The impact of TQM Implementation on employee's performance in China — an example of Shanghai Fu-Shing company

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Abstract

This study seeks in a controlled setting to examine the efficacy of TQM program implemented on rank and file employees, using the method of Case Study at Shanghai Fu-Shing Inc. located in Shanghai City of China, and a Longitudinal Comparative Research Design. Through the sample composition, instrumentation, procedures, data analysis, Null Hypothesis were tested.

Results show that there is a significant difference in the degree of Employee participation between After and Before TQM Implementation. The significant difference indicates that After TQM Implementation has considered the conditions necessary for job performance. In reference to the Human Performance System model, Shanghai Fu-Shing Inc. through its TQC program has addressed the aspects of input (information, resources), performer (training, guidance), output (conformance to quality standards), consequences (bonuses, recognitions), and feedback. In fact, Total Quality Management covers every aspect on the way of life and operation that is conducted in an organization. This is particularly true for employee involvement and job performance that is directly affected by Total Quality Management: Employee Involvement because of established participative activities and job performance because of the conditions created necessary for good performance.

Keywords: Total Quality Management (TQM), performance, employee participation, Just-In-Time (JIT).

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Introduction

Quality has developed into the most competitive weapon. For organizations to survive the competition and succeed in their respective industries, they must seek ways in improving their system and maximizing their resources. The philosophy of Total Quality Management (TQM) has suffused and enveloped the business community for more than a decade. However, we have seen so little impact from TQM on the real success of our businesses. The fault lies in the application of TQM principles to our businesses, or more accurately, the misapplication of TQM. The failure to achieve significant improvement through TQM rest squarely was on the shoulder of the CEO. Because TQM is a method that requires testing and alteration for a perfect fit, its success at any company depends on the corporate climate—a climate that is inevitably determined from the top down by the CEO. And here it cannot be emphasized too strongly that nothing is more important, at every stage in TQM process, than the CEO’s blessing and ongoing support.

The concepts promoted by TQM philosophy are not at fault. The ideas of customer satisfaction, employee empowerment and continuous improvement are based on solid principles that can, if properly applied, improve the current and future success of any business operation—TQM is still too new to be an exact science. (Its underlying principles go back along way, but it began its wildfire sweep through American industry in its current form over ten years ago.) But TQM is not too new to have been tested, expanded on and fine-tuned by dozens of major U.S.—companies that are enjoying the fruits of their labors in the marketplace right now.

Given the importance of employee participation and quality performance in the long-term success of the firm, this article examines a management process that focuses on the participation of employees in the decision-making especially on matters of process improvement and problem solving in their respective job and on-site situation, in effect, a management approach to cultivating responsiveness and quality performance. Specifically a comparative assessment framework is used to describe the impact of TQM on employee participation and job performance. Descriptive data that demonstrate the efficacy of this technique as well as organizational practices of the employees applicable to the different departments of an organization is offered.
Literature review

Harris [11] addressed that the heavy promotion of TQM as a new management philosophy in a wide variety of forums has resulted in criticism and warnings from several sources. TQM is the continuous process of involving employees throughout the organization in creative problem solving to improve the quality products and services [2], [4], [12]. It is the process of identifying performance and quality problems, analyzing their causes, developing and implementing solutions for improvement. The participation of employees in this performance and quality problems were analyzing their causes, developing and implementing solutions for improvement. The participation of employees in this endeavor is a crucial factor. Their insights and inputs on problems and probably solutions must be considered. On the other hand, Jablonski [14] believed that TQM is a cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity. For an organization to continuously improve its productivity and the quality of its products or services, continuous process improvement must be embraced. Continuous process improvement means accepting small, incremental gains as a step in the right direction in achieving total quality. It recognizes the fact that substantial gains can be achieved by the accumulation of seemingly minor improvements. This in turn yields tremendous gains in the long run. Process improvement is continuous because the race of quality has no finish line [21]. The standard for quality constantly changes.

The opinion of three authors on TQM establishes the fact that employee participation is a must for TQM. Thus, TQM leads to employee participation to achieve continuous process improvement, the talents and capabilities are relied upon. It recognizes the fact that people nearest to the job will have valuable inputs on how to improve the process or system. All of these are focused on meeting and exceeding customer’s expectation [7], [10], [12], [19]. Organizations pursue quality, but it is the customer who defines what quality is, what it is, and what it is not.

For an organization to continuously meet customer needs and expectations, performance in all levels must be improve. The goal of TQM is to improve performance. TQM is a performance improvement effort in which organizations can point to results such as cost savings and cycle time reductions [20], [22], [23]. Supportive management practices such
as those provided by TQM address these factors in order to enhance a worker’s performance. With the increased level and intensity of global competition, merely acceptable performance is no longer sufficient. To become more competitive, organizations have begun to focus on every factor that affects a worker’s performance [12]. In order to achieve the goals of both the management and the employees; commitment; scientific knowledge; and participation needs to be present, for these are TQM’s fundamental characteristics. The success of TQM program largely depends on such characteristics. Commitment to work and everybody makes all goals realized. If you are committed to achieve certain thing, you will achieve it, even if there are obstacles blocking your way towards that goal. The management is committed in continuously improving the quality of products and services it offers. Quality is the major determining factors in the choice of the consumer. Improvement in everything assists and enhances innovation, which is an absolute necessity in the competitive markets today. The customers’ ever-increasing expectations demand the urgent reconsideration of management-led focus on total quality. Senior Managers should be the ones to plan, initiate, and coordinate the quality improvement process and keep up the momentum when the initial enthusiasm dies down. This requires adequate training and education, not just for the workforce, but also for themselves, who should be the first to demonstrate their commitment by active participation in quality improvement projects. Participation is basically concerned with the social aspect of TQM. No TQM initiative has any chance of bringing about a TQM culture unless the social factor is properly addressed, because total quality is not about a particular process or department, or about the responsibilities of a particular quality manager. It concerns everybody in the company and it requires a new social attitude [8], [13], [16].

It is fallacious to consider that workers are all the same and all principles of management concepts are applicable anywhere. Values should suit management system and the psychology of workers and unions. Value clarification makes quality problems easier to understand [1], [9]. TQM is such a culture — a culture advocating a total commitment to customer satisfaction through continuous improvement and innovation in all aspects of the business. In TQM culture, the customer is not intended to mean only the final recipient of the corporation’s end-product or service. The customer is also every individual or department within the organization [5], [9].
A management commitment to improvement will be inadequate unless the workforce is motivated enough to get involved in the effort. Any initiative like for example, the introduction of new scientific methods will fail if the methods are not adaptable to the needs of the people who use them. Higher salaries can motivate only on a short-term basis. Being involved and taking pride in one’s work in the achievement of excellence are the real motivators for the long term. When a natural commitment to teamwork is ingrained deeply enough to benefit from competitive efforts, innovation will take place and eagerness to change will be the norm. When this situation is allowed to develop, normally, it might help the business units to be more responsive to fast-changing markets. Top managers should be extremely careful of how they control the evolution of a healthy competitive element within the company. This is by means of following the evolution of a controlled and healthy TQM culture [17], [18].

Rummler and Brache’s experience [20] is consistent with that of Edward Deming who maintains that only 15 percent are performance problems and 85 percent are managerial problems. Management has the capacity to make the environment better for the performance. If they provide the conditions that are conducive to good performance, then huge percentage of the performance improvement opportunities is taken advantaged of. TQM is supposed to provide such conditions. Even the 15 to 20 percent of performance improvement opportunity on the part of the worker is influenced by TQM. With TQM, workers are given the proper training, skills, and information needed to perform the job. Thus, it is stated that under international strict competition, companies are motivated to embrace the TQM concept so as to maintain a positive effect on their business performance. [12], [15].

Methodology

Background of the company – Shanghai Fu-Shing Inc.

In 1956, Shanghai Fu-Shing Inc. started as a small bike manufacturing company. After three decades of continuous growth and expansion, it has emerged as the leading hardware company in Shanghai. The Corporate Commitments of Shanghai Fu-Shing Inc. include

(1) a continuing partnership with the region’s hardware factories and allied professionals through scientific and civic endeavors,
(2) a growing contribution to the effective delivery of hardware products in the region,
(3) a working climate that fosters professional and personal growth for its human resources, and
(4) an organization where Quality is a way of life.

Shanghai Fu-Shing Inc used several methods and tools implementing the Total Quality Management program. These include Quality Circle which is Shangahi Fu-Shing Inc’ case is QPC’s or Quality Productivity Circles, QIT’s or Quality Improvement Teams, JIT or Just-In-Time, 5S + 1 Habit, and QFD or Quality Function Deployment. It cited several positive effects of this system. It promotes cleanliness and provides for a better working environment. Space utilization is maximized and unnecessary or time-consuming activities such as sorting and searching are lessened. It also prevents accidents and injuries. Most of all, it increases work efficiency.

Research questions regarding the impact of TQM

The research undertaken for this study is organized to provide an empirical critique on the impact of TQM on employee participation and Job Performance of the rank-and-file employees.

Specifically, this study sought to answer the followings:

Research question 1. How does the degree of employee participation differ in an organization before and after a TQM Program was implemented in terms of: Information Sharing; Training; Rewarding Performance; and Redistribution of power?

Research question 2. To what extent does the level of job performance differ in an organization before and after a TQM was implemented in terms of: Quantity of Work; Quality of Work; Job Knowledge; Initiative; Reliability; Cooperation; Decision Making; and Commitment?

Although business scholars have long asserted that the effects of TQM to an organization are positive, it has to demonstrate time and again as an effective tool in management. An empirical examination of these questions is called for and the description of such a study is noted in the section that follows. To facilitate answering the research questions, the researcher advances two Null Hypothesis which were tested in this study:
(1) there is no significant difference in the degree of employee participation in an organization before and after a TQM was implemented; and

(2) there is no significant difference in the level of job performance of an organization before and after a TQM Program was implemented.

The author conducted a survey study to gauge the impact of TQM on employee participation and job performance illustrated as Figure 1. This study seeks in a controlled setting to examine the efficacy of TQM program implemented on rank and file employees using a Longitudinal Comparative Research Design. The sample composition, instrumentation, procedure, data analysis and findings are described briefly in the sections that above.

The subject pool was composed of a quota sample of 50 rank-and-file employees of Shanghai Fu-Shing Inc., located in Shanghai city of China. Thirty (30) is the minimum number of respondents in measuring a longitudinal comparative research [6]. The researcher made use of 50 respondents per survey period to be able to get the best results in determining the effect of TQM on Employee Participation and Job Performance.

Figure 1
Research evaluation framework for impact of TQM program
More than 50% of the respondents are male. Twenty eight percent belong to the age bracket of 21-24 years. Forty percent of the respondents have worked in the company for 4-6 years.

Procedure

The researcher requested permission from the Department Head of Total quality Control to administer the questionnaires to the rank-and-file and employees of the United Laboratories Inc. who were involved in this study.

The researcher did the administration of questionnaire personally, thus retrieval was facilitated. The directions of the questionnaire were thoroughly explained by the researcher and were assured with positive gesture by the respondents when asked if they fully understand how to accomplish the task given to them. Subjects’ participation in the study was voluntary and without compensation, prior to participation in the study, subjects was assured that the information they provided the administration of the questionnaire and subjects completion of the data collection instrument was not time limited. Instead, respondents were encouraged to proceed at their own pace. Average time spent by subject in accomplishing the research matter was approximately 20 minutes.

Results

Response for each item and area in the two instruments were tallied and expressed in terms of mean, standard deviation and $t$-test. The mean analysis was used to determine the level of employee participation and job performance of Shanghai Fu-Shing Incorporated. The standard deviation was used to determine how spreads out the scores of employee participation and job performance are between the two periods (before and after the implementation of TQM program). To determine whether or not there is a significant difference between the mean of the two periods, $t$-test was used. This test determines the impact of TQM on Employee Participation and Job Performance. Each area of employee participation and job performance was scored by obtaining their means.

The researcher used a 0.05 level of confidence. If the equivalent probability of the $t$-value is less than 0.05, then the null hypothesis is rejected. The range in which the response of the employees after the TQM were implemented in terms of Employee Participation is displayed
on Table 4. Results showed that 24% of the respondents were in the range of very high degree of participation, while 64% belongs to the high degree of participation. Twelve percent belongs to the moderate degree of participation.

Table 1
Sample demographic profile

<table>
<thead>
<tr>
<th>Proportion of subjects</th>
<th>21-24</th>
<th>25-28</th>
<th>29-32</th>
<th>33-36</th>
<th>37-40</th>
<th>41-44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>28%</td>
<td>10%</td>
<td>18%</td>
<td>14%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>48%</td>
<td>52%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of experience</th>
<th>1-3</th>
<th>4-6</th>
<th>7-9</th>
<th>10-12</th>
<th>13-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>with the company (in years)</td>
<td>14%</td>
<td>40%</td>
<td>18%</td>
<td>8%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 2
Interpretation of the responses per area for the employee participation questionnaire

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5-5</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>3.5-4.49</td>
<td>Agree</td>
</tr>
<tr>
<td>2.5-3.49</td>
<td>Neutral</td>
</tr>
<tr>
<td>1.5-2.49</td>
<td>Disagree</td>
</tr>
<tr>
<td>1.0-1.49</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Table 3
Interpretation of the responses per area of the job performance questionnaire

<table>
<thead>
<tr>
<th>Score</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5-5</td>
<td>Description</td>
</tr>
<tr>
<td>3.5-4.49</td>
<td>Excellent</td>
</tr>
<tr>
<td>2.5-3.49</td>
<td>Very satisfactory</td>
</tr>
<tr>
<td>1.5-2.49</td>
<td>Satisfactory fair</td>
</tr>
<tr>
<td>1.0-1.49</td>
<td>Poor</td>
</tr>
</tbody>
</table>
Table 4

Distribution of responses for employee participation – After TQM Implementation

<table>
<thead>
<tr>
<th>Range</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5-5</td>
<td>12</td>
<td>24</td>
<td>Very high degree</td>
</tr>
<tr>
<td>3.5-4.49</td>
<td>32</td>
<td>64</td>
<td>High degree</td>
</tr>
<tr>
<td>2.5-3.49</td>
<td>6</td>
<td>12</td>
<td>Moderate degree</td>
</tr>
<tr>
<td>1.5-2.49</td>
<td></td>
<td></td>
<td>Low degree</td>
</tr>
<tr>
<td>1-1.49</td>
<td></td>
<td></td>
<td>None at all</td>
</tr>
</tbody>
</table>

The range Employee Participation before the TQM implementation is displayed in Table 5. Results indicate that 12% of the respondents are in the very high degree bracket, 66% are in the high degree bracket while 22% belongs to the moderate degree bracket.

Table 5

Distribution of responses for job performance – Before TQM Implementation

<table>
<thead>
<tr>
<th>Range</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5-5</td>
<td>6</td>
<td>12</td>
<td>Very high degree</td>
</tr>
<tr>
<td>3.5-4.49</td>
<td>33</td>
<td>66</td>
<td>High degree</td>
</tr>
<tr>
<td>2.5-3.49</td>
<td>11</td>
<td>22</td>
<td>Moderate degree</td>
</tr>
<tr>
<td>1.5-2.49</td>
<td></td>
<td></td>
<td>Low degree</td>
</tr>
<tr>
<td>1-1.49</td>
<td></td>
<td></td>
<td>None at all</td>
</tr>
</tbody>
</table>

For the aspect of Job Performance, Table 6 shows that after TQM Implementation, 42% employees belong to the excellent bracket, 50% belongs to the very satisfactory bracket while 8% belongs to the satisfactory bracket.

Before TQM Implementation, Table 7 shows that 24% of the respondents are in the excellent bracket, 62% belongs to the very satisfactory bracket, while 14% belongs to the satisfactory bracket.

The weighted mean for each area of Employee Participation is presented in Table 8. The table shows the weighted mean of the respective periods, their t-values, and their probability values.
In the area of Information sharing, After TQM Implementation obtained a mean of 4.073 compared to the 3.783 mean of Before TQM Implementation the $t$-value is 2.588 and its probability is 0.01. The researchers rejected the null hypothesis at the significance level of 0.05. In the area of Training, After TQM Implementation the $t$-value is 0.7087 and its probability is 0.513. The researchers accepted the null hypothesis at the significance level of 0.05.

In the area of Rewarding Performance, After TQM Implementation obtained a mean of 4.060, while Before TQM Implementation obtained a mean of 3.784, the $t$-value is 1.848 and its probability is 0.64, again the researcher accepted the null hypothesis at the significance level of 0.05. In the area of Redistribution of Power, After TQM Implementation obtained a mean of 4.326, while Before TQM Implementation obtained a mean of 3.923, the $t$-value is 3.421 and its probability is 0.001, the null hypothesis is rejected at the significance level of 0.05. In considering of after TQM Implementation of the overall aspect of Employee Participation.
was 3.884. The $t$-value obtained when subjected to the $t$-test is 2.713 with a probability of 0.008. Again, the null hypothesis is rejected at the significance level of 0.05.

<table>
<thead>
<tr>
<th>Areas</th>
<th>After X</th>
<th>Before X</th>
<th>$t$-value</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information sharing</td>
<td>4.073</td>
<td>3.783</td>
<td>2.588</td>
<td>0.01</td>
</tr>
<tr>
<td>Training</td>
<td>4.119</td>
<td>4.044</td>
<td>0.7087</td>
<td>0.513</td>
</tr>
<tr>
<td>Rewarding performance</td>
<td>4.060</td>
<td>3.784</td>
<td>1.848</td>
<td>0.064</td>
</tr>
<tr>
<td>Redistribution of power</td>
<td>4.326</td>
<td>3.9232</td>
<td>3.421</td>
<td>0.001</td>
</tr>
<tr>
<td>Overall</td>
<td>4.145</td>
<td>3.884</td>
<td>2.713</td>
<td>0.008</td>
</tr>
</tbody>
</table>

The weighted mean for each area of Job Performance is presented in Table 9. The table shows the weighted mean for each performance area for both approaches as well as the respective $t$-values and probability values.

In the area of Quantity of Work, After TQM Implementation obtained a mean of 4.08 compared to the 3.83 mean of Before TQM Implementation. In Before TQM Implementation, the $t$-value is 1.824 and the probability of 0.0067, at the significance level of 0.05, the researcher accepted the null hypothesis. In the area of Quality of Work, After and Before TQM Implementation, obtained means of 0.015, the researcher rejected the null hypothesis at the 0.05 level of significance.

For the Job Knowledge, After TQM Implementation obtained a mean of 4.42 compared to Before TQM Implementation 4.16. The $t$-value is at 2.01 and the probability at 0.044. The null hypothesis is again rejected at the significance level of 0.05. For Initiative, After TQM Implementation obtained a mean of 4.25 compared to the 3.91 of Before TQM Implementation. The $t$-values and probability values are at 2.33 and 0.0203, respectively. The researchers also rejected the null hypothesis at the significance level of 0.05. In the area of Reliability, a mean of 4.10 was obtained by After TQM Implementation while Before TQM Implementation obtained a mean of 3.79. The $t$-value is 2.312 and the probability is 0.0215, the researcher again rejected the null hypothesis at the significance level of 0.05. In the area of Cooperation, After and Before TQM Implementation obtained means of 4.15 and 4.02, respectively. The $t$-value is at 0.3348, while probability is at 0.735, the researcher accepted the null hypothesis at the significance level of 0.05.
Table 9
Comparative mean of job performance

<table>
<thead>
<tr>
<th>Areas</th>
<th>After X</th>
<th>Before X</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of work</td>
<td>4.08</td>
<td>3.83</td>
<td>1.824</td>
<td>0.067</td>
</tr>
<tr>
<td>Quality of work</td>
<td>4.23</td>
<td>3.94</td>
<td>2.446</td>
<td>0.015</td>
</tr>
<tr>
<td>Job knowledge</td>
<td>4.42</td>
<td>4.16</td>
<td>2.01</td>
<td>0.044</td>
</tr>
<tr>
<td>Initiative</td>
<td>4.25</td>
<td>3.91</td>
<td>2.33</td>
<td>0.0203</td>
</tr>
<tr>
<td>Reliability</td>
<td>4.1</td>
<td>3.79</td>
<td>2.31</td>
<td>0.0215</td>
</tr>
<tr>
<td>Cooperation</td>
<td>4.15</td>
<td>4.02</td>
<td>-0.335</td>
<td>0.735</td>
</tr>
<tr>
<td>Decision making</td>
<td>4.05</td>
<td>3.76</td>
<td>1.922</td>
<td>0.054</td>
</tr>
<tr>
<td>Commitment to the company</td>
<td>4.41</td>
<td>4.17</td>
<td>1.748</td>
<td>0.079</td>
</tr>
<tr>
<td>Overall</td>
<td>4.21</td>
<td>3.97</td>
<td>2.141</td>
<td>0.032</td>
</tr>
</tbody>
</table>

For Decision Making, After TQM Implementation obtained a mean of 4.05 compared to Before TQM Implementation 3.76. The $t$-value and probability value are at 1.922 and 0.054, respectively. The null hypothesis is also accepted at the significance level of 0.05. For the employees’ Commitment to the Company, After TQM Implementation scored a mean of 4.41 compared to Before TQM Implementation 4.17. The $t$-value is at 1.78 and the probability is at 0.079. Again, the researcher accepted the null hypothesis at the significance level of 0.05.

Overall, After TQM Implementation obtained a mean of 4.21 compared to the 3.97 of Before TQM Implementation. When subjected to the $t$-test, the $t$-value is 2.141 with a probability of 0.032. The researcher rejected the null hypothesis at the 0.05 level.

Discussion

In interpreting the significance or non-significance of the differences in the participation and performance of employees between After and Before TQM Implementation, the researcher based their interpretations on the $t$-values obtained and their equivalent probability at the 0.05 level of confidence.

Employee participation

The results varied in the four areas of Employee Participation. In the area of Information Sharing, it showed that there is a significant difference
between After and Before TQM Implementation results implied to the fact that employees of After TQM Implementation are involved in information sharing to a higher degree compared to their Before TQM Implementation counterparts. This indicates that facts and information needed to do a good job provided to employees After TQM Implementation are more than adequate.

This is mainly because After TQM Implementation the employees make extensive use of Quality Circles, or in their case Quality Productivity Circles in their operations. Data from the company showed an increase in the number of registered circles from the implementation of the TQM program to the present. Data also showed a decrease in the number of approved Quality Productivity Circles (QPC) decrease in approved recommendations means that lesser and lesser improvements are being made as the system approaches its maximum efficiency. The significant difference also indicates that they have more than ample opportunity to exchange information with their supervisors.

A factor that contributed to this is the fact that Quality Productivity Circles holds regular meetings and dialogues with supervisors at least on a weekly basis. Rumors are also rarely relied upon to get hold information on company matters. This speaks very well of the reliability and accuracy of information that flows in their organization. On the pat of Before TQM Implementation, although they have a high degree of participation, facts and information given to them are also more than what is required but still falls short in the degree attained by After TQM Implementation.

They also have ample opportunity to exchange information on company matters that are at times picked up on rumors. Information sharing between employees and supervisors are less frequent for Before TQM Implementation compared to After TQM Implementation. This may be attributed in part to the fact that they don’t use quality circles or the like extensively. They use productivity teams, but are also limited in impact since they are small in numbers.

In the area of Training, results showed that there is no significant difference between After and Before TQM Implementation. This indicates that employees of both approaches have a high degree of participation in terms of training and increasing knowledge. This is consistent with the objective of Total Quality Commitment (TQC), which is the continuing
development of each and every member of the Shanghai Fu-Shing family into a quality person to realize the company’s quality vision.

This is also true for Before TQM Implementation which considers its people as its greatest resource and the backbone and lifeblood of the company. This supports the commitment of both organizations in having a well-trained workforce. For Shanghai Fu-Shirig Inc., training is particularly essential for their participation in their Total Quality Commitment program.

Recent activities include re-training in values and TQC tools for the Manufacturing Division and Refreshers Course in TQC/QPC Tools for the Distribution Division. These include fishbone diagrams, Pareto Charts, and other problem solving techniques. Before TQM Implementation, employees were also sent to seminars, training and re-training sessions are frequently conducted to further sharpen their skills and keep them on the peak of their abilities.

Before TQM Implementation employees were also sent to productivity teams abroad so they are kept abreast on the latest marketing trends and manufacturing developments. Information and skills obtained are disseminated to the other employees. Results also showed employees of both approaches receive more than sufficient guidance and assistance they need to accomplish their work.

The third area of Employee Participation, which is Rewarding Performance, showed that there is no significant difference on the rewarding performance between after and Before TQM Implementation. Both periods exhibited a high degree or rewarding their employees based on company performance. Bonuses are received by organizational members most of the time when the company performs well. Monetary incentives other than bonuses are also given, to the organizational members. In the case of After TQM Implementation, several monetary awards tied to group and organizational performances are given in connection to its Total Quality Commitment program.

In terms of non-monetary rewards, recognition and publicity were given to the employees of both approaches who contributed immensely in the company’s overall performance, Letters of Commendation for “Outstanding Project Performers” were awarded recently in simple rites at Shanghai Fu-Shing Inc. The Quality Champion and Quality Achievers also received glass trophies aside from the cash awards they received.
There is a significant difference in the Redistribution of Power between After and Before TQM Implementation results indicate that After TQM Implementation showed a higher degree of sharing with its employees. It indicates that their employees are highly empowered in terms of providing suggestions and recommendations to decisions regarding their work.

A factor that contributes to this is the company’s use of Quality Productivity Circles. Through regular meetings, problems are identified, selected, and analyzed. Through the use of problem solving tools (brainstorming, because and-effect diagrams, etc.), findings and recommendations are submitted to the supervisors. The supervisor analyzes and approves the viable suggestions and submits it to the Divisional Total Quality Commitment Council. The council in turn monitors the implementation of the approved suggestions. It is systematic and structured, thus facilitating the process of recommendation and implementation of work improvements. They also have considerable freedom in making decisions in improving their work.

Employees are given considerable freedom in the arrangement of their workplace and in deciding the system they will use in accomplishing their work. It should be qualified that decisions made are appropriate to their levels in the organization. Before TQM Implementation, there is also a high degree of power sharing, though it is significantly lower than the degree attained by Shanghai Fu-Shing Inc.

They are empowered in giving recommendations on work improvement issues but the channels are less structured and systematic due to the lack of formal suggestion programs. In the aspect of decision making regarding work improvements, the employees are also allowed to such decisions although the degree of freedom in doing so is significantly less compared to their After TQM Implementation counterparts.

Overall results showed that there is a significant difference in the degree of Employee Participation between After and Before TQM Implementation, an indication that the degree of participation of employees in the aspects of participation as well as the opportunity and freedom to be involved are generally higher in After compared to Before TQM Implementation. This is particularly true in the area of information sharing and redistribution of power where results showed a significant difference.
Job performance

Cardy et al. [3] addressed that from a TQM perspective, workers’ performance is viewed as largely a function of the system rather than of the workers. This is perhaps most apparent in the writings of Deming who proposed that 85% of performance variance is due to the system and only 15% is due to person factors. The eight factors of performance yielded various results when the significance of its differences was tested. The first factor Quantity of Work yielded the result that there was no significant difference in this area for After and Before TQM Implementation.

Employees of both periods yielded quantity of work that are very satisfactory. It indicates that the worker of both periods often exceeds volume requirements. More than average amount of work are completed before deadlines most of the times.

Results in the Quality of Work factor showed that there was significant difference between after and Before TQM Implementation. For After TQM Implementation, the quality of work is described as very satisfactory. It indicates that requirements of the job in terms of neatness were accuracy, and thoroughness frequently exceeds the job requirements. It also indicates that work submitted is seldom returned for corrections.

For Before TQM Implementation, the quality of work is also described as very satisfactory although not in the same level compared to After TQM Implementation. Accuracy, neatness and thoroughness requirements are normally met, although work submitted is sometimes returned for corrections.

The third performance factor, Job Knowledge, showed that there is a significant difference in this factor between After and Before TQM Implementation. For After TQM Implementation, knowledge of employees on their job is very satisfactory. Results indicate that their employees have almost complete and thorough knowledge of their job. It also indicates that employees rarely need instruction or assistance.

As to Before TQM Implementation, knowledge of employees on their job is also very satisfactory but falls short in the level of job knowledge of After TQM Implementation employees. Still, Before TQM Implementation employees have more than adequate knowledge required of their jobs. Instruction and assistance are also needed occasionally in performing assigned and required tasks.
There is also a significant difference in the Initiative of employees, the fourth performance factor, between the two periods. The initiative of the employees in After TQM Implementation is described as very satisfactory. Employees frequently seek and set additional tasks for themselves. They also device ways to improve their job performance, and that were without necessarily being told to do so. The company’s use of Quality Productivity Circles makes a great contribution to this fact. Membership in a Quality Productivity Circle is voluntary and this speaks well for the initiative of After TQM Implementation employees.

As to Before TQM Implementation, employees’ initiative is also described as very satisfactory. They normally contribute, develop and device ways to improve their job performance and work situations.

There is also a significant difference in the Reliability factor between the two period. Results revealed that employees in After TQM Implementation showed very satisfactory reliability attitudes. This indicated that, employees were able to do the required or assigned jobs most of the time without the need for follow-up when certain situations call for it. It also indicated that their employees rarely have attendance and punctuality problems.

An area of the TQC program of the company that encourages punctuality and attendance is the perfect Attendance Award Program. Employees are given certificates and cash awards if they are able to maintain a perfect attendance and punctuality record for a given period of time. The longer the period of perfect attendance, the higher of the cash will incentive.

As to Before TQM Implementation, reliability of employees is also described as very satisfactory, though at a lower level compared to After TQM Implementation.

Employees were able to do the required job with minimal follow-up. It also indicates that their employees sometimes have attendance and punctuality problems.

Results in the sixth performance factor Cooperation revealed that there is no significant difference between the two periods. Employees of both approaches showed attitudes of cooperation that is described as very satisfactory. Employees are frequently cooperative and exercises tact in dealing with co-workers and superiors. Above average interaction skills are also manifested by the employees in both approaches. Employees of Shanghai Fu-Shing Inc. also acquired skills in interpersonal and group
interactions since this is a vital part in participating in TQC related activities. An indication of this is the continued success of the Quality Productivity Circles.

Grouping in the circles is permanent, so harmony and cooperation should be maintained in order for group to be consistently effective. This attitude is also exhibited outside the circles. As of Before TQM Implementation, motivational programs are regularly conducted. This is aimed at inculcating effective work habits and enhancing professional relationships among the people in the company.

The results showed that there is also no significant difference in the Decision Making abilities between employees of after and Before TQM Implementation. Employees of both approaches exhibited very satisfactory decision making abilities. This indicates that employees of both approaches almost always make decisions that are consistent with company plans and policies.

Ability to make logical and timely decisions is also frequently exhibited. Both approaches have a well-trained workforce. Employees receive the training necessary to do the job so decisions made in the workplace are logical and timely. Training complemented with awareness of company plans and policies results to decisions that are logical and consistent.

In testing the employees’ Commitment to the company, the eight performance factors, results indicate that there is no significant difference between the two periods. Commitment of employees of both approaches is described as very satisfactory. This indicates that employees almost always take effort in promoting the company’s best interests.

Results also indicate that employees of both periods of the company exhibit a high degree of loyalty to the company. This is attributed to the companies’ treatment of their employees. This is indicated in the sound recognition and reward system. After TQM Implementation also has rewards tied to its TQC program. Aside from the rewards, both approaches also exhibited concern to the development of its employees. This is indicated by their regular trailing and seminar programs conducted for the employees of both approaches.

The TQC objective of Shanghai Fu-Shing Inc. is the continuing development of every member of the Shanghai Fu-Shing Inc. family into a quality person to realize its great resource for competition. Employees are committed to the company since they are properly taken cared of.
Overall, results showed that there is a significant difference in the level of Job Performance between the two periods. It shows that the levels of performance of After TQM Implementation employees are generally higher compared to Before TQM Implementation.

This particularly true in the factors of work quality, job knowledge, initiative, and reliability were results indicate a significant difference. The significant difference indicates that After TQM Implementation has considered the conditions necessary for Job Performance. In reference to the Human Performance System model, Shanghai Fu-Shing Inc. through its TQC Program has addressed the aspects of input (information, resources), performer (training, guidance), output (conformance to quality standards), consequences (bonuses, recognition), and feedback.

The significant difference in terms of Employees Participation and Job Performance can be attributed to TQM. This is because TQM covers every aspect that may affect Employee Participation and Job Performance. In fact, TQM covers every aspect on the way of life and operation that is conducted in an organization. This is particularly true for Employee Participation and Job Performance that is directly affected by TQM: Employee Participation because of established participative activities and Job Performance because of the conditions created necessary for good performance.

The “significant difference” on the other hand in some areas was discussed per indicator of participation and per factor of performance. Overall, the insignificant difference in some aspects can be attributed to the fact that these have been properly addressed by management Before TQM Implementation and also as a matter of priority.

The quantity or productivity factor of performance for example is only third in the priority of the TQC program of Shanghai Fu-Shing Inc. after quality and delivery. However, this is a case to case basis since the other factors that showed an insignificant difference can also be attributed to the fact that it was considered in the company’s operations properly as indicated in the high levels of participation and performance.

Recommendations

The TQM Program of Shanghai Fu-Shing Inc. has proven itself to be successful in terms of its effect on Employee Participation and Job Performance. The TQM program provided venues and conditions where employees can influence the direction of the company. The researcher
presents recommendations derived from the findings of the study as follows:

1. Shanghai Fu-Shing Inc. continues implementing its TQM program. Management must devote a sustainable effort to continually support and develop the program by deployment of more resources and time. Resources would be the materials and tools required by the Total Quality/Productivity Circles to improve all aspects of quality in management and product/service. Time is needed in the identification and analysis of problems as well as the formulation of solutions.

2. Additional incentives should be given to employees who are active in the TQM Program, aimed to increase the participation of employees to TQM related activities.

3. The membership of Quality Productivity Circles should not be confined to rank-and-file employees but should be opened to participation by technical staff and supervisors or formation of distinct circles/teams wherein the managers or higher executives act as leaders and facilitators.

4. The researcher recommends that studies of the same nature be conducted in other industries and probably not to confine the study to rank and file employees but to all levels in the organization.

References


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