### CHAPTER 5

## Benefits From Successful TQM Implementations In Harris Malaysia

There are a few benefits that Harris Malaysia reaped from the successful implementation of TOM.

### 5.1 ISO 9002 certification

Harris Malaysia obtained the ISO 9002 certification in July 1993. The implementation of TQM was instrumental in that attainment. ISO 9002 series is essentially an international recognized quality assurance system which assures customers or third parties that a company (in this case, Harris Malaysia) is operating in accordance with specified requirements of international standards. Therefore this will enhance the capability of Harris Malaysia to sell and compete in the international market.

#### 5.2 Customer satisfaction

TQM has provided a significant increase in customer satisfaction. A key indicator used by Harris Malaysia to measure customer satisfaction is the customer satisfaction gap analysis. For this analysis, Harris Malaysia had interviewed 20 customers (1/12 of the customer base) each month and asked them about 19 questions on product, sales, after sales services and cultural. Two basic question were i) how important are these elements to them? and ii) how well Harris Malaysia has satisfied them?

The different between importance and satisfaction which is the gap is important in this analysis. The higher the gap the more critical it become. A gap of one (1) is considered average and compatible in the industry whereas the gap of 0.7 is considered good.

This gap analysis has shown a great improvement from 1991 to 1995. In 1991, it was 1.7; 1992, 1.3; 1993, 1.0; 1994, 0.9 and 1995, 0.7. Therefore, with the implementation of TQM, it has increased the level of customer satisfaction toward Harris Malaysia products.

### 5.3 On-Time Delivery (OTD)

On-time delivery (OTD) has shown a remarkable improvement from 80% in 1991 to 95% in the same period in 1995. The latest OTD for its major lines now exceeds its 95% stretched goal, according to its TQM Director, Mr. Stephen Nah.

### 5.4 Working environment

In addition to these impressive figure, Nah adds, "The working environment is dynamic and pleasant. Our absenteeism rate is only 1.5% compared with the average industry rate of 2.3%. While others experience a monthly employees turnover rate of 4% on average, ours is less than 1.8%. Most of our employees have served long; averaging eight years, while the majority of the senior executives have served for more than ten years.

# 5.5 Workflow

The workflow between departments have improved because each employee considers the person to whom he or she supplies as customer and takes effort to understand his needs and requirements. Internal customers visit and feedback is a normal practice in Harris Malaysia.

# 5.6 Qualitative benefits

More concrete accounts can be drawn from the floor members. Having been with the company for more than 11 years, Normah Ismail, an inspector in the IC Packed Final Inspection Department who is also an EIT/SDWT secretary, says, "We now have a better

understanding of the whole process of the plant's operation and what the company's requirements are. TQM has given us opportunities to learn, and there is now more cooperation and interaction among floor members, both within and between sections.

Engineer Chris Wong, who has served for more than eighteen years, may have encountered some bucups due to member's difference at the early stage of TQM, but he says, "It's a really exciting environment now, the members are more willing to participate with the implementation of TQM, members are encouraged to learn more skills and to be more independent. Time wastage is reduced when members are often to deal with basic problems on equipment machinery and learn how to make use of the job manuals.

Furthermore, Harris Malaysia also gained benefits from organizing their employees in teams to streamline their operations. Self managing teams like PET, SIP, EIT and IMT have provide three critical benefits to enhance the competitive edge of the organizations. They are first, increased employees autonomy and empowerment to solve problems and improve work process. Therefore, the timing for completing task has become shorter. Secondly, it has increased the employees morale and ownership of jobs and the organizations goals. Thirdly, it has increased the pride of the employee toward the products and the organization.

### 5.7 Quality improvement

The quality of Harris Malaysia's products have increased tremendously after the implementation of TQM. The Total Quality System Review (TQSR) measurement shown that in 1991, the TQSR score was 270 points out of 1000 points, in 1993 it was 455 points and it increased to 600 points in 1995. This enable Harris Malaysia to qualify for the Silver Award Worldwide Organization.

### 5.8 Increase in productivity

According to Mr. Stephen Nah, since the implementation of TQM, the productivity rate of production workers had increased. The K' volume per direct operator has doubled in 1995 with the head count still remain the same.

### 5.9 Customer warranty returns

The returned of defect products from the customers has reduced significantly with the establishment of TQM in Harris Malaysia. In 1992, it was 4,200 PPM (part per million) rate. This has been reduced to 200 PPM in 1995. The reduce of defected products returns show that quality of the products have increased significantly.

## 5.10 Increase in profitability

Since the implementation of TQM in 1991, Harris Malaysia has not only experienced an increase in productivity, but also an increase in profitability. Harris Malaysia's net profit has increased from US\$5 million in 1993 to US\$20million and US\$40 million in 1994 and 1995 respectively. A tremendous increase in profitability shows that customers have great confidence in Harris's products.

### 5.11 An increase of book to bill ratio

Customers confidence in Harris Malaysia's products have increased. This can be seen in the book to bill ratio. Currently, the book to bill ratio of Harris Malaysia is 1:1.07. This means that out of every 1 (one) product sold to the customer, there is 1.07 product booked by the customer.