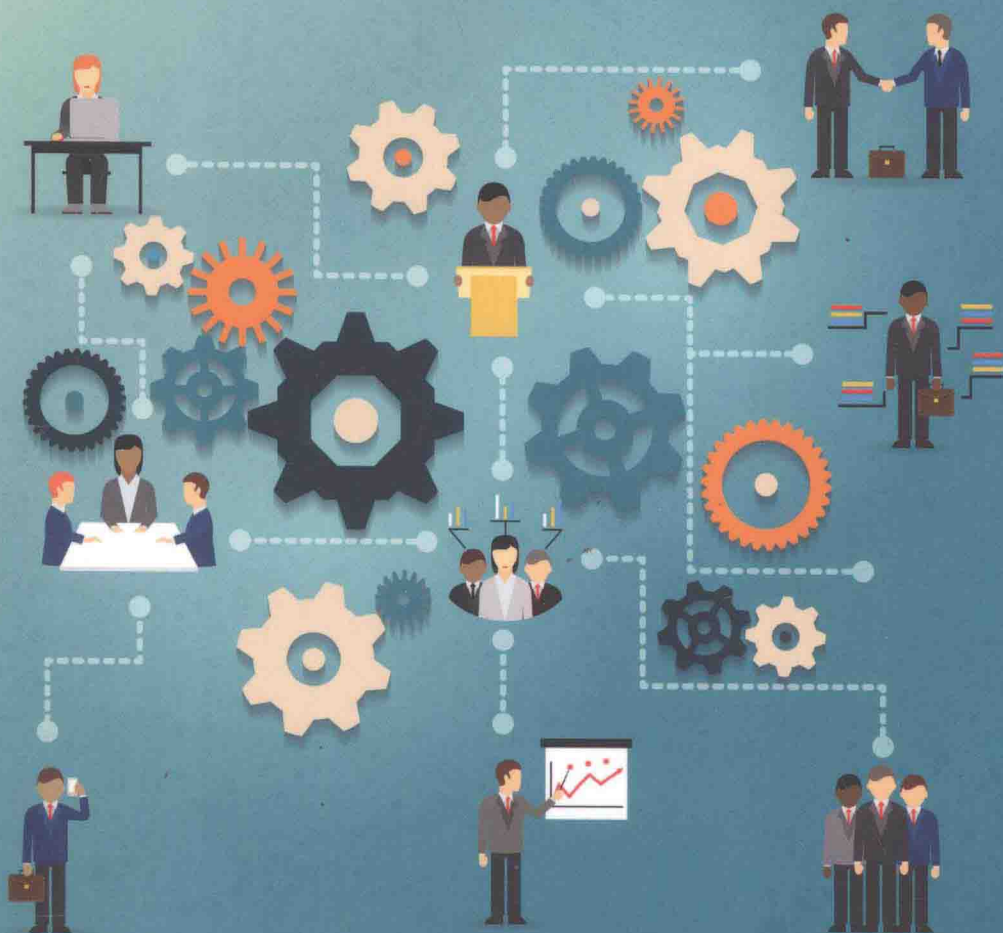# MANAGING QUALITY

AN ESSENTIAL GUIDE AND RESOURCE GATEWAY

6TH EDITION

EDITED BY BARRIE G. DALE, DAVID BAMFORD & TON VAN DER WIELE

WILEY

Managing Quality

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'Barrie and David are among the leading researchers and the best teachers in total quality management. Their teaching in quality management and performance improvement at Manchester Business School was very well liked by their students for many years. In this sixth edition of the book, they have chosen to cover a broad range of topics in TQM in great depth. While different companies may take different approaches to achieve their strategic goals, no company could afford not to commit itself to improving the quality of its products and services for ultimate customer satisfaction. This book introduces all important areas of TQM to students and provides a rich knowledgebase for both study and practice in quality management.'

Professor Jian-Bo Yang, Chair of Decision and System Sciences, Alliance Manchester Business School, The University of Manchester

'Previous editions of this excellent text have provided the basis for student reading and class reflection on current issues in quality management, but I am particularly pleased to see an excellent set of online resources to accompany the new book. The presentation material, exercise questions and video/web links provide an invaluable resource both for lecturers teaching the subject for the first time, but also for experienced teachers wishing to compare, contrast and update their material when adopting the book and planning future course delivery. I will certainly adopt and adapt the resources provided in my teaching of quality management from now on.'

Dr Paul Forrester, Senior Teaching Fellow, Keele Management School, Keele University

'A sustained focus on Quality Management is arguably the most important attribute of a competitive organization. An essential read for students, scholars and practitioners, the textbook provides an extensive examination of contemporary Quality Management that is timely, informed and accessible. The online resources are invaluable for educators and students alike, bringing a blended learning dimension to each chapter through multi-media videos, case studies and interactive teaching materials.'

Dr Claire Moxham, Senior Lecturer in Operations Management, Management School, University of Liverpool

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Acknowledgements

In our role as editors we have attempted to ensure that each topic is adequately covered in breadth and depth and is presented simply and clearly. Subject to these constraints we have tried not to interfere with our contributors' styles because we believe an author's style is an integral part of getting his or her message across to the reader.

The brief given to the contributors was to keep the level of technical detail to a minimum and to write in a focused, non-specialist language. This is much easier in some subjects than others, but we believe that this objective has been achieved, and hope the reader will find that the structure of the book is logical and the content is clear and free from confusing jargon.

Finally, we wish to thank all the contributors for making this book possible. We have learned much from them. We hope the readers will too.

Preface

The subject of Quality Management is vast. There are many issues and interfaces to consider, and there are a considerable number of tools, techniques and systems which an organization can use to assist it in the introduction and development of the concept. The text covers the main aspects and functions of Quality Management, from identifying customer needs and requirements through to quality planning, supply and production/operations. This sixth edition of *Managing Quality* builds on the success of the previous publications. The book covers the main concepts and issues currently being debated and considered by business leaders throughout the world. It is a very comprehensive text and has developed a track record and following amongst students, academics and practitioners. Its purpose is to provide the reader with an appreciation of the concepts and principles of Quality Management. It has proved to be a wide-ranging source of reference for the many tools, techniques and systems which are associated with the concept.

In the book the term 'total quality management' (TQM) is used to describe the process of transformation by which all parts of the organization have a focus on quality with the ultimate objective of customer satisfaction and delight. Some people argue that the term TQM has fallen out of use, with directors and managers regarding it as a fallen star and a jaded concept. They moved on to what are perceived as newer concepts (e.g. Six Sigma, lean mapping, etc.). There is little doubt that in many companies and industries the issue of improvement in the quality of products and services remains urgent. Therefore in this book we are sticking to the term TQM and, when appropriate, coupling it to 'Strategic Process Improvement'.

The feedback on previous editions indicates that the book has been useful to industrialists, management consultants, academics, and undergraduate and post-graduate students from a variety of disciplines; TQM is not the special province of one group of people or one discipline. People studying for professional examinations that involve considerations of quality have also benefited from the use of the book. We hope readers will read the whole book to gain an understanding of the breadth and depth of Quality Management. However, most of the chapters do

Figure 0.1   A conceptual model of management quality

stand alone and readers may choose to dip into the book in order to learn more about a particular subject.

In the spirit of continuous improvement, and a move into providing electronic support materials, a major revision of the book has been undertaken this time around. All chapters were fully reviewed and, to provide greater focus for the reader, some were extensively revised/combined, and some removed. In addition, appropriate support materials are now provided online (e.g. Instructor Resources, teaching slides, additional cases, key questions for each chapter, etc.). Please visit the book page on www.wiley.com for additional information/access.

The text is still arranged around four main areas; however, these have been refined and are presented as a conceptual model within Figure 0.1.

These interlinking parts serve to communicate the applied breadth and depth of aspects of relevant Quality Management application of tools, techniques and systems. Specifically the parts cover: Part One: Development Quality – overview and management, received wisdom, framework for TQM; Part Two: Business Context – policy deployment, quality costing, managing service quality, supplier development; Part Three: Quality systems, tools and techniques – quality systems, quality management tools, quality management techniques; Part Four: Sustaining Quality – teams, self-assessment and awards, New challenges, The future. We present the conceptual model of this.

The academic contributors have also outlined some of their recent research findings. We do hope that readers will find some new ideas and angles on subjects which have been brought to their attention. It is to be hoped that, through study of the text, readers will be encouraged to take up the challenge of strengthening their commitment and dedication to TQM and continuous improvement.

Barrie G. Dale
Professor Emeritus
Alliance Manchester Business School

David Bamford
Professor of Operations Management
The Business School, University of Huddersfield

Ton van der Wiele
Associate Professor Quality Management and Performance Improvement
Rotterdam School of Management, Erasmus University

About the Authors

The Editors

Barrie G. Dale is Professor Emeritus at Alliance Manchester Business School. Founder of the *International Journal of Quality and Reliability Management*, he was its co-editor for over 25 years. He has authored several other books including, *The Road to Quality* (1993), *Quality Improvement through Standards* (2nd edition, 1994), *Managing Quality and Human Resources* (2nd edition, 1997), *Working in Partnership* (1998), *Managing Business Improvement and Quality* (1998), *Total Quality Management Blueprint* (1999) and *Quality Costing* (3rd edition, 1999).

David Bamford is Professor of Operations Management at the Business School, University of Huddersfield. He is an experienced industrialist/academic with numerous publications to his name. Knowledge transfer projects, across many sectors, have been central to his academic career and his research interests are focused towards operations improvement strategies in the application of Operations Management theories, strategic organizational change, leadership and quality management, and sports operations management.

Ton van der Wiele was Associate Professor of Quality Management and Performance Improvement at RSM Erasmus University, Rotterdam. He has published many papers in various international journals on Quality Management, Performance Improvement, Management Consultancy and E-business. Quality-editor of the *International Journal of Quality and Reliability Management*, van der Wiele has worked in the Quality field for more than twenty-five years.

Contributors

Chapter Authors

Jim Bamford is Senior Lecturer in Operations Management at the Business School, University of Huddersfield, UK.

Bernard Burnes is Professor of Organizational Change at the Stirling Management School, University of Stirling, UK.

Benjamin Dehe is Senior Lecturer in Operations Management at the Business School, University of Huddersfield, UK.

Roy Lee was Squadron Leader, Support Management Group, Royal Air Force, Wyton, UK.

Barbara Lewis is Professor Emeritus of Marketing, Alliance Manchester Business School, University of Manchester, UK.

Marina Papalexi is the Research Assistant in Operations Management at the Business School, University of Huddersfield, UK.

Iain Reid is Senior Lecturer in Operations Management at the Business School, University of Huddersfield, UK.

Chapter Contributors

John Aldridge is Quality Manager at Survitec Survival Products, Shewsbury, UK.

Ian Ferguson is Managing Director of Ferguson Associates, Birmingham, UK.

Rory Love was Quality Engineer, Alexanders Ltd, Falkirk, UK.

John Macdonald was Managing Director of John Macdonald Associates, Surrey, UK.

Peter Shaw was TQM Project Officer, Manchester School of Management, UMIST, UK.

Jos van Iwaarden is a Senior Consultant at A.T. Kearney, Utrecht Area, The Netherlands.

Roger Williams is Professor Emeritus of Business and Management, Erasmus University, Rotterdam School of Management, Rotterdam, The Netherlands.

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