is closely connected with the formulation of steps that can be utilized to identify situations, targets, requirements, progress and achievement. Monitoring revolves on the steps needed to ensure the ISO 9000 implementation process is done according to the necessary requirements. Finally, the conformance dimension refers to the creation of steps designed to initiate the application for obtaining ISO 9000 accreditation.

### **Research methodology**

According to the Local Government Department (2011), currently, there are 149 organizations of LG existing in Malaysia. However, for the purpose of this research, only 53 LGs which are operating in Peninsular Malaysia were randomly chosen as the research sample as well as respondents for this study. Therefore, questionnaires consisting of open-ended questions were distributed to these 53 LGs. The questionnaires required the quality team members or officers of the selected LGs to list down the steps formulated and taken by them in implementing ISO 9000 in their organizations. The obtained data was then analyzed using the descriptive statistical method specifically named as frequency analysis in order to identify the categories of steps which were more recurrently used by the respective LGs. For a more comprehensive data analysis, the Statistical Package for Social Science (SPSS) software was used.

#### Analysis and discussion

From the 53 sets of questionnaires that have distributed, all the respondents duly answered and returned the questionnaires. From these 53 respondents, 26 from them were those representing District Councils, 21 respondents representing Municipal Councils and 6 respondents represented City Councils. From these 53 respondents, only 13 (24.5%) LG organizations were found to have established specific units or sections to handle the implementation of quality programs, especially the ISO 9000 quality management system within their respective organizations. Meanwhile, 40 respondents or 75.5% of these LG organizations were found to have delegated the task of implementing quality programs as part of additional responsibilities for other existing individuals, units, sections or departments in their organizations. Through the analysis conducted, it was also discovered there is a wide range in terms of the respondents' experience in implementing quality programs. This is evident through the analyzed data where there were 20 respondents (37.7%) who were involved in implementing quality programs, specifically ISO 9000, for more than 10 years; 17 respondents (32.1%) with experiences ranging from 1 to less than 3 years; 5 respondents (9.4%) who have been involved for 3 to less than 5 years; another 5 respondents (9.4%) who have been involved for 7 to less than 10 years; 3 respondents (5.7%) with less than 1 year experience; and the remaining 3 respondents (5.7%) with an experience of 5 to less than 7 vears.

According to the listing as stated by the 53 respondents, there are basically 7 categories of steps taken by the LGs in implementing ISO 9000 in their respective organizations. The categories of steps are as follows:

Category	List of Steps	Number of Steps
1	<ul> <li>Obtaining full commitment from the top management</li> <li>Establishing a MS ISO 9000 implementation team</li> <li>Providing training</li> <li>Evaluating existing quality systems</li> <li>Formulating an implementation plan</li> <li>Implementing the quality system</li> <li>Conducting quality audits</li> </ul>	7
2	<ul> <li>Acquiring full commitment of top management</li> <li>Identification of main processes related to the implementation of MS ISO 9000</li> <li>Forming and training the MS ISO 9000 implementation team</li> <li>Preparation of MS ISO 9000 documents</li> <li>Employee training and formulation of plan or implementation schedule</li> <li>Implementation of MS ISO 9000 quality system and carrying out internal audits</li> <li>Audit by SIRIM</li> <li>Accreditation and certification</li> </ul>	8
3	<ul> <li>Obtaining top management commitment</li> <li>Forming and training the implementation team</li> <li>Identifying main processes involved in the implementation of ISO 9000</li> <li>Preparing ISO 9000 documents</li> <li>Training of employees and formulation of plan or implementation schedule</li> <li>Implementing ISO 9000 quality system and conducting internal audits</li> <li>Final review by the internal quality unit of the LG</li> <li>SIRIM audit</li> <li>Accreditation and certification</li> </ul>	9

Table 1. List	of steps for	<b>ISO 9000 im</b>	plementation	within local	government	according to category

4	<ul> <li>Receiving the top management's full commitment</li> <li>Forming and training the implementation team</li> <li>Identification of main processes related to the implementation of ISO 9000</li> <li>Providing initial disclosure and training to all relevant employees</li> <li>Conducting gap analysis</li> <li>Preparation of ISO 9000 documents</li> <li>Reevaluation of employee comprehension and capabilities as well as devising an implementation plan</li> <li>Implementing the MS ISO 9000 quality system</li> <li>Internal audits by the implementation team or the quality unit</li> <li>Audit by SIRIM</li> <li>Accreditation and certification</li> </ul>	11
5	<ul> <li>Obtaining full commitment from the top management</li> <li>Indentifying main processes involved in the implementation of ISO 9000</li> <li>Establishing and training an implementation team</li> <li>Devising a plan of work</li> <li>Conducting gap analysis</li> <li>Preparation of ISO 9000 documents</li> <li>Training of employees and setting the implementation date</li> <li>Review of documents and distribution</li> <li>Implementing the ISO 9000 quality system</li> <li>Internal audits by the implementation team or the quality unit</li> <li>Audit by SIRIM</li> <li>Accreditation and certification</li> </ul>	12
6	<ul> <li>Acquiring training</li> <li>Conducting gap analysis</li> <li>The preparation of ISO 9000:2000 documentation</li> <li>Conducting documentation audits</li> <li>Implementing a quality system based on the ISO 9000:2000 Quality System documents</li> <li>The application for certification</li> </ul>	6
7	<ul> <li>Training on ISO 9000 standard</li> <li>Implementing gap analysis</li> <li>ISO 9000:2008 documentation</li> <li>Implementation of quality management system</li> <li>Internal audit training</li> <li>Executing internal audit</li> <li>Management review meeting</li> <li>Level one audit</li> <li>Level two audit</li> <li>Level three audit</li> <li>Reevaluation audit</li> </ul>	11

These categories of implementation steps were then analyzed using the frequency analysis method. The following figure 1 shows the results of the analysis done. From the figure, it can be clearly seen that the most frequent set of steps adopted by the LG is Category 7 with a frequency of 21 times (39.6%), followed by Category 2 with 10 recurrences (18.9%), Category 6 with 8 recurrences (15.1%), Category 4 and 5 both with frequencies of 4 times (7.5%) and finally Category 1 and 3 that has recorded 3 recurrences (5.6%). Based on this analysis, it is evident that the 11 steps implementation method in Category 7 is the most preferred method utilized by the LGs in implementing ISO 9000. The 11 steps are namely, training on ISO 9000 standard, implementing gap analysis, ISO 9000:2008 documentation, implementation of quality management system, internal audit training, executing internal audit,

management review meeting, level one audit, level two audit, level three audit and reevaluation audit. If these 11 steps are scrutinized, it is obvious that these steps are similar to the ones proposed by the MS ISO 9001:2008 Implementation Guidelines for the Public Sector. Therefore, the null hypothesis,  $H_0$  should be accepted as it has been discovered that most LGs have the tendency to use the steps as proposed by the government. This is due to the fact that LGs are more prone to abide by directives and guides prepared by the government.



Figure 1. Categories of ISO 9000 implementation steps in local government

Consequently, these LGs tend to use the implementation steps proposed by the government as an easy way out in terms of getting ISO 9000 accreditation and certification. On the other hand, the question of the effectiveness of the steps proposed by the government also arises. This is mainly because even though a lot of the LGs adopt and use these steps only a handful of them have been successfully accredited and certified. The result of the analysis also shows that there are a number of LGs which have done review and modifications on the implementation steps. This finding clearly demonstrates that there a small number of LGs which have tried to amend the relevant implementation steps to suit the needs of their respective organizations. When referred to LGs which have been successful in getting ISO 9000 certification, it has been found that a number of them have implemented the quality system with their own interpretation of the implementation steps. For example, the Majlis Perbandaran Pasir Gudang has set forth their version of a 9 step implementation process which consist of getting commitment from the top management, forming the implementation team and deciding the relevant main processes in implementing ISO 9000, providing training, establishing meetings between the management representative and employees, conducting gap analysis, preparation of the ISO 9000 documents, training employees to implement the documented procedures, implementing ISO 9000 and finally achieving accreditation and certification.

## Conclusion

Implementing the ISO 9000 Quality Management System is indeed a necessary and advantageous effort for any organization. This is because the implementation of ISO 9000 will certainly bring about a host of benefits to the organization implementing it, specifically in terms of the standard of quality in the services or products offered by these organizations. In order to ease the implementation process, systematic and comprehensive steps have to be planned in detail as an implementation guide. This research conducted on the LG organizations clearly shows that a majority of LGs prefer to adopt verbatim the implementation methods and steps proposed by the government, often without any analysis on the suitability of these steps for their respective organizations. This flagrant tendency to simply duplicate is seen as counteractive measure to the well being of the organizations within the LGs. The clear evidence of this malaise is the fact that even though the calls and directives for ISO 9000 certification in LGs have been canvassed since 1996, until today a vast majority of these organizations still have not been capable of doing so.

#### References

Alcock TD (1995) ISO 9000: A manager 's guide. Federal Publications, Kuala Lumpur.

- Halim, S dan Manogran, P. (1999). *MS ISO 9000: A Practical Guide for Implementation in The Civil Services*. Kuala Lumpur: INTAN
- Government of Malaysia (1996), *Garis Panduan Bagi Melaksanakan MS ISO 9000 Dalam Perkhidmatan Awam*. Kuala Lumpur : Jabatan Perdana Menteri.
- Government of Malaysia (2002), Garis Panduan Bagi Melaksanakan MS ISO 9000:2000 Dalam Perkhidmatan Awam. Kuala Lumpur : Jabatan Perdana Menteri.
- Government of Malaysia (2010), *Panduan Perlaksanaan MS ISO 9001:2008 Dalam Sektor Awam*, Kuala Lumpur: Jabatan Perdana Menteri.
- Local Government Department (2011). Local Authority Name List. http://jkt.kpkt.gov.my/en/main.php?Content=vertsections&SubVertSectionID=56&VertSectionID=43 &CurLocation=43&IID=&Page=1. (accessed on 23rd January 2011).
- Muhammad Rais Abdul Karim (1997), Forum MS ISO 9000 Perkhidmatan Awam. Kuala Lumpur : MAMPU.
- Mohd Yusoff Zakaria (1997). *Penambahbaikan Kualiti yang Berterusan Melalui MS ISO 9000*. Presented at the National MS ISO 9000 Simposium on 6 and 7 January 1997. Kuala Lumpur.
- Wilson, L. A. (1996), *Eight Step Process To Successful ISO 9000*. Kuala Lumpur : Golden Books Centre Sdn Bhd..
- Yeoh, Sek Chew dan Lee, Ng Chai (1996), ISO 9002 In The Malaysian Construction Industry: Guide And Implementation. Malaysia : McGraw-Hill Book Co..