QUALITY MANAGEMENT SYSTEM FOR KNOWLEDGE MANAGEMENT INVENTORY

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ABSTRACT

This research is initiated to investigate the existence of Quality Management System (QMS) for Knowledge Management Inventory (KMI) in stakeholder organisations in Malaysia and the level of its implementation. This research test nine quality elements selected based on overall Knowledge Quality models. Besides, the purpose of this research is to identify the element of inventory related to Knowledge Management System in organisation and to prioritize it according to the most important. A set of survey's questionnaires were distributed to a total of 100 respondents to several government offices and private sectors related to construction. The data collected was analysed using Statistical Package for the Social Sciences (SPSS) and Microsoft Excel. The analysis was done based on Organisation-Resources model developed by Maier, 2007 by using Pareto Chart quality tool. The findings indicate that ISO 9000 model is mostly adopted by the organisations and the level of implementation is rated good for the nine elements tested even the workers are not aware of quality model existed. Recommendation was also given inclusion of other aspects such as human needs and type of work environment for improvement.

ABSTRAK

Penyelidikan ini bermula dengan tujuan untuk menyiasat kewujudan Sistem Pengurusan Kualiti (QMS) untuk Inventori Pengurusan Pengetahuan (KMI) dalam organisasi pemegang kepentingan di Malaysia dan tahap pelaksanaannya. Penyelidikan ini menguji sembilan elemen kualiti terpilih berdasarkan model kualiti pengetahuan keseluruhan. Di samping itu, tujuan penyelidikan ini adalah untuk mengenal pasti elemen inventori yang berkaitan dengan Sistem Pengurusan Pengetahuan dalam organisasi dan keutamaannya mengikut kepentingan. Set soalan kaji selidik telah diedarkan kepada 100 responden dari beberapa pejabat kerajaan dan sektor swasta yang berkaitan dengan sektor pembinaan. Data yang dikumpul dianalisis menggunakan Pakej Statistik untuk Sains Sosial (SPSS) dan Microsoft Excel. Analisis telah dibuat berasaskan model Sumber Organisasi yang dibina oleh Maier (2007) dan menggunakan Carta Pareto sebagai alat menganalisis kualiti. Penemuan menunjukkan bahawa model ISO 9000 kebanyakannya diterima pakai oleh organisasi-organisasi dan tahap pelaksanaannya dinilai baik walaupun pekerja-pekerja tidak menyedari kewujudan model kualiti tertentu. Cadangan juga diberi untuk memasukkan aspek lain seperti keperluan manusia dan jenis persekitaran kerja untuk pennambahbaikan.

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LIST OF ABBREVIATIONS

QMS Quality Management System

ISO International Standard Organisation

KM Knowledge Management

KBV Knowledge Based View

KMI Knowledge Management Instruments

ICT Information and Communication Technology

SPSS Statistical Package for Social Science

GLC Government Link Company

EQ Emotional Quotient

IQ Intelligent Quotient

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter consists of the overall representation of the research. It discusses the background, problem statement, research aim, objectives of study, scope of the study, significance of the study, brief methodology and summary.

1.2 Background

There are many definitions and perception regarding the meaning of quality. It seems that many quality experts define quality in a different way. Towards managing the product quality, a Quality Management System (QMS) is needed.

A quality management system (QMS) is a collection of business processes focused on consistently meeting customer requirements and enhancing their satisfaction. It is aligned with an organization's purpose and strategic direction (ISO9001:2015). It is expressed as the organisational goals and aspirations, policies, processes, documented information and resources needed to implement and maintain it [1].

Knowledge Inventory is a kind of stock taking to identify and locate knowledge assets around the organization. This includes the explicit and its difficult to locate tacit knowledge sources. The best way to make a comprehensive list of knowledge sources is to classify it by explicit and tacit knowledge. The examples of explicit knowledge that already exist are the categories of documents, databases, intranet libraries and links.

Too much physical inventory on hand results in unnecessary and extraneous expenses. Initial freight charges, along with storage, security and maintenance of excess inventory, cost money and increase operating expenses for a business. Excess of perisable inventory may be subject to spoilage and more susceptible to theft. Furthermore, the inventory purchased on credit costs, making a business an additional deficit in interest expense.

Too little inventory on hand results in not having the product available to meet current demand. For both merchandisers and manufacturers, this reduces potential profits as consumers and customers look to the competitor to fulfill needs. For manufacturers, in particular, insufficient inventory can produce an increase in product costs. In this research, related aspects of quality management will be surveyed in order to be integrated into knowledge management.

Finally, a model of quality management approaches was recommended for supporting knowledge management to achieve higher performance of constructions.

1.3 Problem Statement

Due to globalisation in politic and economy,, the today's market is very competitive. The demand for quality is a critical factor for organization to survive in the expanding global marketplace. Besides quality factor, knowledge is another factor for organization to become more successful. Up to date, there is still less research conducted regarding quality management in knowledge management as the knowledge management is still considered new in most organizations. Therefore, the aim of this study is to provide knowledge-based Quality Management System (QMS) model for Knowledge Management Inventory (KMI) in organizations in Malaysia.

This research hypothese to answer the questions such as what are the options of QMS available and suitable for KMI in organisations? How far the implementation of QMS in KMI is has been adapted? How to develop the knowledge-based QMS? What are the important elements of knowledge-based QMS? Which QMS model to be used? Answers to these questions leads to the initiation of this study.

1.4 Aim

The aim of the research is to check the adoption of QMS that suitable for Knowledge Management Inventory in organisations and to provide improvement to the existing management system.

1.5 Objective of Study

The objectives of this study are:

- i. To identify which QMS model that mostly adopted and the level of its implementation
- ii. To identify the elements of Inventory related to Knowledge Management in organisation and to prioritise according to the most important to be implemented. An Organisation-Specific Resources model developed by Maier, 2007 was used as the baseline of study.

1.6 Scope of Study

The scope of the study is related to Quality Management System for Knowledge Management Inventory existed in organizations in Malaysia. A set of questionnaires will be distributed to 100 respondents related to construction.

1.7 Significant of Study

If QMS is implemented appropriately in organisations, it will relate as improvement of inventory management. Furthermore it will help to reduce the excessive cost of "not knowing". Good inventory management supports production, marketing, and finance functions whereas poor inventory management can hamper production, increase operating costs and reduce customer satisfaction.

1.8 Brief of Methodology

Other than literature studies, a set of questionnaires will be used as the medium in gathering information regarding the existence and state implementation of the Quality Management System for KM Inventory in organizations in Malaysia. A set of Questionnaires will be distributed to a total of 100 respondents with a construction background. The collected data will be analyses using a statistical method.

1.9 Summary

In this chapter, the background and objectives of the study had been clearly stated. This study will help in evaluating the current status of QMS implementation in construction related organisation and to initiate improvement to the existing management system.

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