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QUALITY MANAGEMENT:

TOOLS,
METHODS AND
STANDARDS

EDITED BY
MARCO SARTOR
GUIDO ORZES

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Foreword

Quality: a concept so broad that it still remains rather indeterminate despite the wide literature that concerns it. Perhaps the word that comes closest to him is “improvement.” Many of the initiatives that carry this label consist in projects for improvement of the product, processes, internal organization, and connections with the external units.

These quality improvement projects present some characteristic aspects.

First of all, the systemic approach. The conventional name of quality management includes some principles and a group of interconnected and often complementary methodologies. Quality projects can act locally, but they must respond to an integrated logic. In any case, they require a look that is not restricted to the narrow space of a single activity or function: the adjective “total” that sometimes accompanies the word Quality underlines the need for a wide-ranging vision and an action that is not limited to a single technique or a limited company segment.

Second, the dynamic perspective. Quality cannot be (only) a stamp to be displayed when necessary, the snapshot taken on a goal traced by some standards. On the contrary, it is a dynamic process that continuously moves forward to achieve the objectives. In many situations, on the other hand, a quality that is closely linked to the standard, a quality assurance rather than a quality management, continues to prevail. We try to (r)ensure the customer on the internal procedures, considering the certification as a point of arrival rather than a step along the road of joint and continuous improvement.

Third, specificity. Any improvement project starts from an initial state. It improves a starting condition that is different from company to company because it is linked to its history, to the sector and the country in which it operates, and to the reference market. The different starting and boundary conditions impose distinct and specific trajectories. Vice versa, there is often a tendency to think that there is a best way of quality and

that a recipe successfully tested in one company can be rigidly replicated in others. But it is difficult to understand the nature of a presumed best practice if the boundary conditions are not considered and the forms of adoption are evaluated with reference to their own peculiarities.

The editorial project of this book has taken on board these three characteristics. Quality is investigated and illustrated not as a list of principles or a toolbox of independent methodologies, but as a general philosophy that seeks to consistently compose objectives and tools, revealing their interdependencies. It is described not as a static goal, but as a dynamic process that is innervated in the company's metabolism. Finally, the book combines experiences from different realities, extracting cues to adapt policies and practices according to the particularities of the context.

The picture that emerges from this detailed analysis conducted in several voices and from different perspectives offers an effective "improvement" in the understanding of the concept of quality, allowing the reader to move on a path that gradually thins the initial uncertainty and enriches it with a variety of educational and operational supports.

Guido Nassimbeni
University of Udine, Italy

Introduction

The current economic scenario, characterized by a growing international competition, leads to the rethinking of many of the governance mechanisms of our companies: from strategies to relationships with customers and suppliers, from processes to the role of human resources.

In this context, “quality management” – synonymous of efficiency and effectiveness and therefore competitiveness – becomes essential.

Quality has many meanings for the company and the market. Product quality (read as the ability to differentiate the offer from competitors) contributes to the creation of competitive advantages for the company. By increasing trust between the parties, by limiting opportunistic behaviors, and by consolidating cooperation, it is also able to bring improvements in the whole market.

The panorama of books dealing with the topic of “quality management” is quite complex. This volume aims to fill a gap in the current publishing scenario by providing an updated summary of the knowledge of a discipline that has boundless fields of application: from industry to public administration.

The work comes from the deep conviction that quality today (more than ever) represents a great opportunity to be seized for businesses, public administration, and society. An opportunity capable of being translated at company level into the ability to increase market shares, productivity, the ability to reward the capital invested, and at geoeconomic level in employment, development, and improvement of the quality of life.

The editors of the volume are professors of quality management and operations management in industrial/management engineering degrees. The authors are academics and businessmen (managing directors and chairmen of private companies) who have decided to contribute to the volume, synthesizing their own experiences and knowledge.

Starting from the history of quality, the volume accompanies the reader in a rapid review of the main tools and approaches aimed at improving

effectiveness and efficiency in organizations. Balanced scorecard, QFD, and FMEA are some of the solutions that are first introduced theoretically and then described with concrete examples.

Adequate space is also given in the text to the theme of certifications. ISO 9000, ISO 14001, ISO 45001, ISO 27001, and SA8000 are described in their essential features.

Today, we live in a century that burns ideas quickly: new ideas are often surpassed even before having assimilated them. This has led to the need to revise theories that have rapidly evolved over time.

History shows that the interest in quality awakens in crises. Crises offer opportunities for growth and development. At the beginning of the 1980s – when various events (from the oil crises to the appearance of fearsome Asian competitors on the international scene) had led to imbalances between supply and demand – many companies managed the adverse scenario by investing in quality. We trust that this work – contributing to the diffusion of the culture of quality – can offer a contribution in this sense.

Marco Sartor and Guido Orzes