An instrument for quality performance measurement

A. De Toni*, G. Nassimbeni, S. Tonchia

Institute of Business Organization, University of Udine, Via delle Scienze-33100 Udine, Italy

Accepted November 1994

Abstract

An instrument for evaluating the quality performance measurement level and the quality performance results is presented. The instrument is based on the classification of quality in categories and classes, for each of them, the objects of the evaluation, the methodologies, techniques and indicators most useful and used for the quality measurement and control are described.

The instrument was tested in two large Italian manufacturing companies (Eaton Controls S.p.A. and Zanussi Elettrodomestici S.p.A.) and gave satisfactory results for the set up and improvement of the quality performance measurement and control system, and permitted a more effective benchmarking in relation to the quality performances.

1. Introduction

Nowadays quality is one of the best source of competitive advantage and high quality performance is becoming of crucial importance. Much has been said regarding quality management and practices [1], but very little exists in the literature concerning the measurement of the level of quality produced by a firm [2].

In this paper, an instrument for evaluating the quality performance measurement level and the quality performance results is presented. It analyses the quality measurement methodologies, techniques and indicators, and permits both the quality measurement level and the quality results obtained by a firm to be measured, in order to compare them in relation to the past ("self-evaluation") and to the best competitors ("benchmarking").

As illustrated in Fig. 1, the instrument is based on the classification of quality in three categories, which regard the overall aspects of quality and they should be measured separately, because they represent independent dimensions of the whole quality level of a firm:

- total quality offered,
- perceived quality and customer satisfaction,
- quality costs.

Top management, heads of the departments and workers are all responsible without particular distinctions; the results depend on management commitment, on investments and resource and operations management.

It is important to measure the level of total quality offered as a sole result of performance, but it is also relevant to measure the quality performance results of the single departments. So, the total quality offered becomes the result of the integration of several activities regarding the "value chain" (supplying and purchasing, production, sales and