Implementation of a customer satisfaction program: a case study

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Abstract
For an enterprise striving to implement total quality management (TQM), customer satisfaction (CS) is an important objective to achieve. The success of CS is not only closely related to a company's TQM performance but it also has permanent effects on the company's future. However, many corporations still fail to implement CS due to lack of experience, or not being able to keep up with the continuous implementation of CS. This study takes a look at one large Taiwanese multi-product manufacturing company with nine years of CS implementation experience. The implementation steps developed over nine years of CS implementation would be used as the foundation in building the CS implementation framework so that the possibility of actual performance failure would be minimized.

1. Introduction

Under the management philosophy of total quality management (TQM), business operation is mainly guided by its pursuance in quality improvement and promoting customer satisfaction (CS). From surveys taken, Agus *et al.* (2000) discovered that implementing TQM does strengthen a company's CS and improve its financial performance. Eklof (1998) also believes that CS is effective in quality management and considers it as the most important role in implementing TQM. Naumann *et al.* (2001) further state that CS would be one of the principal strategies and subjects that enterprises need to face in the next ten years. As CS becomes one of the important judging factors in national quality awards, it is more apparent that CS is important in a corporation's future growth.

The importance of CS has received widespread recognition from the corporations but those still not implementing it are put off due to lack of experience, and those that have implemented CS are worried that they cannot continue with it. How to resolve these two problems have become a top priority to many enterprises.

This study first takes a look at the literature to explore the meaning of CS and to understand its implementation key points. Next, the experience of a large Taiwanese multi-product manufacturing company is discussed in detail to understand the necessary steps taken in implementing and carrying through CS. Furthermore, the result of the implementation is discussed to understand what makes it a success or failure. Lastly, managerial implications are presented and the PDCA (plan, do, check and action) management circle is adapted in combining theories and case-in-study operation patterns into one CS implementation framework to ensure a corporation has the capability necessary in each PDCA step during CS implementation to avoid any failure and to also ensure the continuity of CS.

2. Related works

The exact meaning of CS must first be understood to set goals during the CS process. This section looks at several theories and literature to clarify the meaning of CS and to explain the key points of CS implementation.

2.1 Meaning of CS

Scholars of different backgrounds have different explanations for "customer satisfaction", looking at it both theoretically and practically. After summarizing from the literature of many scholars, Yi (1990) believes "customer satisfaction" should mean "evaluation", symbolizing a type of consuming experience. When choosing a product or service, a consumer's decision is dependent on his/her past satisfaction and trust of the product or service. This satisfying experience results after using a product or service or, more specifically, the reaction between expectation and actual perception before and after using a product or service. However, not one particular factor or characteristic could affect this perception but the entirety of the whole experience. Thus, Wong (2000) believes that a customer's "total satisfaction" is an emotional perception. Evaluation is based on the customer's reaction from using the product or service. "Customer satisfaction" then is a total satisfaction that leaves a good perception. The perception of this wholeness is very similar to the meaning of "customer value package" brought up by Fredericks and Salter (1995). The "customer value package" includes:

1   price;
2   product quality;
3   service quality;
4   innovation; and
5   corporate image.

Martensen *et al.* (2000) also discovered that "expectation", "product quality", and "corporate image" are three facilitating factors in ensuring customer satisfaction and loyalty. In summary, CS could be explained as a satisfying feeling towards expectation after the customer accepts the entire quality of a product or the process procedure of a service.

In reality, corporations in the past did not pay much attention to customer satisfaction but were focused more on attracting new customers in expanding their market shares. Now, due to lower sales resulting from product maturity, corporations are turning around to stabilizing existing customers to ensure their market shares (Bruhn and Grund, 2000). To be more explicit, corporations have came to realize that CS could increase customer loyalty, which in turn improves profits. At the same time, it may lower the chance of customers being driven away due to the poor quality of products or services (Anderson and Fornell, 2000). Furthermore, CS, through customers' word of mouth, may allow an enterprise to lower the costs necessary to attract new customers and to improve its overall image.

2.2 CS implementation key points
Denton (1993) discovered that Motorola received the Malcolm Baldrige National Quality Award because Motorola was strategically correct in building its goal on "pleasing the customer" in its total customer satisfaction (TCS). To achieve the six-sigma quality in TCS, the following six steps are keys to success:
1   ensure the uniqueness of product or service;
2   understand customers and what they like;
3   understand what pleases customers;
4   specify work contents and workflow;
5   design and improve workflow; and
6   ensure continuous improvement through evaluation and analysis.

Fredericks (1995) considers the following five steps to effectively manage customer satisfaction and loyalty:
1   set objectives to let customers understand the product or service;
2   let customers set their own quality standards;
3   process customer requests and conduct quality evaluations;

4   implement and carry through CS plan; and
5   monitor implementation results from the market and internal divisions.

However Mooney (1995) discovered that the primary factors of customer satisfaction are at the least total cost of acquisition, ownership and use. Corporations should raise their performance in the five steps set out below, not just focus on one particular step in the entire process procedure:
1   marketing;
2   engineering technology;
3   acquisition;
4   manufacturing capability; and
5   customer service.

Furthermore, Naumann *et al.* (2001) state the five key reasons in implementing CS, from a practical viewpoint are:
1   the full support from the highest executive;
2   collect customer data;
3   benchmarking;
4   employee participation; and
5   evaluating financial performance.

In summary, CS implementation should be done under the recognition and desire of the entire corporation and its employee. CS could only be continuously improved with a clear business philosophy and objective in obtaining correct information to design a well-planned implementation standard, evaluation system, work content and flow.

3. A case study

To answer the two problems faced by corporations most frequently, this section takes a look at the model of a large Taiwanese multi-product manufacturing company in CS implementation and its results. Understand how this corporation begins CS through "pilot phase" and "promotion phase". In addition, examine the actual steps of carrying out annual business goals in the "stable phase" to better understand how the case-in-study continues to improve its CS image.

3.1   Background of the case-in-study
Founded in 1962, the case-in-study began with manufacturing household electric appliances and has advanced to a multi-product manufacturer covering living electric appliances (living), and adding an emphasis on system equipment (system), and product components for industry (industry). It has six manufacturing division companies manufacturing products for living, system and industry, and three sales division

companies handling domestic and overseas sales, and technical supports.

In product research and development technology (R&D), the case-in-study has a very close relationship with its affiliated businesses in Japan. In order to bring in Japanese technology and to train local employees, the case-in-study has set up an "ability development center", "production and technical training institute", and "sales training institute". The company has always believed in the quality philosophy of "CS No. 1" to constantly improve its quality objective on products and service. In 1996, the company was honored with a national quality award, which established its corporate image with outstanding quality.

3.2 Set up of CS implementation center and bureau

In 1993, after a resolution on promoting corporate CS image was reached in an executive meeting, a competent senior officer was immediately appointed by the President to head up as the director of the CS implementation center. In the next 15 months, the center went through both Pilot Phase and Promotion Phase. Other than evaluating corporate constitution, set company goals and complete corporate operation systems during these two phases, fliers, publications, and evaluation standards and methods were also set up. Simultaneously, mutual understandings were set up between business divisions to set the foundation for implementing CS throughout the entire corporation. The actual implementation could be described as follows.

Pilot phase

1 Collect all relevant publications on CS and attend CS seminars and workshops to gather more information.
2 Invite Japanese consultants to perform corporate diagnosis so that any possible problems that may occur from CS implementation could be recognized beforehand.
3 Make presentations to top executives and directors of each business division on the importance of CS, its effect, benefits, and problems that may arise in the future. To build division directors' knowledge and interest in CS implementation.
4 Draft CS philosophy, vision, directions and common goals that are unique to the corporation.
5 Conduct CS implementation seminars throughout the corporation so that all employees understand the meaning, objective and principles of CS.

Promotion phase

6 To make it known throughout the corporation, the president makes a resolution in the corporate annual meeting on his determination to follow through with CS implementation.
7 Design and post all kinds of billboards, posters, fliers, and wear tags on uniforms to remind employees of the importance of CS implementation and to enforce the improvement consciousness of all employees.
8 After center briefs on CS evaluation system and receives comments from each business division, CS internal and external survey system and self-evaluation system for each business division are designed to be used as criteria in scoring CS contests.
9 Examine any divisions, business, and information relevant to CS within the corporation to centralize all CS-related responsibilities and set standards in business coordination, so as to avoid manpower wasted in handling these responsibilities and information separately in the future.
10 Each business division is to set up its own implementation bureau, responsible in all CS matters related to the division. In addition, a CS implementation committee is formed along with the CS implementation center to move forward the CS business and goals of the corporation.
11 Conduct CS operation meetings to set report formats, track methods and dates of annual CS implementation plans.
12 Motion was passed by CS implementation committee to set up employee participation system (CS quality comment cards) to ensure that all employees continue improving the goals set in improving corporate CS image.

3.3 The framework for stable phase

After the set-up of the CS implementation center and implementation committee, the case-in-study has undergone several changes in its CS implementation structure due to an accumulation of experience and changes and needs of the business environment. In the process of structural changes, CS has moved on to the mature phase and to the current stable phase. Changes in each phase hint that the corporation has successfully moved along in its CS implementation. It also indicates that consciousness of CS has been deeply implanted in all employees.

After the case-in-study enters the stable phase, its implementation structure could be understood more easily from Figure 1 which

Figure 1
CS implementation structure of case-in-study
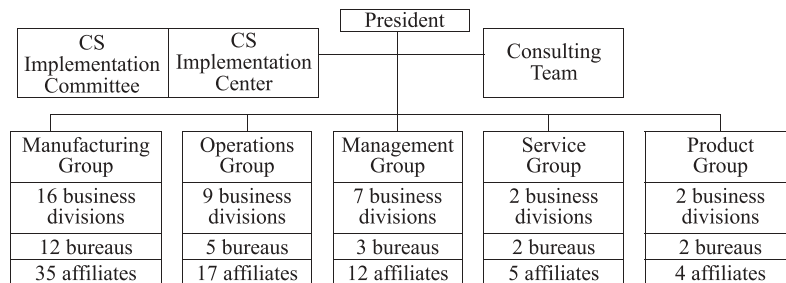
shows that in CS implementation, the
case-in-study takes the employee
participation method to get all divisions to
participate and implement CS at the same
time. The CS implementation bureau of each
business division then are responsible for
monitoring their own CS annual goals and
reinforcing employees' CS improvement
consciousness. The CS implementation
center, from its assisting role, coordinates
the implementation bureaus of all divisions
to move forward the corporation CS goals
and business.

3.4 Annual CS implementation steps during the stable phase

In the structure framework of the stable
phase, annual CS businesses are jointly
handled by the CS implementation center
and the implementation bureau of each
business division. The CS implementation
center is responsible for the following four
principal businesses:

1 Make training programs and promotion
   activities more lively and interesting.
2 Survey the voices of external customers
   (market) and internal employees to use as
   the basis in evaluating each business
   division.
3 Conduct CS operation meetings and CS
   implementation committee meetings to
   track the completion level of proposed
   agendas.
4 Propose and follow through with annual
   "CS emphasized agendas".

As a whole, the corporation has the following
20 annual business agendas. These 20 items
are CS foundations the case-in-study needs to
continue improving its corporate CS image.
These steps are implemented in the following
order. It is also called "annual CS
implementation steps":

1 Announce annual directions and goals in
   the CS operation meetings.
2 Announce the implementation key
   subjects of each business division in the
   CS implementation committee.

3 Announce key businesses of each division
   in internal business division meetings.
4 CS implementation center to publish CS
   annual operations manual.
5 CS implementation center to promote
   obedience in basic rule manual.
6 CS implementation committee to design
   promotion materials, billboards, and
   posters for the company and business
   divisions.
7 CS promotion teams of each business
   division unit to urge all employees to fill
   out CS quality comment cards.
8 CS implementation bureau of each
   business division to introduce
   implementation activities of its business
   division to all employees.
9 CS implementation committee to evaluate
   each and every product operation manual.
10 CS implementation committee to conduct
   circuit interviews and hold conferences.
11 CS implementation center to conduct
   annual market survey.
12 CS implementation committee to plan
   "TOP inspection" for each business
   division every month.
13 CS implementation committee to conduct
   work satisfaction survey on all corporate
   employees.
14 CS implementation committee to track
   how dissatisfying items are handled from
   CS survey questionnaires.
15 CS implementation committee to sponsor
   "quality enhancement programs" that are
   part of national quality award.
16 CS implementation center to evaluate
   implementation results of each business
   division.
17 To report annual implementation status
   in CS operation meeting.
18 CS implementation committee to reward
   best proposals given in quality comment
   cards.
19 CS implementation center to analyze the
   comments from product users.
20 CS implementation center to publish
   articles on successful stories in CS
   implementation.

3.5 Implementation results

In the nine years since the beginning of the "pilot phase" in 1993 until the "stable phase" right now, the annual customer satisfaction index (CSI) has been up and down in each category but the overall index was consistently up in the first three years and peaked in 1995. After 1996, annual CS index numbers fluctuated as the results of too much fluctuation in some of the categories. However it is worthwhile to note that after 1996, annual customer dissatisfaction index (CDSI) has never reached over 13 per cent from distributors and 7.5 per cent from customers. It is evident that implementing CS could effectively reduce customer complaints.

Table I outlines the index values between each category and the annual index for years 1993 and 1995. In 1995, annual CSI was up 11 per cent from the distributors and 8 per cent from the customers, while annual CDSI was down 7.9 per cent from the distributors and 3.7 per cent from the customers. From the distributors, CSI has significantly improved in the order of service, sales, product, quality, and promotion; CDSI is evaluated from high to low in the order of service, product, sales, quality and promotion as listed respectively. Improvement in customer CSI is ranged from high to low in the order of promotion, service, product, quality and sales. Customer CDSI is evaluated from high to low in the order of promotion, service, sales, quality, and product. It is evident that there is a great difference between distributor and customer CSI in "promotion". The CS implementation committee later found out that the difference resulted from an inconsistent survey conducted. Beginning in 1996, the committee would then make slight adjustments to surveys to ensure the reliability of surveys taken.

4 Discussion

After nine years of implementation, the case-in-study has developed its own unique CS model. However it is impossible to have other manufacturers adapt the same model due to differences in business type and size, small to medium businesses especially, since they are limited by human and financial resources. For corporations wanting to implement CS, grasping the case-in-study's physical steps taken and key factors would serve as a valuable reference.

From the previous section, it is evident that in the first two phases during the initiation of CS implementation, the case-in-study concentrated on the following 11 tasks:
1. set up implementation center;
2. gain CS knowledge;
3. conduct corporate evaluation;
4. arouse interests;
5. set goals;
6. promote CS contents;
7. design evaluation systems;
8. centralize business responsibilities;
9. set up implementation bureaus in each division;
10. set up implementation committee; and
11. design company involvement system.

In the stable phase, the following eight tasks were taken:
1. set annual objectives;
2. propose physical businesses;
3. training;
4. promotion;
5. monitor;
6. investigate related information;
7. evaluate results; and
8. rewards.

All these summarize the actual contents necessary in CS implementation.

Table I
Comparison of annual CSI and CDSI values

| Index | CSI: % | | | | CDSI: % | | | |
| Survey type | Distributors | | Customers | | Distributors | | Customers | |
Year	1993	1995	1993	1995	1993	1995	1993	1995
Categories								
Service index	57	81	83	94	36.0	18.0	7.0	4.0
Product index	71	82	83	89	23.0	15.8	6.5	6.0
Quality index	75	82	84	89	18.8	14.8	6.5	5.5
Promotion index	78	79	78	89	19.0	16.0	19.0	8.0
Sales index	57	81	88	93	24.0	17.0	9.0	6.0
Annual index	70	81	83	91	24.2	16.3	9.6	5.9

Notes:
CSI = [Number of very satisfied and satisfied]/[Total valid survey responses]
CDSI = [Number of very dissatisfied and dissatisfied]/[Total valid survey responses]

Summarizing scholars' views of CS implementation (from Denton, 1993; Fredericks and Salter, 1995; Mooney, 1995; Naumann *et al.*, 2001), they all believe that the critical success factors (CSFs) of implementing CS include the following:
1 support from the top executives;
2 set business philosophy, vision, and goals;
3 understand what pleases customers;
4 ensure uniqueness and quality of product or service;
5 design work and workflows;
6 set up plans and evaluation systems;
7 monitor performance;
8 encourage employee participation;
9 learn from benchmarking;
10 continue improvement; and
11 overall increase in CS.

Combining the case-in-study results and scholar's point of view, the following 15 key factors should be considered to achieve successful CS implementation:
1 have full support of the top management;
2 set clear corporate CS philosophy, vision and goals;
3 understand corporate constitution and its problems;
4 set up CS implementation standards and centralize responsibilities;
5 encourage and train all employees to take CS seriously;
6 understand what pleases internal and external customers via market survey and internal questionnaires;
7 ensure uniqueness and quality of product or service;
8 design work and work flows to please customers;
9 Llet customers gain the most satisfaction with the least total cost;
10 set plans and evaluation systems;
11 monitor results from each procedure;
12 encourage continuous improvement;
13 learn from benchmarking;
14 ensure continuous improvement; and
15 overall achievement in obtaining customer satisfaction.

5. Managerial implications

Being friendly to the customer is not enough; the company should make money on customer satisfaction. This research presents a CS implementation program from studying the success model of the case-in-study and its physical implementation steps. The results show that the CS has a positive impact on sales and overall growth. A direct effect is from those complaint or cost reductions. For example, satisfied customers are less likely to call product repairs, i.e. operating costs

decrease when the customer is satisfied. On the other hand, we found that the increase of the CS will lead to an improvement of business results. However, when satisfaction has reached a certain level, further improvement of business results seems to be non-significant. Therefore, once the CS has reached a good position, the enterprise should concentrate its efforts on loyalty (Andre and Saraiva, 2000).

In the TQM environment of the case-in-study, the employee on the process is trained to think of the customer as the next person on the process. For example, quality comment cards are utilized to increase expectations and reduce the customer complaints. The job is not done until the customer is satisfied. On the basis of this study, we can see that effective CS implementation can make the company's vision and goal be set and successfully executed; in addition, employees' quality awareness and skills for continuous improvement can be enhanced and the company's competitive advantage can be sustained.

The PDCA management circle has been known to have the capability of collecting various resources within an enterprise to complete a common-set goal (Lee and Dale, 1998). To show the importance of each of the key factors mentioned above in CS implementation, the PDCA management circle is applied in this study. In addition, take the implementation steps from the case-in-study and the researchers' viewpoints to result in the CS implementation framework shown in Figure 2. This framework shows the necessary functions in each PDCA step from CS implementation. The corporation would achieve physical and accurate implementation capability by completing these functions, thereby avoiding failure and ensuring continuity of CS. Executing steps necessary under each function are dependent on an enterprise's business type, market uniqueness, organizational size, human and financial resources, corporate vision and goals.

Other than used as basic principles for manufacture, the proposed implementation framework would also allow manufacturing companies to understand the physical implementation steps of CS, and each of the basic functions required. In turn, few or no mistakes will occur and they will thus achieve the goal of successful CS implementation. Hopefully this framework could be applied in several manufacturing companies to develop specific implementation steps and businesses for each manufacturer according to this framework. In addition, the actual

Figure 2
CS implementation framework
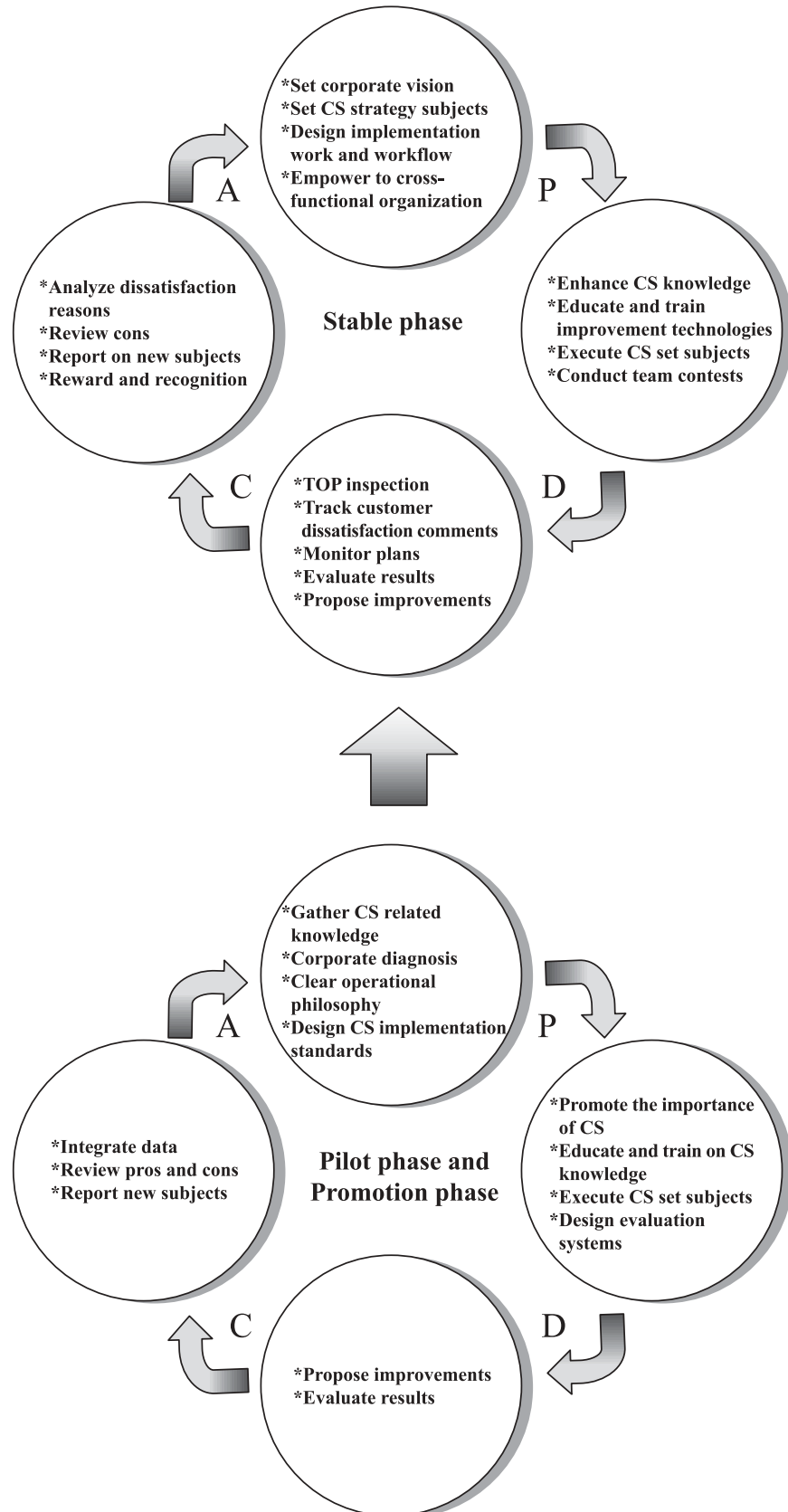
implementation of each manufacturer is evaluated and the difference between actual implementation and this framework is examined to confirm the validity of this framework. Coincidentally, the framework could also be corrected to make it better.

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