

CHAPTER 6 - Competitive strategies

Contents

CHAPTER 6 - Competitive strategies	2
6.8 Cost of quality	2

CHAPTER 6 - Competitive strategies

6.8 Cost of quality

Active reading. Note the classifications of the costs of quality and think about the tangibility and intangibility of some of the elements. Also, think about the requirements for data collection of financial and nonfinancial data. Note the need for accountants to work with other professionals and the use of other related techniques, illustrating that accountants do not work in isolation, nor are the techniques used in isolation.



Video link [Costs of quality](#)

[<https://www.youtube.com/watch?v=Ss9mlvIQbLo>]

Control of quality is often a key element in a differentiation strategy, even though consumers expect a degree of quality in their low price purchases. Therefore, understanding the costs associated with quality is an essential aspect of the sustainability of the strategy. Quality has many different definitions, but perhaps the one best suited to the purpose of this learning resource is that quality means “fitness for purpose,” that is, does the product or service do what it is supposed to do? It then means that even low-cost items are subject to the costs of quality.

In general terms, the costs of quality can be defined as all resources employed by an organization to assure quality standards (Bohan and Homey, 1991). Managing the costs of quality, however, is as much about improving customer satisfaction (Kiani et al., 2009) as it is about keeping costs low and improving the quality of products (Srivastava, 2008). It should embrace the whole organization and the value creation system, including business partners.

The costs of quality can be analyzed into four main categories (Feigenbaum, 1956).

- Prevention—expenditures incurred to keep quality defects from occurring. These are typically costs associated with activities such as training, supplier evaluation, and quality planning.
- Appraisal—costs incurred to identify and control if the products or services conform to the required specification. These are typically costs associated with the activities of inspection, quality control, supplier monitoring, and customer surveys.

- Internal failure—any costs incurred because of failures identified via the appraisal system before the delivery to the customer. These are typically costs associated with the activities of reworking, downtime, equipment failure, re-inspection, and testing.
- External failure—costs incurred to rectify quality defects after the product or service has been delivered or provided to the customer. These are typically warranty costs, product liability insurance schemes, and contribution lost from customers who do not return, or who do not consider the offering due to loss of corporate reputation.

These can be separated into conformity and nonconformity (Crosby, 1979), as shown in Table 6.19.

Table 6.19 Costs of conformity and costs of non-conformity

Cost of conformity	Cost of nonconformity
<ul style="list-style-type: none"> • Prevention costs • Appraisal costs 	<ul style="list-style-type: none"> • Internal failure costs • External failure costs

Most organizations will have some form of cost of conformity for which a budget, or target limit, can be prepared. Objectives can be set to reduce or keep the cost of conformity to a minimum. Ideally, if nothing ever went wrong, the cost of nonconformity should be zero. However, if things do go wrong, then there is a cost associated with the failure. Costs of rectification either before or after the customer receives the product or service will be incurred, and, in the case of external failure, it could result in loss of reputation and potential future sales. The cost, in this case, is the lost contribution on those sales. A key aspect of dealing with quality failures is to investigate the reason for the failure and to instigate changes so that it does not happen again.

Juran et al. (1975) highlight the intangible nature of some of the costs of quality, such as loss of goodwill and potential loss of future customers. Poor quality can also have an impact on employee morale, which can have a perpetuating effect on poor performance. As with motivation, it is not just a case of motivating employees to achieve excellent performance but also of ensuring that they have the skills, resources, and equipment needed to perform their job to high standards.

Tracking the costs of quality may not be easy in the first instance. As with ABC, there may be a need to develop the accounting systems to collect data in a form that is easily translated into meaningful reports for management. ABC can be a useful technique to employ in identifying and tracking the actual costs of activities associated with quality (Carolfu, 1996; Tsai, 1998; Maiga and Jacobs, 2008). The accountants and quality professionals in the organization need to work together (Mandal and Shah, 2002) to gain maximum benefit from tracking and reporting the cost of quality.

It is, however, not just a case of monitoring the costs but of understanding the costs of quality and making decisions about the potential trade-off between costs. This can impact on the market offering and benefits emphasized in the marketing strategy. For example, an organization may decide to reduce the number of inspections based on statistical analysis that

historically, very few products are manufactured that are of poor quality. However, this increases the potential risk that a defective product could get through the process and into the hands of the customer. The policy could then be to replace the product immediately, free of charge, and without question. The customer focuses on the excellent customer service received rather than the fact that there was a problem. The organization can also make trade-offs in terms of training and inspection. If the investment in training is increased, in theory, the number of failures should be reduced, and the cost of failure should also be reduced or eliminated. In this way, accounting for the costs of quality is not just a monitoring activity but can form the basis of policy decisions and support the competitive strategy.

6.8.1 Costs of quality report

Active reading. Note the range of items included under each heading. Think about how each element could be controlled, the accuracy with which a target can be set, and the actual cost can be recorded.

A typical example of the costs of quality report is shown in Table 6.20.

Notice that quality planning and supplier evaluation are part of prevention, and customer surveys are part of the appraisal costs. The cost here is the administration cost associated with undertaking the activity. Also, note that the contribution lost from sales will be an estimated value as this is difficult to calculate with a high degree of accuracy. It is often associated with publicity around an event, such as product failure. In instances such as this, it may be possible to calculate the volume of sales lost, based on previous experience of sales growth, the difference between expected sales levels, and those achieved. Any shortfall may be due to adverse publicity around product failure. Reporting such figures helps to highlight the significance of quality failures and can be used to galvanize the organization into improving the processes.

Table 6.20 A typical costs of quality report

	2020	2019	Change
	\$	\$	%
Prevention costs			
Training	16,000	15,000	7
Quality planning	5,000	5,200	-4
Supplier evaluation	2,000	3,000	-33
Other quality improvements	4,500	6,000	-25
Total prevention costs	27,500	29,200	-6

Appraisal costs			
Testing	50,000	51,500	-3
Inspection	40,000	42,000	-5
Supplier monitoring	10,000	11,000	-9
Customer surveys	12,000	10,000	20
Total appraisal costs	112,000	114,500	-2
Internal failure costs			
Rework and rejects	7,500	8,000	-6
Reinspection and testing	3,000	2,500	20
Equipment failure cost of repairs	1,500	1,500	0
Downtime	1,000	1,200	-17
Total internal failure costs	13,000	13,200	-2
External failure costs			
Product liability costs	75,000	75,000	0
Repairs under warranty	120,000	125,000	-4
Contribution foregone from lost sales	15,000	13,000	15
Total external failure costs	210,000	213,000	-1
Total cost of quality	362,500	369,900	-2

Learning activity: Think about a time when you were disappointed with a product you purchased or a service you experienced. How did it make you feel? How important do you think it is for an organization to have a strategy for dealing with customer complaints? How would this help reduce the potential intangible elements of external failures?

Concerning internal failures, there can be a detrimental effect on employee morale in cases where there are high failure rates and a high incidence of reworking involved. Poor employee morale has been shown to cause quality failures. What could the organization do to prevent the demotivation of employees and the lowering of employee morale? How would this be recorded within the costs of quality?