

INTERNAL CUSTOMER SATISFACTION IN ISO 9001 CERTIFIED MANUFACTURING COMPANIES

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ABSTRACT

In recent years, work in implementing the ISO 9001 standard has been intensified in Malaysian industries. A rapidly growing number of companies in various industries have already been certified or are working towards certifications. This paper investigates on the actions that have been practiced by the management of ISO 9001 certified manufacturing companies in fulfilling their internal customer satisfaction. A postal survey was used as research methodology where questionnaires based on the identified actions that have been practiced by management in fulfilling their internal customer satisfaction were sent to 300 randomly selected manufacturing companies in Malaysia. Forty-three companies (14.3%) responded to the survey. The results of this study demonstrate a higher mean value for the involvement and communication of the management in increasing the level of satisfaction of the internal customers. This is followed by management responsibility, monitoring internal customer satisfaction, motivation and reward and process control.

Key words: ISO 9001, Internal Customer satisfaction, Manufacturing Companies, Certification

INTRODUCTION

Delivering superior customer value and satisfaction are critical to a firm's competitive advantage. Yet in today's competitive environment, market place advantages are often short-lived. With this in mind, many practitioners and academic researchers are touting continuous improvement strategies to stay ahead of the competition. To drive continuous improvement, academic researchers are placing more importance on measuring organizational performance from the customer's perspective [1]. As a result, customer value and satisfaction research is the most prevalent type of research conducted by companies today. Customers decide who has the best offering, and they are the ultimate judge of quality products and services.

ISO 9001 standard is a quality system or quality management system, which is widely used by organization. ISO 9001 is a set of universally understood and accepted quality which, when well implemented, give customer confidence that supplier can consistently meet their needs. This standard also help organisation to maintain access to key customers, improve performance, and achieve a new level of international credibility [2]. Happy satisfied customer will improve the bottom line of an organization. Disaffected ones will prophesy a company's quick descent into the loss-making pit [3].

The quality of service delivered to external customer is often determined by the quality of service that internal customers (employees) provide each other [4]. When discussing about customers it is important to remember that, everyone within an organization provides a service. There are 'internal' as well as 'external' customers. So by this case, the paper is to identify the factors that are required to increase internal customer satisfaction especially on actions that are taken by the management in ISO certified manufacturing companies. The findings of this paper can help management to focus on the factors that can improve their internal customer satisfaction.

Customer

Customer is an important subject to organizations and businesses in the world. Customer is common terms to those that receive services or product from other personnel or other group [5]. Customer can also be referred as the purchaser, the supplier or the contractor. Customer is divided into two, internal and external customer [6]. Internal customer is the worker in an organization responsible to produce products. Every worker receives materials or services from other worker in the process of making their own products. External customer is the consumer or other organization that uses product or service provided from other organization.

It is recognized in the marketing literature that all employees of an organisation are internal customers [7]. The notion of an internal customer suggests that every employee is both a supplier and a customer to other employees within the organisation [8]. The quality of service delivered to external customer is often determined by the quality of service that internal customer – employees – provide each other [4]. If any organization wishes to improve the quality of its service, it needs to overcome the ‘them and us’ attitude prevalent in many companies amongst management and staff. The quality of service supplied to workers in an organization often determines how well the external customer is served as shown in Figure 1.

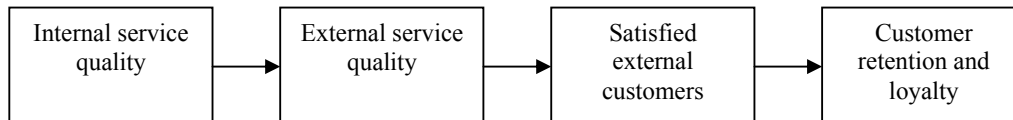


Figure 1: The link between internal and external customer [4].

An increasingly service-oriented economy requires organizations to attract and retain customers to ensure a sustainable competitive advantage. To achieve this objective, organizations must focus their efforts on developing and sustaining an organizational culture that emphasizes internal customer well-being as means to attract and retain external customer patronage [9].

Previous study has acknowledged the importance of employees in dealing with the external customer, recognizing that employees' satisfaction and support of the overall marketing strategy was essential for external customer satisfaction [10]. This link between internal customer satisfaction and external customer satisfaction has since been widely advocated but with little supporting empirical evidence [11].

Satisfaction can be measured from the highest level to the lowest level of satisfaction. If the customer felt that their need are completed, so the customer will achieve the highest level of satisfaction and if the customer felt that their need not completed, the customer will achieve the lowest level of satisfaction [12].

Customer satisfaction is derived largely from the quality and reliability of the product and services provided by companies [13]. The major goal of any customer satisfaction programme should be to achieve ‘preferred supplier’ status with as many customer as possible. ‘Preferred supplier’ status means that a customer formally or implicitly make the policy known within the organization that wherever possible, any purchased of goods and services in requested will be supplied by the preferred organization [13]. Customer loyalty and satisfaction are becoming more difficult and more important to maintain in today’s competitive world. Keeping the customer satisfied is the key to ensuring their coming back. And to make this happening, it is important to see vitally to the bottom line [14].

ISO 9001 contains quality system requirements for use where a supplier capability to design and supply conforming product needs to be demonstrated. ISO 9001:1987 emphasized that the requirements specified are “aimed primarily at preventing nonconformity at all stages from design through to servicing.” Customer satisfaction was implied throughout the 1987 standard. ISO 9001: 1994, however, adds an explicit statement regarding customer satisfaction by stating that the requirements in the standards are “aimed primarily at achieving customer satisfaction by preventing nonconformity at all stages from design through servicing.” [6].

The quality policy requirement of the ISO 9001 standard states that the “quality policy shall be relevant to the supplier’s organizational goals and the expectations and needs of its customers.”[6]. This international standard promotes the adoption of a process approach in developing, implementing and improving the effectiveness of a quality management system, to enhance customer satisfaction by meeting customer requirement [15].

Customer satisfaction measurement will enable organizations to accurately identify customers’ requirement and their relative importance. In addition, organizations will understand how the customer perceive the organization’s performance in meeting the requirements. Priorities for Improvement (PFIs) can be identified and areas for improvement in performance will produce the greatest gain in customer satisfaction. Organization will be able to pinpoint ‘understanding gaps’ where staff have a misunderstanding of customer priorities or their ability to meet customers needs. Organization can also set goal for service improvement and monitor progress against customer satisfaction index. Lastly organization will be able to increase profit through improved customer loyalty and retention [15].

According ISO 9001:2000 customer satisfactions should be measured to monitor the effectiveness of the quality management system and to highlight areas where improvements should be made. The best ways to keep customers is to meet, or even better to exceed their requirement. Studies show that relationship between customer satisfaction and loyalty is exponential which means that very satisfied customers are much more likely to remain loyal than merely satisfied ones. Only through measuring customer satisfaction will develop sufficient understanding of customers' requirement to organize the business to meet those need and adequate knowledge of success in satisfying customer to make the improvements necessary to improve customer satisfaction [15].

Role of Management

Globalisation and worldwide economic uncertainty have increased the pressures for all organisations around the world to perform. The role of management is *'to ensure that customer requirements are determined and are met with the aim of enhancing customer satisfaction'* [16]. Management is also responsible for making available adequate resources to enable the organization to develop and deliver a product (the standard uses 'product' to mean product or service), which will meet those customer requirements. To judge the organization's success in achieving this core objective, customer satisfaction will have to be measured and the results used as a key ingredient for the continual improvement of the quality management system [16].

The involvement of upper management is crucial for every quality initiative, project, or program [17]. Employees will provide good service if they are taken care by their employer [4]. Thus it is crucial to identify factors that help the company to fulfill their internal customer satisfaction.

The five factors related to management that are considered to be important in this paper are:

- i. Management Responsibility - The role of senior management has emerged as an essential prerequisite to fostering both an internal customer orientation and a market orientation [18]. It is the responsibility of the senior management to establish a climate conducive to a customer satisfaction environment and encourage market customer satisfaction behaviors among employees. Without continual reinforcement of customers satisfaction ideas, employees will revert to their former attitudes and behaviors[19].
- ii. Motivation and rewards - Most managers realize that a motivated employee is more likely to take pride in their work, thereby ensuring that they complete the given tasks quickly, efficiently and cost effectively. The job of a manager in the workplace is to get things done through employees. To do this the manager should be able to motivate employees. But that's easier said than done. Motivation practice and theory are difficult subjects, touching on several disciplines. Performance is considered to be a function of ability and motivation. Ability in turn depends on education, experience and training and its improvement is a slow and long process. On the other hand motivation can be improved quickly. There are many options and an uninitiated manager may not even know where to start [20].
- iii. Monitoring internal customer satisfaction - An essential first step in the development of all service initiatives is gaining feedback from internal customer. Monitoring internal customer satisfaction is a pointless exercise unless management are committed to the process and likely to act on the results. The objectives of monitoring, therefore, need to be clearly defined before a program begin, together with a budget and timetable [20].
- iv. Involvement and Communication - There are many methods of communication, and organizations must be wary of not losing the message in the medium. Surveys show that team briefing is the most common form of employee communication. Verbal communication is immediate and allows participation and interest, but calls for careful preparation and good presentation. Communication skills, such as listening and questioning, are important to encourage two-way dialogue. The disadvantages of verbal communication can be that the message may not be retained by the listener or that the message is not received in a uniform manner. Although written communication should ensure consistency of message in a timely manner, the written word is often open to misinterpretation. Visual media such as videos are powerful methods of conveying a message as people learn most through sight. Most vital of all, the power of behavior is often overlooked by management in organizations [21].
- v. Process Control - Controlled conditions for process control include appropriate controls for materials, production equipment, processes and procedures, computer software, personnel, and associated supplies, equipment maintenance, utilities and environments. Processing operations must be specified to the necessary extent by documented work instructions [17].

METHODOLOGY

The methodology for this study was in the form of a survey. The survey was conducted to find the information related to the actions that have been taken by the management of ISO 9001 certified manufacturing companies in fulfilling their internal customer satisfaction. The steps taken for this investigation consisted of several steps namely, information gathering, designing of questionnaire, questionnaire distribution to respondents, retrieval of completed questionnaire forms analysis of data, discussion of results and formulating the conclusion of the investigation.

Among the aforementioned steps, the questionnaire played a crucial role in maximizing the effectiveness of this project. It served as the medium in the process of information collection process, which is vital for this study. The components of the questionnaire are divided into three parts, company background, quality system and role of management in the organization. Upon completion of the final draft, a pre-test was carried out to look into the effectiveness of the questionnaire and also as a measure to look into the most probable result of the study. Upon successfully completion of the pre-test, the final questionnaire was edited. Most of the questions require the respondents to choose the response based on a Likert scale of 1 to 5.

The prepared questionnaires were then distributed to over 300 manufacturing company organizations certified ISO 9001 that serve as sample or respondents. Most of the questionnaires were distributed by post and were followed up with phone calls. Questionnaires were delivered manually to some factories around the state of Selangor. A waiting period of one month was given to all respondents to respond to the questionnaire. During the waiting period, constant reminders were made through telephone calls. Most of these completed forms were received via postal mail as each of the post questionnaire form had been self addressed and stamped. As a result, 43 (14%) companies responded to the investigation. The responses were then analyzed using the simple statistical method of mean, weighted average and other relevant percentages. The analyzed result were then compared with the previous study to look for similarities and contradictions. Finally, conclusion and recommendation were made from the results obtained.

RESULTS AND DISCUSSION

Profile of companies

Forty-three (14.3%) companies responded to the survey. Most of the companies have been incorporated more than 5 years. The majority of the companies are small and medium scale industries (SMIs) as shown in Table 1. This is expected since the majority of manufacturing companies in Malaysia are SMIs which form the backbone of the manufacturing industry.

Table 1: Category of Company

No.	Category of company	Frequency	Percent
1	SMI	22	51.2%
2	Large	10	23.3%
3	Multinational	8	18.6%
4	Other(s):.....	3	7.0%
	Total	43	100.0%

In terms of the type of products being manufactured by the respondents, the majority of them are in the rubber and plastic products as shown in Table 2. This is followed by basic metal and metal fabricated products manufacturers. This result is consistent with the listing in the SIRIM QAS Directory of Certified Products and Companies Year 2002 in which large number of manufacturers are those that produce rubber and plastic products, basic metal and metal fabricated products, and radio TV communications equipment. All the respondents are ISO 9000 certified. Most of the companies have been certified more than 3 years period.

Table 2. Type of Product

	Type of products	Frequency	Percent
1	Food products & beverages	1	2.3%
2	Textile & textile products	4	9.3%
3	Wood & wooden products	3	7.0%
4	Chemical and chemical products	2	4.7%
5	Rubber and plastic products	10	23.3%
6	Concrete. Cement lime and plaster	3	7.0%
7	Basic metal & metal fabricated products	9	20.9%
8	Electrical machinery & apparatus	4	9.3%
9	Radio. TV & communication equipment	5	11.6%
10	Others	2	4.7%
	Total	43	100.0%

Management Responsibility

Table 3 shows the relevant questions related in the management responsibility section of the questionnaire. In terms of whether manager is responsible in fulfilling internal customer satisfaction, it has a mean value of 3.65. This is rather low if compared with the other questions from the same table especially on the question related to whether internal customer satisfaction helps organization fulfill their external customer satisfaction which has the highest mean value of 4.37. The statement on management responsibility as one of the factors to help company in fulfilling internal customer satisfaction has a mean value of 4.14. The average mean value for all the questions under the management responsibility is 4.01.

Table 3 Average mean for management responsibility

Management Responsibility	Mean	Average mean
Internal customer satisfaction depends on management's commitment.	3.88	4.01
Management is responsible in fulfilling internal customer satisfaction.	3.65	
Internal customer satisfaction helps organization fulfill their external customer satisfaction.	4.37	
Management responsibility is one of the factors that helps the company to fulfill the internal customer satisfaction.	4.14	

Table 4 shows the actions taken by companies to increase internal customer satisfaction respectively. Organizing training has the highest mean value of 4.37 to increase internal customer satisfaction. This is expected since most companies organize training for all their employees. This is similar to another finding, where by today's firms are putting more emphasis on training and development as they focus more on the customer and encourage employees to become empowered [4]. The next highest action to increase internal customer is related to giving opportunity for all workers to propose suggestions for improvement.. Giving bonus to the best worker and giving appreciation to hardworking worker do not have high mean values.

Table 4: Average values for actions to increase internal customer satisfaction

Actions to increase	Mean
Organize training	4.37
Organize social functions	3.69
Gives bonus to best worker	3.79
Gives appreciation to hardworking worker	3.89
Gives opportunity for all workers to propose suggestions for improvement	4.24

Motivation and Rewards

Table 5 shows the statement “incentive and rewards are frequently used to encourage motivation and recognize good service performance” has a mean value of 4.00. This is followed by the statement “implementing motivation and reward, the level of internal customer satisfaction will increase”. The statement “good workers will be given bonus and problematic workers will be penalized” has the lowest mean value of 3.47. Overall the mean value for motivation and reward factor is 3.81.

Table 5: Average mean for Motivation and Rewards

Motivation and Rewards	Mean	Average mean
Incentives and rewards are frequently used to encourage motivation and recognize good service performance.	4.00	3.81
Good workers will be given bonus and problematic workers will be penalized.	3.47	
By implementing motivation and reward, the level of internal customer satisfaction will increase.	3.97	

Developing bonus schemes linked to attainment of quality service has the highest mean value of 4.17. This is widely adopted to encourage employees to perform their best. Devising non-monetary rewards such as plaques and badges has a low mean value of 3.49. Specific rewards for innovative activities may also be a mean of supporting entrepreneurship within established organizations [22].

Table 6. Average values for actions to encourage employees to perform their best.

Actions encourage employees	Mean
Holding motivational seminars	3.95
Rewarding complaint-free departments	3.68
Devising non-monetary awards such as plaques and badges	3.49
Developing bonus schemes linked to attainment of quality service	4.17
Giving fair pay increases	3.89
Hold regular appraisal meetings	4.00

Monitoring Internal Customer Satisfaction

Table 7 demonstrate the average value of 3.95 for the two questions in this section. The companies mainly agree that internal customer satisfaction must always be observed and measured (4.09). The statement on monitoring of internal customer satisfaction can increase the level of satisfaction scored a mean of 3.18.

Table 7: Average value for monitoring internal customer satisfaction

Monitoring Internal Customer Satisfaction	Mean	Average
Internal customer satisfaction must always be observed and measured.	4.09	3.95
Monitoring of internal customer satisfaction by management can increase the level of satisfaction.	3.81	

In order to sustain internal customer satisfaction, the companies scores highest (4.13) on the statement that internal customer should be asked to identify those areas most in need of improvement. This is followed by feeding back results to all employees. Generally people are able to make important decisions when armed with information affecting those decisions. Sending questionnaires to internal customers is not a popular choice among the respondents since the mean value for this activity is only 3.50. Table 8 demonstrates the mean values for activities to sustain internal customer satisfaction.

Table 8: Average values for activities to sustain internal customer satisfaction

Activities	Mean
a) Ensuring all employees receive interpersonal training.	4.00
b) Sending questionnaires to internal customers as well as external customers.	3.50
c) Conducting an annual audit of internal customer satisfaction.	3.62
d) Visiting internal customers on a regular basis.	3.77
e) Feeding back results to all employees	4.03
f) Asking internal customer to identify those areas most in need of improvement	4.13

Involvement and Communication

The companies involved believe that involvement of workers and good communication is the most important factor toward increasing the level of internal customer satisfaction (4.19). Effective communication between staff at different departments have a mean value of 4.16 compared to the employees awareness of the targets and objectives of companies which have a mean value of 4.14.

Table 9: Average values for involvement and communication

Involvement and Communication		
Employees that are aware with the targets and objectives of company may lead to the improvement of the level of internal customer satisfaction.	4.14	4.16
The effective communication between staff in different departments in terms of clarity, honesty and trust can help to increase the level of internal customer satisfaction.	4.16	
The involvement of workers and good communication are important factors to increase the level of internal customer satisfaction.	4.19	

Table 10 shows five activities which could help in maintaining consistency in communication. Most respondents agree that communication material is written in simple user-friendly language. Communicating the organization's policy via posters, leaflets, and plaques is also considered as an activity to maintain good communication. On the other hand the statement "holding an exhibition of the functions of the different departments within an organization" score the lowest mean of 3.23.

Table 10: Average values for activities to maintain consistency in communication

Activities	Mean
a) Producing photographs of key people in each team/department and publishing these for all employees.	3.47
b) Holding a competition between employees/department.	3.29
c) Holding an exhibition of the functions of the different departments within an organization.	3.23
d) Ensuring that all communication material is written in simple user-friendly language.	4.15
e) Communicating the organization's policy via posters, leaflets, plaques, and other communication material.	4.03

Process Control

Generally the companies agree that good process control can increase the level of internal customer satisfaction. Corrective action taken by management have been identified by the respondents to be one of the process control to increase the level of internal customer satisfaction with a mean of 4.01. This is followed by controlling and maintaining the production equipment which has a mean score of 3.87.

Table 11: Average values for process control

Process Control		
Corrective action is taken in all deviations from specifications to increase the level of internal customer satisfaction	4.01	3.83
Controlling and maintaining the production equipment is important to increase the level of internal customer satisfaction.	3.87	
In-process inspection are used not only to keep the process under control, but to look for opportunities to make improvements and increase internal customer satisfaction	3.54	
Raw materials, components, subassemblies, and supplies that are used for production are according to specifications may increase the level of internal customer satisfaction.	3.58	
A good process control can increase the level of internal customer satisfaction.	4.13	

CONCLUSION

The internal relationship between employees and the company is the focus of the internal customer satisfaction. Several researchers have suggested that competitive advantage in markets may be obtained if managers focus on satisfying the needs of their employees, since the latter are prerequisites to ensuring that these employees provide good service to customers. In order to ensure external aspects of organizational performance, such as customer satisfaction and loyalty, managers must ensure that internal aspects of performance, such as employee satisfaction, employee retention and employee commitment, are maintained. It can be observed from the investigation that the five factors for increasing the level of internal customer satisfaction in the manufacturing companies certified with ISO 9001 according to their mean values are:

- Involvement and communication (4.16)
- Management responsibility (4.01)
- Monitoring internal customer satisfaction (3.95)
- Motivation and reward (3.81)
- Process control (3.83)

In order to increase the level of internal customer satisfaction The management must equip themselves and their employees. From this survey, involvement and communication is the most important factor to achieve the internal customer satisfaction.

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