Perception of Success on the Implementation of ISO 9001: 2008 and its Influence on Organizational Commitment

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Abstract - The main objective of this study is to examine the influence of implementing ISO 9001: 2008 to the employees. This study investigates employees’ perspective on the success of implementation of each element or clause in the ISO 9001: 2008 and its influence towards organizational commitment. Moreover, this research attempted to examine the moderating effect of job level and work experience in the relationship between success factors of ISO 9001: 2008 towards organizational commitment. A survey research method was used to gather 142 usable questionnaires from employees of Sabah Electricity Sdn. Bhd. (SESB). The results of this study reveal that there is a significant relationship between the perceived successes of implementation of ISO 9001: 2008 towards organizational commitment. However, the moderating variables of job level and work experience unsuccessfully moderates the relationships.

Keywords: ISO 9001: 2008, organizational commitment, job level, work experience

I. INTRODUCTION

In recent years, organizational commitment has become an important concept in understanding employees’ behaviour in the workplace (Mowday et. al., 1982). It reflects the extent to which employees’ identity with an organization and their commitment level towards achieving organizational goals (Mowday et. al., 1982). This is supported by Scheider and Nygren (1970) which argues that organizational commitment is the process by which organizations’ goals and those of the individual become increasingly integrated and congruent. Mowday et. al. (1982) further explains that, the concept of commitment can be characterized by at least three factors which are (i) a strong belief in an acceptance of organization objectives and values; (ii) a willingness to exert considerate efforts on behalf to the organization and (iii) a strong desire to retain organizational membership. Organizational commitment reflects the extent to which individual is emotionally attached to the organization and identifies with its goal (Meyer & Allen, 1984).

Total quality management (TQM) is defined as both philosophy and a set of guiding principles that represents the foundation of a continuously improving organization (Besterfield, 1995). It integrates fundamental management techniques, existing improvement efforts and technical tools under a disciplined approach. Whereas Wilkinson and Wither (1994) defines TQM in three word definition, total; every person involved (its customers and suppliers), quality; customer requirements are met exactly, management; senior executives are fully committed. In addition, Yusof (1999) stated that TQM process as a total corporate focus on meeting and exceeding customer expectations and significantly reducing cost resulting from poor quality by adopting a new management system and corporate culture. Dahlaagard et. al. (1998) further explained that, the historical evolution of TQM has taken place in 4 stages namely, quality inspections, quality control, quality assurance and total quality management. Kanji (1990) described that TQM is the way of life of an organization committed to customer satisfaction through continuous improvement. This way of life varies from
organization to organization and from one country to another but has certain principles, which can be implemented to secure market share, increase profits and reduce costs.

Deming (1986) signify employee commitment to quality work as a fundamental to a successful total quality management (TQM) program. Brooks and Zeitz (1999) stated that two dimensions of commitment which are particularly relevant to TQM concept: (i) affective commitment, defined as emotional attachment to the organization and its goals (Meyer and Allen, 1984) and (ii) continuance commitment, defined as the intention to remain as a member of the organization (Meyer, Bobocel & Allen, 1991). However in this study, the organizational commitment model developed by Allen and Meyer (1991) was adopted. Allen and Meyer (1991) have categorized employee’s organizational commitment into 3 dimensions which are affective, normative and continuance to provide insight into the employee-organization link.

According to Meyer and Allen (1991), affective commitment defined as an employee’s emotional attachment to identification with and involvement in the organization. This definition has supported the study by Kanter (1968) which described affective commitment as ‘the attachment of an individual’s fund of affectivity and emotion to the group’. While Mowday et. al. (1979) described affective commitment as ‘the relative strength or an individual’s identification with and involvement in a particular organization. On the other hand, continuance commitment to organization is defined as a ‘side bet’ is made when something of importance to an individual (e.g. pension) becomes contingent upon continued employment in that organization (Ali Yusob Md Zain & Gill, 1999). Meyer and Allen (1991) also illustrated continuance commitment as one’s awareness of the cost associated with leaving the present organization. Employees whose commitment is the nature of continuance will stay in the organization because they have too. Moreover, normative commitment defined as feeling of obligations to the organization based on one’s personal norms and values (Meyer & Allen, 1991). Marsh and Mannan (1977) stated that employee with ‘lifetime commitment’ as one who considers it morally right to stay in the organization, regardless of how much status enhancement or satisfaction the company gives over the years. Weiner (1982) described that commitment as the total internalized normative pressures to act in a way which meets organizational goals and interest. He further suggests that individual exhibit these behaviours solely because they believe it is the right and moral thing to do.

ISO 9000 founded by a non-governmentally run organization established in 1947 – the International Organization for Standardization (ISO) and is a combination of national standards from 100 countries (Mohammad Talha, 2004). Awan and Bhatti (2003) described ISO as the ‘one size fits all’ standards. ISO 9000 is a series of internationally accepted guidelines as to how companies should set up quality assurance system focusing on procedures, controls and documentations. The standards are designed to help a company identify mistakes, streamline its operations and be able to guarantee a consistent level of quality. ISO 9001 is a model of quality assurance system in design, development, production, installation and servicing. It is appropriate when conformance to specified requirements is to be assured by the supplier during several phases of an activity which may include design, development, production, installation and servicing.

II. OBJECTIVE OF THE STUDY

There are seven (7) objectives of this study, namely;
1. To examine the relationship between quality management system and organizational commitment.
2. To examine the relationship between management responsibility and organizational commitment.
3. To examine the relationship between resource management and organizational commitment.
4. To examine the relationship between product realization and organizational commitment.
5. To examine the relationship between measurement, analysis and improvement towards organizational commitment.

In this research, the researcher applied previous studies related to ISO 9000 series and the TQM to support the previous research on the relationship between ISO 9001: 2008 towards organizational commitment.

Feng et al. (2008) studied on the relationship of ISO 9001: 2000 quality system certifications with operational and business performance in Australia and New Zealand. This study reveals that the main implication for practicing managers is the findings that success of implementing ISO 9001: 2000 quality management systems would be increased (operational and business performance) if it was well planned and implemented. They also revealed that the effective implementation of ISO 9001: 2000 would also help to increase the philosophical quality aspects of the organizations if they are integrated with employees’ training, periodic audits, corrective action and commitment at all levels of the organization.

Moreover, the study by Yung (1997) proposed that the factors for successful implementation of TQM are commitment and involvement by top management, teamwork approach in problem solving, training to promote quality awareness, improvement of quality control techniques and methods, continuous improvement program and participation of staff at all levels. This was strongly supported by the study conducted by Mosadegh Rad (2006). He conducted a study on the impact of organizational culture implementation of TQM in Isfahan University Hospital, Iran. This study reveals that support and commitment of top management, effective and strong leadership, strategic quality planning, communication of mission statement, maximising employees’ understanding of the vision, values and quality goals of the organizations, training and development, effective human resources management, employees empowerment, employees commitment and voluntary participation are some of the key factors towards successful implementation of TQM. Furthermore, a study conducted by Syed Azizi Wafi and Mustafa Hashim (1999) revealed that the implementation of TQM was another approach of getting job done with clearer demarcation of the standards required.

Considering the organizational rules, a convenient sampling technique was used to distribute 250 survey questionnaires to employees through contact persons (e.g., secretary of department heads, assistant managers and/or human resource managers) in organization. A total of 142 usable questionnaires were returned to the researchers, yielding a 56.8 percent response rate. The number of this sample exceeded the minimum sample of 30 participants as required by probability sampling technique to allow for the data to be analyzed using inferential statistics (Sekaran, 2000). Data were collected using survey questionnaires. The questionnaires were close-ended and the major purpose for this was to make it easier for respondents to answer. It was designed based from past research, adapting and modifying established questionnaires from research journals and articles. A 5-point Likert scale was used to measure the item indicators as it is usually used and may produce slightly higher mean scores relative to the highest possible attainable score, compared to those produce from above 5 or less than 4 point scale (Dawes, 2008).

The questionnaires were divided into three main sections, section A measured on the demographic factors. Section B measured the ISO 9001: 2008, adopted from Bahrul (2004) and organizational commitment were measured in section C, adapted from Meyer and Allen (1991) model.

The statistical package for social science (SPSS) version 16.0 was used to analyze the data. Reliability scores are measured using the the Cronbach alpha, linear regression is used to test direct effect of independent and dependent variable and the hierarchical regression analysis, as recommended by Cohen and Cohen (1983), was used to test the moderating effect of employee motivation in the hypothesized model. This procedure stresses the development of a multiplicative term, which is used to encompass the interaction effect, and to calculate two R²’s, one for the equation, which includes only main effects (main effect model) and the other for a three-term equation (product-term model), which includes both the main and interaction effects. This technique may separate the component parts of the product term from the term itself to account for the complex combination of variance due to main and interaction effects. Standardized coefficients (standardized beta) were used for all analysis. Results of an interaction are evident when the relationship between interacting terms and the dependent variable is significant. The fact that the significant main effects of predictor variables and moderator variables simultaneously exist in analysis does not affect the moderator hypothesis and is significant to interpret the interaction term (Baron & Kenny, 1986).
V. RESULTS

Table 1 shows the respondents’ profile for this study. Most respondents were male (51.4 %), at executive level job positions (57.0 %), 35 years old and below (54.9 %). Many of them have worked for more than 5 years (43.0 %) with education level at diploma and above (64.1 %).

Table 2 shows the results of reliability score for measurement scales. Following Nunally and Bernstein (1994), all research variables exceed the acceptable standard of reliability score which is 0.70. These statistical analyses confirmed that measurement scales used in this study have met the acceptable standard of reliability measure.

Table 3 shows that mean scores for all variables are between 3.235 – 3.816, signifying the levels of compensation, employee relations, training, employee motivation and job performance are ranging from 3.0-4.0.

A. Hypothesis testing results

**H1: There is a significant relationship between quality management system and organizational commitment.**

The bivariate correlation analysis reveals that quality management system significantly and positively correlated with organizational commitment (r = 0.255, p < 0.05). This result demonstrates that quality management systems are important antecedents of organizational commitment in the organizational sample.

**H2: There is a significant relationship between management responsibility and organizational commitment.**

The bivariate correlation analysis reveals that management responsibility significantly and positively correlated with organizational commitment (r = 0.375, p < 0.05). This result demonstrates that management responsibilities are important antecedents of organizational commitment in the organizational sample.

**H3: There is a significant relationship between resource management and organizational commitment.**

The bivariate correlation analysis reveals that resource management significantly and positively correlated with organizational commitment (r = 0.433, p < 0.05). This result demonstrates that resource management are important antecedents of organizational commitment in the organizational sample.

**H4: There is a significant relationship between product realization and organizational commitment.**

The bivariate correlation analysis reveals that product realization significantly and positively correlated with organizational commitment (r = 0.450, p < 0.05). This result demonstrates that product realizations are important antecedents of organizational commitment in the organizational sample.

**H5: There is a significant relationship between measurement, analysis and improvement towards organizational commitment.**

The bivariate correlation analysis reveals that measurement, analysis and improvement significantly and positively correlated with organizational commitment (r = 0.404, p < 0.05). This result demonstrates that measurement, analysis and improvement are important antecedents of organizational commitment in the organizational sample.

**H6: Job level significantly moderates the relationship between success factors of ISO 9001: 2008 and organizational commitment**

Hierarchical regression analysis is conducted to examine the moderating effect of job level and work experience in the relationship between success elements of ISO 9001: 2008 and organizational commitment. The result from table 4 exhibits the R square change for job level as moderating variable indicates a minimal change in the variance from 0.236 to 0.01 and 0.012. The significant F change for model 2 and model 3 regression is not significant at p<0.05. Therefore, job level is not significantly moderates the relationship between success elements of ISO 9001: 2008 and organizational commitment. Thus, H6 was not supported. This result shows that job level does not acts as an important moderator between success elements of ISO 9001: 2008 and organizational commitment.

In addition, the result from table 4 exhibits the R square change for work experience as moderating variable indicates a minimal change in the variance from 0.236 to 0.25 and 0.034. The significant F change for model 2 and model 3 regression is not significant at p<0.05. Therefore, work experience is not significantly moderates the
relationship between success elements of ISO 9001: 2008 and organizational commitment. Thus, H7 was not supported. This result shows that work experience does not act as an important moderator between success elements of ISO 9001: 2008 and organizational commitment.

VI. DISCUSSION AND IMPLICATION

The findings of this study reveal that there was a significant and positive relationship between success elements of ISO 9001: 2008 (e.g. quality management system, management responsibility, resource management, product realization and measurement, analysis and improvement) towards organizational commitment. However, this study reveals that job level and work experience not significantly moderates the relationship between success elements of ISO 9001: 2008 towards organizational commitment. The result of hypothesis testing of H1 until H5 is consistent and supported by most previous study conducted by Feng et. al. (2006), Yung (1997) and Mosadegh Rad (2004) where they stated that success elements of ISO 9001: 2008 (e.g. quality management system, management responsibility, resource management, product realization and measurement, analysis and improvement) were positively related to organizational commitment.

In addition, this study also supports the research by Praxiom Research Group Limited (2009) stating that the ISO 9001: 2008 emphasizes on the need to ensure that the outsourced processes comply with all customer and legal requirements besides management representative must be a member of the organization’s own management and not an outsiders. It also clarifies that product design and development review, verification and validation activities can be carried out and recorded separately or in any combination besides it must include information that explains how products can be preserved during production and service provision. This finding also supports Lin and Jang (2008) which reveals that a comprehensive ISO 9001 model should support four key constructs, namely; top management support, quality planning, employee involvement and continuous improvement. These constructs created a series of chain which had a direct positive impact on business performance and it must be noted that these constructs are interdependent, rather than parallel components.

In SESB practice, the execution and implementation of ISO 9001: 2008 system, which would involve a change on their nature of work, might result in changes in employee perception and attitudes towards the system. Nevertheless, the employer must maintain and continually improve the system and procedure so that their employees’ will eventually be committed with their jobs. Likewise, employees that involved in the process of implementing the quality system will feel proud of themselves when the system in their company was running successfully and being recognized by auditors. These eventually enhance their motivation to work as they have a high standard and procedure in implementing their work process.

However, job level and work experience does not significantly moderates the relationship between success elements of ISO 9001: 2008 (e.g. quality management system, management responsibility, resource management, product realization and measurement, analysis and improvement) towards organizational commitment. These results illustrates that the implementation of ISO 9001: 2008 system has the same effect to all level of employees in SESB. Thus, ISO 9001: 2008 steering committees should not carry out differentiation to the employees during the implementation of ISO 9001: 2008 system. Since it has been identified that the system should involved employees at all level and experience, the support from management as well as co-workers in SESB is crucial to ensure the system was successfully implemented according to its standards and requirements.

VII. CONCLUSION

This study formulated the research model based on organizational commitment, TQM and ISO standards literature mostly published in Western settings. The reliable measurement scales were used to measure the direct and moderating effect of elements of success ISO 9001: 2008, organizational commitment, job level and work experience in the hypothesized model. Outcomes of testing the direct and moderating model using a regression analysis revealed that success elements of ISO 9001: 2008 (e.g. quality management system, management responsibility, resource management, product realization and measurement, analysis and improvement) directly influence organizational commitment. However, this study reveals that job level and work experience would not moderates the relationship between success elements of ISO 9001: 2008 (e.g. quality management system, management responsibility, resource management, product realization and measurement, analysis and improvement) towards organizational commitment. Therefore H1 until H5 were accepted but H6 and H7 were not supported. This empirical result of the direct relationship also has supported and extended organizational commitment and TQM research literature mostly published in Western settings.

Therefore, every employer should understand and identify on the contribution from the all level of employees in order to ensure the successness of every TQM program implemented. In addition support from top
management and continuous improvement is other crucial elements to ensure this program would be victorious. Management and department head is essentially involved in all ways to ensure that their employees are competent and able to meet all the requirements and standards of the TQM system especially in terms of ISO 9001: 2008 implementation. Trust and adaptability towards challenges were other concerns to instil in each one of their employees. In order to ensure employees understand the main purpose of implementing this system at the first stage, transparency and understandable in communication from top management was essential. Some of the issues that should be communicated were, “what works?” “why it works?” and “how it works?” before validating constructs such as standard’s planning and implementing procedures and adjustment in operational and business structure. These clarifications will directly impact on the employees’ commitment towards the organizations moves in implementing TQM (e.g. ISO 9001: 2008) will increase. Hence, this would promote trust and confidence in them which could directly increase their organizational commitment.

VIII. FIGURES AND TABLES

In a nutshell, this study have contribute and offers a helpful trail to the management of SESB in having better insight and knowledge on the impact of ISO 9001: 2008 implementation. Besides, this result will ultimately assist in promoting mutual understanding between management team and employees as well as to strengthen the co-operation between both parties in enhancing their quality of work process. Basically, SESB would recognize that the higher their employees perception towards the successfulness of the ISO: 9001: 2008 system and its’ usefulness in their work process in a daily basis, the employees would be more committed in realizing the system. Lastly, the result of this study also used as guidelines and reference for SESB to understand and study the contributing factors towards employees’ organizational commitment by the implementation of ISO 9001: 2008 systems.

FIGURE 1. CONCEPTUAL FRAMEWORK

<table>
<thead>
<tr>
<th>Success Factors of ISO 9001: 2008</th>
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<tbody>
<tr>
<td>1. Quality Management System</td>
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<tr>
<td>2. Management Responsibility</td>
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<tr>
<td>3. Resource Management</td>
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<tr>
<td>4. Product Realization</td>
</tr>
<tr>
<td>5. Measurement, Analysis &amp;</td>
</tr>
<tr>
<td>Improvement</td>
</tr>
</tbody>
</table>

Organizational Commitment

**TABLE 1. RESPONDENTS’ PROFILE (N = 142)**

<table>
<thead>
<tr>
<th>Job Grade (%)</th>
<th>Respondent Age (%)</th>
<th>Job Tenure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive = 57.0</td>
<td>35 years old &amp; below = 54.9</td>
<td>5 years &amp; below = 43.0</td>
</tr>
<tr>
<td>Non Executive = 43.0</td>
<td>36 – 45 years old = 26.1</td>
<td>6-25 years = 42.3</td>
</tr>
<tr>
<td></td>
<td>46 years old &amp; above = 19.0</td>
<td>26 years &amp; above = 14.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male = 51.4</td>
</tr>
<tr>
<td>Female = 48.6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Education level (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPM &amp; below = 35.9</td>
</tr>
<tr>
<td>Diploma &amp; above = 64.1</td>
</tr>
</tbody>
</table>

**TABLE 2. THE RESULTS OF RELIABILITY ANALYSIS FOR MEASUREMENT SCALES**
TABLE 3. DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality management system</td>
<td>3.816</td>
</tr>
<tr>
<td>Management responsibility</td>
<td>3.763</td>
</tr>
<tr>
<td>Resource management</td>
<td>3.481</td>
</tr>
<tr>
<td>Product realization</td>
<td>3.503</td>
</tr>
<tr>
<td>Measurement, Analysis and</td>
<td>3.625</td>
</tr>
<tr>
<td>Improvement</td>
<td></td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>3.235</td>
</tr>
</tbody>
</table>

TABLE 4. HIERARCHICAL REGRESSION ON JOB LEVEL AND WORK EXPERIENCE AS MODERATING VARIABLE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R Square</td>
<td>Sig. F</td>
<td>R Square</td>
</tr>
<tr>
<td></td>
<td>Change</td>
<td>Change</td>
<td>Change</td>
</tr>
<tr>
<td>Job level</td>
<td>0.236</td>
<td>0.000</td>
<td>0.001</td>
</tr>
<tr>
<td>Work Experience</td>
<td>0.236</td>
<td>0.000</td>
<td>0.025</td>
</tr>
</tbody>
</table>

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REFERENCES


364
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