

Enrichment Of Customer Satisfaction Through Total Quality Management Techniques

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Abstract - In the past manufacturers could sell all they made. Service organizations didn't worry about the service they provided. Now things have changed. Companies now are becoming more responsive, they offer a better product, and keep improving through Total Quality Management (TQM) techniques. TQM increases customer satisfaction by boosting quality. It does this by motivating the workforce and improving the way the company operates. The customer is more sophisticated and knowledgeable. If you don't offer good service, he will buy from a competitor. When corporate customers start improving their own quality, they also expect better performance from their suppliers.

Index Terms - Continuous improvement program, customer satisfaction, Total Quality Management, Re-engineering.

I INTRODUCTION

Competition is getting harder and becoming global. The fast-growing countries of East Asia often produce at low cost. This may be because of low wage costs or large investment. As a result, prices in many markets have fallen. Others will start to drop. It is easy for a company to get caught between improved Western products and low-price products from emerging countries.

Many companies now produce a new model in half the time it previously took. Some products have a much shorter life than before. At one time a building society wouldn't alter the style of its savings accounts for decades. Now it may add or delete accounts from one year to the next. Change has even taken place in mature public-service organizations. Among hospitals, local government, railways and schools each institution is trying to get an advantage over the other are being done differently. Companies are using biotechnology, fibre optics, ultrasound and neural networks to make faster and better products. The four challenges shown in Figure.1, are forcing organizations to adapt TQM techniques.

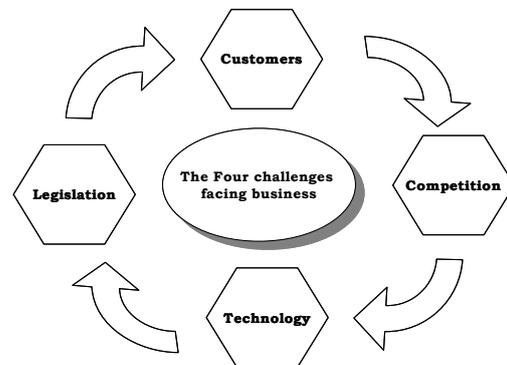


Fig 1: The four challenges

Legislation is making greater demands on companies. Environmental, health and safety laws now require companies to run safe and pollution-free businesses. No longer you can simply pour toxic liquids down the drain. Employees have to be careful to avoid environmental damage. This requires a motivated and knowledgeable workforce. Many companies are complacent. They're used to customers sending in orders. They are accustomed to supplying products which have faults in them. In today's competitive climate, they will start to lose customers. As one guru said, 'Survival is not obligatory.'

Some companies think they have no problems. This is especially true of monopoly suppliers and market leaders with popular products. Success makes companies complacent. Yet history proves that the most successful market leaders invariably fall the heaviest.

A Popular company, which lost its grip on the computer market, is just one example. Many companies are reluctant to change. They think that the systems that have made them successful will continue to work in the future. They feel uncomfortable making changes, or they lack the energy.

Inefficiency exists inside every company. Errors add cost, and reduce customer satisfaction. In the average firm, the cost of doing things wrong can be 25 per cent of turnover. Many staff spends a

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day a week rectifying problems (which is a 20 per cent failure rate). Doing things twice is a waste of time and effort. As a customer you are surrounded by examples of bad quality. It is not just that things are well made or badly made. It goes further than that. Here are some examples of quality failure: The kettle whose spout spills water, the incomprehensible printer manual, the letter from your children's school which contains spelling errors the cafe where the staff ignore their customers & the brochure that takes weeks to arrive, or never actually comes

Even Inside the organization, we can probably see other quality problems: The project which runs over time and over budget, The R&D department whose members are always obstructive, & the products which are made wrongly, and have to be redone.

We know that our product and service could be improved. And we know that outside pressures are growing. So how do we respond? We need to achieve the four essentials, which are shown in Figure 2. Often grouped under the word 'quality', they include the following techniques. Reduce defects. This means reducing the number of errors made, whether in making products that doesn't work, or in making paperwork mistakes.

Improve productivity (in other words, produce a greater output for the same level of cost). Improve customer service. Even companies in technical or capital intensive markets need to satisfy their customers. Competitors are constantly offering your customer newer and better products. Yours have to match that rate of innovation.

II METHODOLOGY

The four essentials can be achieved if the energies of whole workforce are committed to excellence and to the customer. The four essentials are too big a task for any one individual to achieve.

Defining the solution is simple, but achieving it is less easy. Companies and gurus have wrestled with the problem for years. Various Methods for improving quality strategies have been tried. The early attempts used statistical techniques on the factory floor. In the, 1960s, companies used management by objectives to try to, control what happened. But managers sometimes forgot to motivate staff, so the results fell short of their target. Incentive payment schemes (such as piecework] were brought in to boost productivity. But often this produced lots of poorly made products.

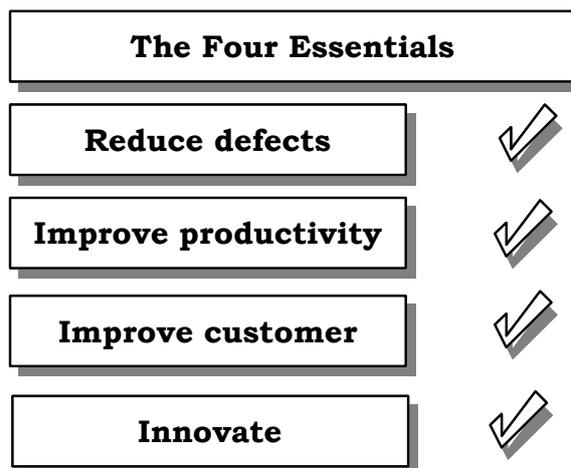


Fig 2: The four essentials

Then companies introduced management systems, such as ISO 9000. But staff sometimes ignored the new systems, and worked the way they always had.

The most recent fashions have been benchmarking, partnership sourcing and business process re-engineering. But these new tools often solve problems in only one area of the business, such as supplier quality or excellence in manufacturing. So that leads to Total Quality Management, or TQM.

Total Quality Management is not as fashionable as re-engineering, nor as firmly defined as ISO 9000. But it contains all the elements for the successful company of the future. Without TQM, you have to pray that your competitors remain incompetent. Use TQM properly, and your success is assured.

TQM is one of the vaguest business tools ever invented. There is no TQM bible, and each of the many quality gurus said something different everyone has their own view of how TQM should be applied. But as the case histories in this paper show, there is more than one route towards TQM. You adapt it to meet the needs of your business.

TQM means satisfying customers first time, every time. It means enabling your employees to solve problems and eliminate waste. TQM is not so much a management technique as a whole style of working. TQM is really just another word for good management. It is difficult, perhaps impossible, to achieve total quality. But companies that aim for it are going in the right direction. In Figure 3 there are the five principles, on which TQM is founded.

1. Concentrate on the customer.
2. Do it right.
3. Communicate and educate.
4. Measure and record.
5. Do it together

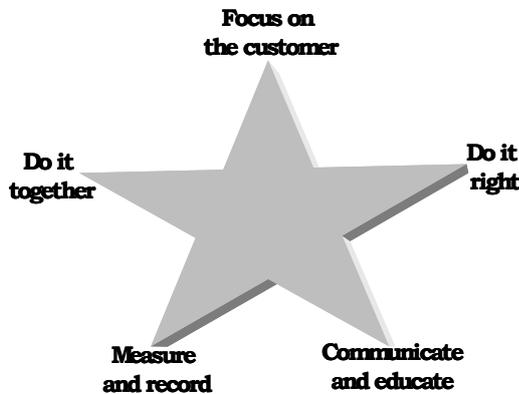


Fig 3: The five principles

The above principles are bandied freely around. It is worth pausing for a moment to see what each of them really means.

Be customer focused means placing the customer at the centre of everything you do. This can be quite a shock for the production-oriented organization. It requires the company to check customers' attitudes regularly. It includes the idea of internal customers as well as external ones.

Do it right first time means avoiding re-work. It means cutting the amount of defective work, whether on the shop floor or in the management offices.

Constantly improve. 'Continuous improvement beats postponed perfection', said a manager at Cummins, the engine maker. As the comment implies, continuous improvement allows the company gradually to get better.

Quality is an attitude. There are no shortcuts to quality. The old methods of inspecting for defects are not good enough any more. Everyone has to be committed to quality. That means changing the attitude of the entire workforce, and altering the way the company operates.

Telling staff what is going on involves improved communication. Typically, this includes team briefings, one of the main elements of TQM. We have to educate and train our people, for an unskilled workforce makes mistakes. Giving more skills to workers means they can do a wider range of jobs, and do them better. It also means

educating staff in the principles of TQM, which is a whole new style of working.

Measure the work. Measurements allow the company to make decisions based on facts, not opinion. They help to maintain standards and keep processes within the agreed tolerances.

Top management must be involved. If senior management is not involved, the program will fail. It is as simple as that. If you are the big boss, there is no problem. If you aren't, your program cannot start until you have the boss's

Commitment. Empowering the staff means getting employees to think for themselves. 'We pay people to improve the business, not just perform to the status quo,' said one organization.

Make it a good place to work. Many companies are full of fear.

Staffs are afraid of the sack, afraid of their boss, and afraid of making mistakes. In Spain, the UK and France, more than 60 per cent of full-time employees are very worried about losing their jobs, according to the Henley Centre. There is no point in running a TQM program unless the company drives out fear.

Introduce team working. Teamwork boosts employee morale. It reduces conflict and in-fighting. It solves problems by hitting them with a wider range of skills. It pushes authority and responsibility downwards and it provides better, more balanced solutions. Yet the culture in most companies actively discourages teamwork. So the TQM program has to foster it actively.

Organize by process, not by function. This element of TQM seeks to reduce the barriers that exist between different departments, and concentrates on getting the product to the customer.

Figure.4 shows, a TQM program creates continuous improvement. This reduces waste and improves customer satisfaction. Both these factors ultimately lead to more profit

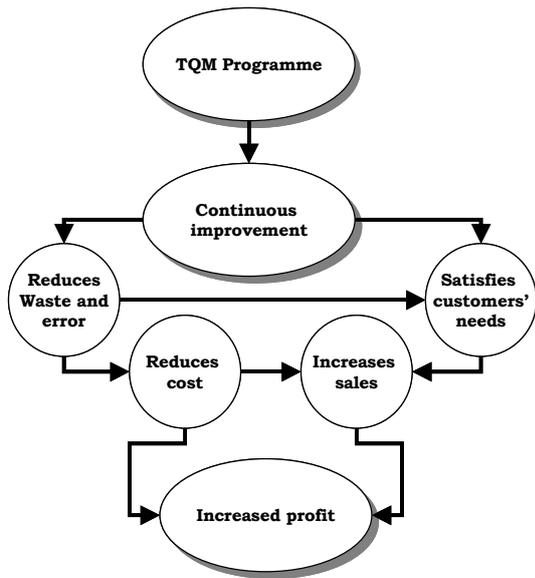


Fig 4: How TQM Works

III CASE STUDIES:

TQM can produce unbelievable results, as the following examples show.

The reject rate at Bally Shoes fell from 2.7 to 0.3 per cent between three years. Lead time from receipt of order to delivery improved from 28 to 3 days. This followed training in team building, continuous improvement and waste reduction.

Using TQM techniques, X company has gained annual fuel savings of Rs 325,000, against management time worth Rs12,000 and a capital investment of Rs35,000. The payback was seven and a half weeks.

Parcel Carrier Company has increased its customers from 62,000 to 105,000 in four years. Unit costs have fallen over five years; 91 per cent of the company's 6000 workers believe that it is committed to developing people.

Car Company has increased its sales per employee from 68,000 to 126,000 in five years, a success which it attributes to its TQM program; 92 per cent of its employee's say they are proud to work for the company, compared with 69 per cent four years previously. Company has launched 30 new cars in five years.

TQM companies out-perform others. A survey by Business Week magazine showed that leading TQM companies (such as AT&T, Motorola and Federal Express) yielded a return of 89 per cent against the Standard and Poor's 500 index average of 33 per cent.

In the UK, 25,000 companies have tackled their quality problems by becoming registered to ISO 9000 (BS 5750). Elsewhere in the world, registrations are also increasing, with big growth in North America, Brazil, India and the Pacific Rim. Many of these organizations are now seeking to build on their success, and are turning to TQM. The first UK award for Quality attracted entries from major firms like TNT and Rover. In the USA, the Baldrige Award has been won by firms like Rank Xerox. If they take TQM seriously, maybe you should as well.

The main benefits of a TQM program are shown in Figure. 5. Some of these benefits are common to many 'quality' initiatives. Advantages which are unique to TQM are as follows: It makes the company a leader, not a follower it fosters teamwork. It makes the company more sensitive to customers' needs. It makes the company adapt more readily to change. It lets staff from different departments meet each other. With this list of benefits, who could ignore TQM?

Benefits for the customer		
Fewer problems with the product or service	Better customer care	Greater satisfaction
Benefits for the company		
Quality improves	Staff are more motivated	Productivity increases
Costs reduce	Defects fall	Problems resolved faster
Benefits for staff		
Empowerment	More training, more skills	More recognition

Fig 5 : Benefits of TQM program

IV Self-assessment

This quiz helps to assess the scale and effectiveness of the measurements taken at the place of work.

Score one point for every 'Yes' answer. Then see how well your organizations do

- 6-8 A Strong TQM culture is in place.
- 3-5 there are signs of a quality culture, But a lot of work remains to be done
- 0-2 Go and find yourself another job

Table 1: Self Assessment

	Yes	No	Don't Know
Is your organization aware of the changes taking place among competitors and customers?			
Is your company a friendly place to work?			
Are most employees secure about their jobs?			
Does the company widely circulate information about corporate progress and plans?			
Is your product and service as good as the best of your competitors?			
Have you conducted brainstorming sessions in the last 12 months?			
Do you have minimal waste and few errors?			
Are all employees customer focused?			
Is the organization constantly improving?			
Score			

V CONCLUSION

With each day passing, better products are reaching the market. Some improvements result from technology, others from better Total Quality Management philosophy. All the time, competitors are seeking to gain an advantage by making their products better in satisfying the customer. This is the theory of Total Quality Management. If companies don't seek to improve, in satisfying the customers they get left behind. Small improvements are easier to make than giant ones, especially for people lower down the chain of command. Small improvements in satisfaction often produce surprisingly big advances. Remember to improve not just production processes, but also management and clerical processes, too, which enriches the customer satisfaction to the highest level

REFERENCES

- [1] Management Sciences. Pandey & Singh, Standard publisher's distributors, January 1996. Page, 318-327.
- [2] Total Quality Management. Bester field, Pearson education. December 2005, Page, 60-85
- [3] Industrial engineering & Management. O.P.Kanna, Dhanpat Rai and Sons, July 1977, page 148-180
- [4] Making TQM work. Kit Sadgrove. Kogan page India, page 11-26
- [5] Essentials of Management. Harold Koontz. McGraw Hill. May 2008. Page 66-80
- [6] Industrial engineering. Mukhi. Tech India publication, page 378-392