

## **Literature Review**

Many studies on the impact of ISO 9000 system implementation from business perspective have been conducted however only a few focused solely on the impact from human behaviors perspective. Basically, the literature on the impacts of ISO 9000 system implementation can be divided into two : positive or optimistic view and negative or pessimistic view.

### **Optimistic View**

Sin (1996) conducted a research on "Impact of the ISO 9000 systems implementation on employees' perception, attitude, and behavior" on manufacturing companies in Singapore. The results of study indicated there is significant improvement in job satisfaction and internal motivation however the job stress increased after the implementation. The improvement in job satisfaction is an unexpected result because ISO 9000 principles do not promote recognition, achievement, advancement and personal growth in a company. Motivation in this study is measured by personal benefits and control over the job function. Personal benefit has shown a positive remark as a result of career improvement and marketable skills resulted from the certification. As more companies are trying to get the certification, experience in ISO 9000 certification process become more marketable. With the implementation of ISO, job functions and responsibilities are clearly defined thus resulting in improvement in job control. On the other hand, the increase in job stress is due to heavy

documentation of ISO 9000 implementation. From the job improvement itself, the study shows there is no significant result. This is in line with the basic principle of ISO 9000 system: to formulate a documented quality system in a company and not focusing on improving employees' job functions.

Simon (1994) viewed the impacts of ISO 9000 system implementation from two sides: Hard side and Soft side. The hard side is defined as the improvement of the production process such as a range of process design and control tools while the soft side concerned with creating customer awareness among employees and enlisting their commitment to improve quality in the organization. He outlined working conditions, reasonable workload, pay and promotions, and minimal role conflict and ambiguity as factors that lead to job satisfaction. The job-satisfaction was measured on five dimensions :

1. Satisfaction with work itself;
2. Satisfaction with supervision;
3. Satisfaction with coworkers;
4. Satisfaction with promotions and opportunities and
5. Satisfaction with pay.

The result of the survey revealed a negative impact of ISO 9000 system implementation on work dimension. Positive impacts were observed with regard to supervision and coworkers however no impact is seen with regard to promotions and pay. The survey concluded that the certification does not necessarily enhance all aspects of employees' satisfaction. The survey also suggested for certification to incorporate employees' requirements in its principles. Simon also commented that Quality Management programmes often failed because it over emphasizes the hard side of quality and neglect the soft

side – the people, and forgot that it depends on broad-based employee involvement and commitment.

John et al. (1997) in his article “strategy for the successful implementation of ISO 9000 in small and medium manufacturers” discussed about the strategies to assist small and medium size manufacturing companies in obtaining ISO 9000 certification. The article outlined the human effect of the implementation as increase in productivity, minimize role ambiguity and increase employee morale.

Mc Queen (1993) in her study “ISO 9000 adds value to the bottom line”, talk on how the standard may help to improve internal organization and operation. Through ISO 9000 duties and responsibilities are clearly defined thus improving external and internal communication. In summary, the certification itself is said to be very rewarding for the company's efforts, boosting employees' morale, increasing their responsibility and commitment to quality and enhancing the quality culture in the company.

### **Pessimistic View**

On the other hand, Carrigan (1994) and Henkoff (1993) were in the opinion that ISO 9000 implementation caused more negative impact than positive impact to the organization. The findings of their studies titled “Is ISO 9000 the path to TQM?” and “The hot new seal of quality fortune” respectively can be summarized as follows:

1. Implementation of the standards may result in the development of static quality system, which increases bureaucracy and reduces flexibility and innovation.
2. Excessive obedience to the documented procedures may discourage employees' critical thinking.
3. The excessive bureaucracy and workload may cause disappointment and resentment to the employees.
4. Excessive and unnecessary documentations may lead to dramatic increase in workload and subsequently increasing employees' job stress.

In worst case scenario, the failure to get certified may cause great disappointment and low morale to employees.

Gotzami et. al. (2002) in their study "The true motive behind ISO 9000 certification", focused on the motives behind certification for 85 Greek large companies and statistically tests their performance after certification and the overall benefits gained from it. The study found that less significant benefits were achieved in employees' satisfaction and participation compared to other factors such as improvement in products quality and internal organization and operation. This is consistent with an empirical survey in Norway (Hongyi Sun, 1999) which proved that although ISO 9000 implementation was significantly related to positive business results, it was not significantly related to employees' job satisfaction.

Another negative review was developed from a study by Santos (2002) titled "Benefits of the ISO 9000 : 1994 System". The study was conducted on 749 certified Spanish companies. Respondents were requested to answer the questionnaires scored on a five-point Likert-type scale. The result of the survey revealed that variables that scored highest average were variables presenting firm's internal operation and climate such as better understanding of process / responsibilities, improvement of the company image in the market, improved products / services quality and reduction in incidents, rejections and complaints. On the other hand, variables presenting human behaviors such as increased employees' satisfaction, increase employees' loyalty and increased employee participation in management scored the lowest mean. However, there is significant positive relationship of the ISO 9000 implementation on increased employee motivation variable.