IMPACT OF HR PRACTICES ON THE QUALITY MANAGEMENT SYSTEMS IN MANUFACTURING ORGANIZATIONS, SRILANKA

V.Sivalogathasan
Senior Lecturer in Management Studies
The Open University of Sri Lanka, Nawala,
Nugegoda, Sri Lanka
vslthasan@yahoo.com

L.P.S Gamini, and S.A.D. Senanayaka
Senior Lecturer in Management Studies
The Open University of Sri Lanka, Nawala,
Nugegoda, Sri Lanka

ABSTRACT

The main objective of this research is to identify impact of selected Human Resource Practices (HRP) on performance of Quality Management System (QMS). The quality management system are being implementing to enhance the quality of products and services by organizations, but most organizations are unable to achieved set targets through quality management system. In this study human resource practices are selected as independent variables, and the quality management system performance is assessed as dependant variables. Sample were selected which organizations have practice TQM or ISO 9001 quality management system were used for the survey and distributed questionnaires received in 68% response rate. This study was found that, there is a strong relationship between human resource practices and quality management system success. The main concept evolve through the analyzed data is people's participation is a main factor to enhance the performance of quality management system. The human resource should play a major role in implementation and maintaining of successful quality management system which enhance the performance of the organizations. To enhance quality management system have to align with human resource practices, and all level of managers should actively participate by playing respective roles. It is impossible to make success of quality management system without human resource practices.

Keywords

Human resource practices, Quality management system, and Total quality management

INTRODUCTION

The demand for quality has emerged as the single most critical factor for businesses to survive in the ever expanding and competitive global market place. World class manufacturing companies gain competitive advantage and greater market share through extraordinary levels of performance and commitment in providing the kind of quality products and services demanded by customers cutting across national borders. Companies supplying materials and parts are more and more being required to be quality certified, especially the international standards such as ISO 9000 and ISO 14000. In the increasingly changing and competitive world companies have to refocus their resources to achieve high quality standards in their products and services and to become quality organizations (Rao et al, 1999).

Total Quality Management (TQM) cannot become a way of life in organizations immediately. Time is needed in order to integrate the appropriate quality principles and techniques into the culture of the organization (Goetsch & Davis, 1994). Time, however, is not the only resource that TQM requires. Human resources are equally important for TQM success. Therefore, it could be said that people's awareness of quality is central to TQM's purpose. Many manufacturing organizations look for implementing quality management system with the prime objective of enhancing quality of the products to enhance the market competitiveness and win the trust of customers. But actually real meaning of the phrase "Quality Systems" is much broader than what most people imagine (Knouse, 1998).

The quality management system is defined by authors in different ways. Quality Management system is a management approach that originated in the 1950's and has steadily become more popular in the early 1980's. Total Quality is a description of the culture, attitude and organization of a company that strives to provide customers

1

with products and services that satisfy their needs. (Dale et al, 2000) The quality culture is requiring in all aspects of the company's operations, with processes being done right the first time and defects and waste eradicated from operations.

Quality Management System means the combination of processes used to ensure that the degree of excellence specified is achieved. A quality management system is the sum of the activities and information an organization uses to enable it to better and more consistently deliver products and services that meet and exceed the needs and expectations of its customers and beneficiaries, more cost effectively and cost efficiently, today and in the future (Heyns, 2001).

Then the quality management system can be defined as the holistic management system which achieves total customer satisfaction. In the achievement of total quality in the organization the human resource dimension is very important (Deming, 1982). Continuous quality improvement depends upon the best use of the talents and abilities of a company's workforce. To achieve world class quality, it is imperative that a company empowers its workers. Companies must develop and realize the full potential of their workforce and maintain an environment conducive to full participation, personal and organizational growth (Rao et al, 1999).

PROBLEM AND OBJECTIVES

The demand for high quality services and products are always increasing day by day. Most organizations want to show their commitment to quality in order to keep and uphold the competitive position in the market. Even though they implement quality management systems such as ISO 9001 or TQM, effectiveness of them is doubtful. Culture of the organizations might be an issue not to create desired commitment on quality. Therefore those systems are to be implemented and maintained in a more effective way. Researchers have been carried out to study the relationship between influence Human resource practices and quality management systems of Sri Lankan manufacturing organizations.

The research problem to be addressed as what is the impact of Human resource practices on the performance of quality management systems. Therefore, the objectives were set to:

1. To investigate HR practices that predicts the performance of the quality management systems.

2. To identify HR practices to be practiced in organizations to successfully implement quality management systems.

3. To investigate the role of the HR department in establishing and maintaining quality management practices.

The advantages of the implementation of a quality management system such as TQM or ISO 9001 are improved quality and enhanced efficiency, increasing customer satisfaction and many more. (Knouse, 1998). Most of Sri Lankan industries are using quality management systems such as ISO 9001 which through these systems they want to address the quality aspects which customers look for. Even though they maintain those systems, required quality culture might not be built in most organization. This may be the reason why many organizations cannot continuously practice and improve the quality management system needed to grow simultaneously with customers' demand on quality requirements. But any organization can be more productive; more customers oriented and can generate more revenue with higher profit, if they practice the quality management system for the well being of the organization.

There are many researches carried out to find out steps to be taken to successfully implement a quality management system. "There is a high failure rate in the implementation of TQM. The key issue in this regard is that companies have devoted relatively little attention to human resources management (HRM). Several academics and practitioners have asserted that synergy and congruence among HRM practices are critical to the implementation of TQM. However, there is relatively little empirical evidence to support this contention. The purpose of this research is to conduct an empirical study on high-tech firms, in order to analyses the impact of HRM practices on the implementation of TQM" (Yang, 2006).

Therefore this study will be helpful to identify what is the impact of HR practices on quality management systems. The main focus of this research has been on manufacturing organizations of the Sri Lanka. The research scope narrowed to organizations which have separate quality assurance department and practice TQM or ISO 9001 quality management system.

LITERATURE SURVEY

Quality Management System

Quality is often used to signify 'excellence' of a product or service. That perspective can be slightly changed in different industries. In some engineering companies the word may be used to indicate that a piece of metal conforms to certain physical dimension characteristics often set down in the form of a particularly 'tight' specification. In a hospital it might be used to indicate some sort of 'professionalism'. If we are to define quality in a way that is useful in its management, then we must recognize the need to include in the assessment of quality the true requirement of the customer, the needs and expectation (Oakland, 1999). Quality management theory has been influenced by contributions made by quality leaders. The success of quality management is base on several quality models. Much of perspective and popular literature on

TQM subscribes that TQM is "universal" in its application ability. This appears on many levels the institutional, national and certification schemes. The formal evaluation models of quality management are developed, such as the Malcolm Baldrige National Quality Award model in USA, the European foundation for Quality Management (EFQM) model in Europe and Deming Application Prize model in Japan. (Tari Jose Juan, and Sabater Vincente, 2004). Quality has been defined by several quality gurus in different ways. Dr. Juran defined quality as "Fitness for use". TQM, ISO 9001, Deming Quality Award criteria and Malcolm Baldrige Quality Award criteria are well known quality management systems which is used in most countries (Oakland, 1999; Gitlow, 2006).

Total Quality Management

Total Quality Management (TQM), is a method by which management and employees can become involved in the continuous improvement of the production of goods and services. It is a combination of quality and management tools aimed at increasing business and reducing losses due to wasteful practices. The importance of TQM has considerably increased on both a practical and theoretical level. It has been developing around a number of critical factors which vary from one other to another, may be grouped into two dimensions. These are the management system (leadership, planning, human resource, ect) or "soft" parts and the technical system (tools and techniques) or "hard" parts. (Tari Int.J. and Sabeter Vincente, 2004). There is evidence supporting the compatibility of the practices in these programs and that manufacturing performance is associated with the level of implementation of both socially- and technically-oriented practices of the three programs. Some of the companies who have implemented TQM include Ford Motor Company, Phillips Semiconductor, SGL Carbon, Motorola and Toyota Motor Company (Hashmi, 2007). TQM actually plays a number of roles. One is to create an environment where seamless dimension and implementation of hard TQM can take place, and the other is to directly aspect organizations' performance in the same way that traditional human resource management (HRM) practices can impact on an organization.

ISO 9000

ISO 9000 is a series of standards for the management of quality systems in almost any type of organization. Manufacturers, distributors, service agencies, or even design firms can achieve ISO 9000 certification which some customers require of their suppliers. In addition, some European directives and agencies require that manufacturers maintain a certified ISO 9000 system. This too ensures that safety requirements are adhered to through the design, production, and distribution phases of the product. The key requirements of ISO 9001:2000 are a documented quality system (i.e. quality manual and

procedures), an internal audit system to verify compliance with the documented quality system, and that the processes are effective and corrective and preventive action system to ensure compliance is maintained. This series of standards was first introduced in 1987 and was revised in 1994 and 2000. The ISO 9000 standards are published and reviewed by the ISO (International Standards Organization), located in Geneva, Switzerland.

The International Standards Organization (ISO) 9000 is perhaps the most popular quality improvement system. It is an international set of documents widely known as standards written by a worldwide organization known as the ISO/Technical Committee 176 (Lamprecht, 1992). This set of standards ensures that a company has a specific quality improvement policy, which makes it more competitive in the market. This aspect of competitiveness is one that makes ISO 9000 very popular among Sri Lankan firms

Malcolm Baldrige National Quality Award

The Malcolm Baldrige National Quality Award is the most prestigious quality award in the world. The National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce, manages the Baldrige National Quality Program. The American Society for Quality (ASQ) assists in administering the Award Program under contract to NIST. Whether the organization is small or large; is involved in service, manufacturing, government, or nonprofits work; and have one office or multiple sites across the globe, the Criteria provide a valuable framework that can help the management measure performance and plan in an uncertain environment.

The Criteria are built on the set of interrelated core values and concepts. Those are visionary leadership, customer-driven excellence, organizational and personal learning, valuing employees and partners, agility, focus on the future, managing for innovation, management by fact, social responsibility, focus on results and creating value, systems perspective.

Sri Lanka National Quality Award

The Sri Lanka National Quality Award is conducted by Sri Lanka Standard Institution (SLSI). Organizations can participate in the award competition under two main sectors as manufacturing sector and service sector. Service sector is further categorized as general service sector, health service sector and education sector. The organizations are further categorized as small scale organizations, medium scale organizations and large scale organizations (SLSI, 2007). The same criterion is used for Sri Lanka National Quality Award which uses Malcolm Baldrige National Quality Award (MBNA, 2007).

Human Involvement in Quality Management System

The people involvement is a main key element in TQM and ISO 9000 quality management systems. People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit. To fulfil that task all necessary information to be communicated to the relevant members. The organizational objectives to be clearly communicate to the all employees of the organization. A system to be established gathers ideas of all employees' as much as possible (ISO 9001:2000 QMS, 2007).

To successfully implement TQM, an organization must concentrate on the eight key elements. These elements are ethics, integrity, trust, training, teamwork, leadership, recognition and communication.TQM has been coined to describe a philosophy that makes quality the driving force behind leadership, design, planning, and improvement initiatives. (Pandhi, 2007). TQM is built on a foundation of ethics, integrity and trust. It fosters openness, fairness and sincerity and allows involvement by everyone. This is the key to unlocking the ultimate potential of TQM. These three elements move together, however, each element offers something different to the TQM concept.

Ethics is the discipline concerned with good and bad in any situation. It is a two-faceted subject represented by organizational and individual ethics. Organizational ethics establish a business code of ethics that outlines guidelines that all employees are to adhere to in the performance of their work. Individual ethics include personal rights or wrongs.

Integrity implies honesty, morals, values, fairness, and adherence to the facts and sincerity. The characteristic is what customers (internal or external) expect and deserve to receive. People see the opposite of integrity as duplicity. TQM will not work in an atmosphere of duplicity.

Trust is a by-product of integrity and ethical conduct. Without trust, the framework of TQM cannot be built. Trust fosters full participation of all members. It allows empowerment that encourages pride ownership and it encourages commitment. It allows decision making at appropriate levels in the organization, fosters individual risk-taking for continuous improvement and helps to ensure that measurements focus on improvement of process and are not used to contend people. Trust is essential to ensure customer satisfaction. So, trust builds the cooperative environment essential for TQM.

The training, teamwork and leadership are main elements which help to build the TQM culture in the organizations. Basing on the strong foundation of trust, ethics and integrity, bricks are placed to reach the roof of recognition (Pandhi, 2007). Training is very important for employees to be highly productive. Supervisors are solely responsible for implementing TQM within their departments, and teaching their employees the philosophies of TQM. Training employees require interpersonal skills, the ability to function within teams, problem solving, decision making, job management performance analysis and improvement, business economics and technical skills. During the creation and formation of TQM, employees are trained so that they can become effective employees for the company

To become successful in business, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems. Teams also provide more permanent improvements in processes and operations. In teams, people feel more comfortable bringing up problems that may occur, and can get help from other workers to find a solution and put into place. There are mainly three types of teams that TQM organizations adopt (Pandhi, 2007).

It is possibly the most important element in TQM. It appears everywhere in organization. Leadership in TQM requires the manager to provide an inspiring vision, make strategic directions that are understood by all and to instil values that guide subordinates. For TQM to be successful in the business, the supervisor must be committed in leading his employees. A supervisor must understand TQM, believe in it and then demonstrate their belief and commitment through their daily practices of TQM. The supervisor makes sure that strategies, philosophies, values and goals are transmitted down throughout the organization to provide focus, clarity and direction. A key point is that TQM has to be introduced and led by top management. Commitment and personal involvement is required from top management in creating and deploying clear quality values and goals consistent with the objectives of the company and in creating and deploying well defined systems, methods and performance measures for achieving those goals (Pandhi, 2007).

It is binding mortar which keeps everything together. Starting from foundation to roof of the TQM house, everything is bound by strong mortar of communication. It acts as a vital link between all elements of TQM. Communication means a common understanding of ideas between the sender and the receiver. The success of TQM demands communication with and among all the organization members, suppliers and customers. Supervisors must keep open airways where employees can send and receive information about the TQM process. Communication coupled with the sharing of correct information is vital. For communication to be credible the message must be clear and receiver must interpret in the way the sender intended (Pandhi, 2007).

The main element is recognition of employees which should be used for survival of TQM system. The Recognition is the last and final element in the entire system. It should be provided for both suggestions and

achievements for teams as well as individuals. Employees strive to receive recognition for themselves and their teams. Detecting and recognizing contributors is the most important job of a supervisor. As people are recognized, there can be huge changes in self-esteem, productivity, quality and the amount of effort exhorted to the task at hand. Recognition comes in its best form when it is immediately following an action that an employee has performed (Pandhi, 2007).

Employee empowerment is another main area which can leverage the quality management system of an organization. The employees who mainly attained on a particular work know what the inefficiencies in those systems. If they could use their creative minds, they can improve those processes to a very high level. The power of creativity clearly has been identified by all TQM implemented organization and the necessary systems have been implemented to create a culture which evolves creative ideas. The Toyota organization has identified unused employees' creativity as a main waste. The methods they have used to evolve human creativity are training, suggestion schemes, measurement and recognition and excellence teams (Hashmi, 2006).

Even though all above literature reviews the importance of human involvement referring to specific quality management systems, those literatures strongly prove the importance of human involvement for the success of quality management system. According to the literature, the most important HR practices for success of quality management system are Recruitment & Selection, Orientation & empowerment, Training & Development, Performance appraisal and Reward & Recognition and also teamwork and communication.

Importance of HRM for QMS

Quality control (QC) should not only be the domain of expert and engineers but also rely upon the cooperation of workers at all levels if high quality products are to be created. In this regard, the role of quality control circles (QCCs) at the grassroots level should not be underestimated (Dale et al, 2000). However, QCCs are not a panacea. What is more important is the role of top managers who are responsible for maintaining close contact with workers and increase their morale. Top managers should understand the corporate philosophy and vision, present them to all workers, and demonstrate leadership in guiding their implementation. The most important mission assigned to top managers is creating a work environment specific to the firm. The role of middle managers is important as well; they are responsible for training leaders in the workplace and increasing worker motivation. They also should possess basic QC knowledge (Dale et al, 2000).

All, top and middle management should pay the utmost attention to human resources development (HRD). Effective implementation of HRD is not necessarily easy as

it is closely associated with the socio cultural background of the country in which the firms operates. It may also not be easy in Asian countries with the exception of Japan, where labour turn over and job hopping are the order of the day. The production capability of a country is composed of capital and labour. The former includes machinery, equipment, and technology. They can be freely imported from any country, but manpower is less mobile across the national borders. Hence the production capability of a country depends to a large extent upon the quality of its workers. It is interesting to note, however that workers can suddenly improve productivity and quality once a change in top management takes place. This suggests the importance of the role of top management in boosting the morale of workers (Dale et al, 2000).

Yang (1994) did a research to study relationship between Japanese approach to quality management and human resource perspectives. In his conclusion he clearly states that a major factor which makes these Japanese firms successful in producing high quality products is management's deep concern for people and a set of sophisticated human resource policies formulated and executed at these plants. People are carefully selected, well trained, respected and recognized as important partners with management in achieving company goals (Yang, 1994). They have identified team base activities and training as the main roles in successfulness of quality management system.

Lau & Idris (2001). The findings were culture, trust, teamwork; employment security and training are the main HR practices which influenced on successfulness of TQM. The quality improvement efforts are still in an early stage and the primary focus is on gaining the ISO 9000 series accreditation. The short periods of systematic implementation with the "hard" aspects of quality are the main reasons for the absence of a "quality culture" and a move towards strategic TQM. The author believes that the current status and the role of the HR function in the majority of the industrial organizations studied do not suggest the HR function takes a substantial role is TQM efforts, either by establishing a culture that supports a quality improvement effort, designing and implementing plans for employee empowerment and development or applying TQM principles, practices and techniques within the HR function (Vouzas, 2004). The personnel function in industry has been seriously neglected for years and the role of the personnel department overlooked. However, the author strongly believes that the new realities and perspectives developed owing to the European integration reinforcing competition, which, in turn, may motivate firms to engage in new managerial techniques requiring a high level of personnel professionalism and a strong and empowered HR department (Vouzas, 2004).

The undermined role of the HR department, coupled with the lack of emphasis placed on the implementation of the main TQM principles, leads to the conclusion that

awareness must be converted into understanding. Furthermore, it seems that insufficient attention is being given to "cultural change", a necessary element for any quality improvement effort. Finally, from the findings, it is obvious that in the selected industrial organizations the quality improvement efforts are not driven or supported by the HR function; a reality that is based on the rhetoric developed by quality professionals that HR intervention to quality could make the quality journey unpredictable (Vouzas, 2004).

The researchers had identified the poor performances of quality management system is resulted by lack of consideration of HRM while implementing and maintaining the quality management system. The researchers suggest for empowered HR department and they emphasize role of HR department also to be aligned with quality management system.

The study investigated the effect of individual HRM practices on the implementation of TQM and concluded that the practices of "training and education", "incentive compensation", and "employee development" produced the greatest influences on TQM. The HRM implementation significantly affected the TQM practices of "culture change and development", "customer satisfaction management", and "statistical quality control" to a greater extent than the other TQM practices (Yang, 2001). The research carried out by Yang concluded with implication of importance of skill development and rewards for higher performances of TQM.

The outcome of all researches is "there is a strong impact on quality management performance by HR practices". Even though those researches had been carried out in different countries, the main outcome is HR practices such as skill development system, rewards, communication, team work, empowerment performance appraisals and others HR practices also affects the performances of quality management system.

The most popular quality management systems of the world are ISO 9000 and TQM. Literature emphasizes the importance of people's participation for success of quality management systems. The TQM and ISO 9000 concept and Malcolm Baldrige National Quality Award criteria have identified and stated as important HR practices communication, recognition, training, teamwork, leadership and empowerment.

The main content of this research is the influences of HR practices on the quality management system's performance. Therefore a model can be developed with influence HR practices and quality management system's performance.

Human resources practices are directly influencing of the performance of the quality management system in the organizations

Recruitment & Selection: A valid selection process is an important part of a technical HRM system, which is necessary for developing a QMS process choosing the correct employee is essential to the development an effective QM system. Valid selection procedures add flexibility so that an organization may be in a better position to implement strategy (Wright & Snell, 1998).

Orientation & Empowerment is generating high performance of the human resources. It increase moral of the employees. The employees are self motivating to achieve organizational goal. Employees are taking upper hand to do the job. It is increasing organizational loyalty. Due to that output of the organization is up to standards. It is directly affected to reduction of the scrap level and reduction of rework. If rework is reducing, it increases quality of product and cost of the production. It is beneficial for competitive market. Due to that customer complains will reduce and can be stable in the market. It is help to develop good brand name and obtaining awards and certifications.

Performance Appraisal process is also effecting to people motivation. This task is evaluating people in the organizations. Human resources are very important factor of the organization. Those resources should motivation to achieve the organizational goal. Motivated employees are providing quality input to the organization. Quality output is affected to reduction of scrap level and reduction of reworks. The product quality is good; customers complain will reduce and can obtain awards and certification to the product

Training & Development process is input quality man power to process. This is quality input to organization. Quality input making quality output. TQM is implementing and maintaining need skill people. So skill development is very important factor to making quality product

Reword & Recognition is help to motivate people in the organization. People motivation is influencing to improve the product quality it is affecting to reduction of scrap levels and rework percentage. The product quality is good; customers complain will reduce and can obtain awards and certification to the product. This is one hypotheses of the research.

Team work is developing informal group in the organization. Informal group can create team leader and monitors. Team work become successful in business, teamwork is also a key element of TQM. With the use of teams, the business will receive quicker and better solutions to problems. Team sprits are effecting to improve of the quality of the product or service of the organization. When quality is up to the standard, it is effecting to reduction of scrap levels and rework percentage. The product quality is good; customers complain will reduce and can obtain

awards and certification to the product. This is one hypotheses of the research.

Communication system is most important factor of the organization to develop smooth process of the organizations. Not only is that communication important from customer requirement to satisfy to customer. The process is smoothing due to communication inside the organization. Communication means a common understanding of ideas between the sender and the receiver. The success of TQM demands communication with and among all the organization members, suppliers and customers. Supervisors must keep open airways where employees can send and receive information about the TQM process. The product are made base on the customer requirement. Identify of requirement and transfer to relevant operations process conduct by the proper communication system. It effecting to reduction of waist and scrap. It is help to increase of customer satisfaction

Hypotheses

H₁: The Recruitment & Selection, Orientation & Empowerment, Training & Development, Performance appraisal, and Reward & Recognition systems will significantly influence performance of Quality management system.

H₂: The Recruitment & Selection, Orientation & Empowerment, Training & Development, Performance appraisal, and Reward & Recognition systems will significantly influence performance of Quality management system by mediating Teamwork and Communication.

The developed theoretical model clearly indicates there are two research constructs to be operationalized as indicated in the model five HR practices identified which can mainly influence on quality management performance. Out of those five, reward system, empowerment and skill development well tested in previous research carried out in other countries. Other two, recruitment & selection and performance appraisal are included because those are very common HR practices all over the world that influence QMS. Apart from these HR practices Team work and Communication are influence factors to the QMS.

To measure the quality management system performance, four indicators are identified such as scrap level, rework percentage, customer complaints and awards & certifications. Out of these four, two are manufacturing section's performance indicators. Other two are used to measure the quality management system's performance of all industries. Reason to select these as quality management performance indicators is because they are widely used in Sri Lankan industries as performance indicators. According to the ISO 9001:2000 standard, organizations can use appropriate performance measurement indicators. Before selecting the quality management system performance

indicators, there were discussions held with managers of different industrial sectors. Then common performance indicators are selected to simplify the data collection. Then to be more specific and accurate indicators and sub indicators are identified for each variable concept.

METHODOLOGY

The Garment industries were selected in western province and they should have implemented a quality management system. The research is mainly carried out on the primary data. The main focus is to develop well-structured questionnaire to collect primary data. The questions consist with the Liker scale, Dichotomous scale and multiple response scale. The developed questionnaire distributed only to head of the HR division or head of the production division or head of quality assurance division. More than 50 questionnaires were distributed and only 34 returned questionnaires were used for analysis.

This analysis is done to check the characteristics of collected data. Through that we can identify the specific characteristics of manufacturing organizations of Sri Lanka, specific characteristics of particular industry sectors as well as individual organizations. To get unbiased conclusion at the end of the research, to be sure that, our variable measuring system is accurate. Therefore the variable measurement system was checked for validity and reliability. The reliability of variables was tested by inter-item consistency and validity of variables was tested by component extraction method. There were two hypotheses set for the first objective and those hypotheses were tested by correlation analysis and regression analysis. Descriptive statistics were used to analyses the results of other three objectives.

The main research constructs are HR practices and quality management performance indicators. This research is based on only the primary data. The variables were identified for those research constructs and few indicators are set for each variable. Then a method was designed to convert the concept in to an answerable qualitative set of questions. The convenience sample was selected and required data was collected through the questionnaire. All data collected through the questionnaire was fed to the SPSS and then through that data was analyzed. Collected data was analyzed in three steps. The characteristics of the sample were identified by using descriptive statistics and other tools. In the second step the data was verified for the goodness of measures. Finally statistical analysis was done to test hypotheses.

RESULTS

The data were collected from different types of organizations which are manufacturing different types of garment products and operating in different markets. There are some characteristics can be identify which are particular

to garment industry sectors. The researcher collected 34 questionnaire were received among Garment factories

The scale of the organization can be identified through number of employees. Main focus was drawn while distributing the questionnaire survey, organizations which have implemented quality management systems. Therefore medium, large and extra large categories were used for the survey. Out of those organizations, 15% organizations have employees between 50 and 200, 35% organizations have employees between 200 and 500, 32% organizations have employees between 500 and 1000 and rest of organizations have more than 1000 employees. The performance of organization might vary with the scale of organization.

The main two contents of this research are HR practices and quality management system performance. The number of employees in the HR department might influence on HR practices. Therefore the data was collected to find the number of employees in HR department. Out of those organizations, 18% organizations have HR employees between 1 to 5, 32% organizations have HR employees between 5 to 10, 38% organizations have hr employees between 10 to 20 and 12% of organizations have more than 20 hr employees.

There might be a relationship between the number of employees in the quality department and quality management system performance. Therefore data was collected regarding how many employees are in quality department and that shown in followings. Out of those organizations, 12% organizations have QMS employees between 1 to 10, 44% organizations have QMS employees between 10 to 25, 32% organizations have QMS employees between 25 to 50 and 12% of organizations have more than 50 QMS employees.

Goodness of Measures

The reliability of variables was tested using inter-item consistency and results are shown in the table 3.1. The nine variables checked for reliability through inter item consistency. All variables Cronbach's alpha values are 0.7 or greater than 0.7. Therefore the overall consistency of the measure can be justified.

Variables were checked for construct validity through component extraction method. The extracted results of construct validity are indicated that every set of variables given only one factor which has Eigen value greater than one. That means each set of variables mainly belongs to the one latent factor. The percentage variance value also greater than 53%. On the other hand the KMO statistic values also greater than 0.50 and that are indicated sample adequacy in under each construct. Bartlett's test provides justification to prove concept variables in each construct is not identical.

Quality Management Performance

The five performance indicators were used to find out quality management system performance. Out of these indicators three were tested through likert questionnaire. Awards won and certifications obtained were tested by asking whether those awards and certification have been obtained or not. Seven types of certifications and five types of award were considered for the data collection. For obtaining of one certification or award one mark was given. The descriptive statistical values of those variables are shown in table 3.2. The analysis results show most organizations pay good attention to keep customer satisfaction at a very high level. Rework monitoring and controlling was attracting minimal attention. The most organizations haven't won awards but have obtained certifications.

The large-scale organizations are showing good QMS performance and variation is very low. But small-scale organizations have shown lower QMS performance and the range of the performance vary widely among organizations. Large organizations are well established and they are major players in their particular segments those organizations performance also are very good. The impact on QMS performance by number of employees in quality department was analyzed. Except organizations which have less than three employees in the quality department, other organizations' QMS performance is increased with number of employees in the quality department.

HR Practices

Five common HR practices and two influence variables were chosen for this research. Those HR practices' establishment in organization were tested through Likert scale questions. The analyzed results show the organizations which included to sample concentrate more on empowerment and give less attention on reward system.

HR practices are well established in large organizations than small organizations. The reason is, most large organizations are well establishing high performing entity. They use HR practices to enhance the performance than small organizations. HR practices establishment with the number of members in HR department. An organization employed more members in HR department because of two reasons. One could be that it is a large scale organization and the other could be they concentrate more on HR activities.

Relationship between HR Practices and QMS Performance

The main objective of this research is to find out relationship between HR practices and quality management system performance. Data were collected under five main variables about quality management system performance. The correlation among each HR practice and quality

management performance are shown in table 3.4. The Pearson correlation index between recruitment & selection and QMS Performance is 0.671 at 99% confidence level, the empowerment and QMS performance is 0.501 at 99% confidence interval. Reward system and QMS performance is 0.417 at 95% confidence interval. The correlation index between performance appraisal system and QMS performance is 0.839 at 99% confidence level and the training & development system and QMS performance is 0.579 at 99% confidence interval. That means there is a strong positive relationship between reward system, performance appraisal and training development system; and QMS performance. This was explained that the reward & recognition, performance appraisal, and training & development systems will significantly influence performance of quality management system.

In addition, the Pearson correlation index between teamwork and QMS performance is 0.613 at 99% confidence interval. The communication system and QMS performance is 0.501 at 99% confidence interval. That means there is a strong positive relationship between teamwork, and communication system; and QMS performance. This states that the teamwork, and communication will significantly affect performance of quality management system.

The data analysis shown there is, positive strong significant relationship between HR practices and QMS performances. For this research six common HR practices were taken in to consideration. For better usage of this research outcome which is the most influencing HR practice for quality management performance to be found out that. The results of analysis shows that performance appraisal system is the most important HR practice among the selected six HR practices which influence on performance of quality management system. In quality management system implementation stage, the most important is training & development system while least important is empowerment among selected five HR practices. Therefore before implement a quality management system, the training & development, Empowerment and performance appraisal are need to be established properly and it will reinforce the quality management implementation process.

To enhance the performance of quality management system after implementation, it is very important to organizations which already have implemented a quality management system to further enhance the performance. According to study the most important HR practice is training & development system while least important HR practice is communication system. Therefore the organizations which already have implemented a quality management system can introduce or strengthened the performance appraisal system and training & development system to enhance the performance of the quality management system.

The role of HR in QMS Implementation & Maintaining

The role of HR department in quality management implementation and maintaining process is training the employees. The second most important activity is to motivate the people to get adapted to the quality management system and third activity is participation for other activities such as planning. The table 3.5 shows extracted results of questions regarding management's roles of QMS implementation and maintaining. The main role which should be played by each management category can be identified in the last row of the table 3.5.

RECOMMENDATIONS

One of the more interesting findings of this study is that more than half of the organizations had get reward and certificate. Even the relatively strong positive correlation found between HRM and the QMS variables implies that major HRM practices are not typical in this sample.

HRM is seen as more effective. Generally all of the seven variables are seen to have an impact on performance of QMS, the extent of this impact being positively related to the extent of strategic direction across the various areas of HRM. The measures of HRM practice and performance of QMS focus used are found to be significantly related. The differences found in relation to the HRM practices are that adoption of HRM focus is more positively related to QMS variables.

The team work, and communication approach to performance of QMS is generally supported, with the emphasis on communication significantly correlated with the rating of overall QMS effectiveness and with the other variables which significantly correlated with this effectiveness. The regression analyses suggest that the extent of emphasis on Performance Appraisal may be an aspect taken into consideration when respondents rate how appropriate the approach their organization adopted to QMS. The total level of HRM practices across the various areas of QMS is significantly related to overall QMS effectiveness.

This supports the need to be rather more than one perspective on these issues, as advocated by the multiple constituency approach (Tsui & Milkovich, 1987). The differences found can of course be interpreted in different ways. In regard to the effect of these HRM practices upon performance of QMS, it is reasonable to assume that HRM staffs are better situated to report accurately than are managers or employees. HRM staff may also have greater knowledge of details in the various areas of HRM, so that again their ratings of the extent of strategic direction in these areas may be more accurate. The views of managers and employees on the overall effectiveness of HRM on QMS may however be more accurate, since their views are less likely to be affected by a tendency to defend one's own policies.

The implications for practitioners are that having high levels of HRM influence across the various areas of QMS is important if QMS is to be seen as effective overall by HRM staff, managers and employees. A focus upon developing committed, involved and innovative employees, and having an overall HRM strategy, are also significantly related to ratings of QMS effectiveness, and these factors seem to be taken into consideration when assessing how appropriate HRM in the organization. The relationship between these aspects and organizational level strategy is, however, less clear and could use further study. Overall, the results can be interpreted as suggesting that HRM staff need to ensure that HRM policies and practices are modified in ways that will increase or at least maintain levels of strategic direction in the various areas of HRM.

Thus further research using case studies would be useful to document the specific types of practices that are made and how they contribute to performance of QMS. Such research could also assess the extent to which HRM adopts a leading role in relation to these practices, while the conclusions offered above are supported by the data, this is an exploratory study, with a limited sample and brief, simple measures. It may be particularly difficult to study effectively interactions among HRM and QMS with a questionnaire such as this, and further exploration may usefully employ a more in-depth, case-study approach.

CONCLUSION:

It has been found that HR practices have positive effects on QMS performance, and that the adoption of QMS is therefore an effective means by which enterprises can increase competitiveness. The implementation of QMS also benefited the company's image, and improved the satisfaction and quality awareness of employees. However, several empirical studies have asserted that there is a high failure rate in the implementation of QMS. One of the main factors is that companies cannot perform HRM practices effectively. Therefore, this study focused on the effects of influence HR practices on the implementation of QMS performance.

The study investigated the effect of influence HR practices on the implementation of QMS and concluded that the practices of "Appraisal system", "Team work", and "Communication" produced the greatest influences on QMS performance. The HRM implementation significantly affected the QMS of "Rework monitoring", "Awards", and "Certificate obtained" to a greater extent than the other QMS performance. The study also analysed the effects of influence HRM and QMS performance. Both HRM and QMS significantly affected these quality performances, especially with regard to "customer satisfaction" and "employee satisfaction".

Overall, the empirical results proved that HRM played a key role in the implementation process of QMS; and HRM and QMS combined to give total quality and organisation performance. However, the effects of different HRM practices on the implementation of QMS are differentiated. Enterprises must determine which HRM practices are critical to their business, and should prioritise these practices before they devote their efforts to the implementation of HRM.

REFERENCES

Albert, P.C. C. and Tam, C.M. (2000), "Factors affecting the quality of building projects in Hong Kong", *International Journal of Quality & Reliability Management,* Vol. 17 No4/5, pp423-442.

Ching-Chow, Y. (2001), "The impact of human resource management practices on the implementation of total quality management - An empirical study on high-tech firms", Chung-Yuan Christian University, Taiwan.

Dale, B. and Cooper, G. (2000), Total Quality and the Human Resource. New Delhi, Infinity Books.

Deming, (1982), "Improvement of quality and productivity through action by management", National Productivity Review, winter, pp. 12-22.

Graham, D. (2002), "Quality management initiatives and people management strategies - The need for integration in the new millennium in an Irish context", International Journal of Quality & Reliability Management, Vol. 19 No5, pp524-539.

Hashmi, K (2007). Introduction and Implementation of Total Quality Management (TQM). International Organization for Standardization (2007).

ISO (2000), "Quality Management Principles", <http://www.iso.ch/iso/en/iso9000-14000/iso9000/qmp.html>

ISO. (2007). International Organization for Standardization, Quality management principles. Available at http://www.iso.ch/iso/en/iso9000-14000/understand/qmp.html.

John Zhuang Yang, (1994). The Japanese Approach to Quality Management – A Human Resource Perspective. Journal of Organizational Change Management, Vol. 7 No3, pp44-64.

Knouse Stephen and Giacalone, Robert (1998). "Holistic Approach to Business Ethics."Business and Society Review 98:46–49.

Lau, H.C. and Idris, M.A. (2001), "The soft foundation of the critical success factors on TQM implementation in Malaysia", The TQM Magazine, Vol. 13 No1, pp51-62.

Noorliza, K and Asaari M.H.A.H (2006), "The effects of total quality management practices on employees' work-related attitudes", The TQM Magazine, Vol. 18 No1, pp30-43.

Oakland, J. (2000), Total Quality Management ± Text WithCases, 2nd ed., Butterworth Heinemann, Oxford.

Oakland, J.S. and Oakland, S. (1998), "The links between people management, customer satisfaction and

business results", Total Quality Management, Vol. 9 Nos 4/5, pp. 185-90.

Oakland, J.S. and Porter, L. (1994), Cases in Total Quality Management, Butterworth Heinemann, Oxford.

Pandhi, N (2007). Total Quality Management. Available at http://www.sixsigma/me/tqm/theeightelementsoftqm

Rao .S. Subba and Raghunathan, T.S. (1999). The best commonly followed practices in the human resource dimension of quality management in new industrializing countries The case of China, India and Mexico. Journal of Quality and Reliability Management, Vol. 16 No 3, pp215-225.

Rao, A., Carr, L.P., Kopp, R.J., Martin, J., Rafii, F., and Schlesinger, P.F. (1996), Total Quality Management: A Cross Functional Perspective, John Wiley &Son, USA

Tsui, A.S. & Milkovich, G.T. (1987) Personnel department activities: Constituency perspectives and preferences. Personnel Psychology, 40: 519-37.

Vouzas, F. & Psychogios, A.G. 2007. Assessing manager's awareness of TQM. The TQM Magazine.19 (1). 62-75

Wilking, A, Marchington, m & Deleuma B. 1994 manufacturing more effective TQM: Implication for the management of Human Resource By pp 69-88.

Yang, C & Christian, C. 2003. The establishment of TQM system for the health care industry. The TQM Magazine. 15 (2). 93-98.

.