BOOK REVIEW

A REFRESHED PERSPECTIVE ON THE IMPLEMENTATION OF WELL-ESTABLISHED QUALITY IMPROVEMENT INITIATIVES

BY JENNIFER BELL

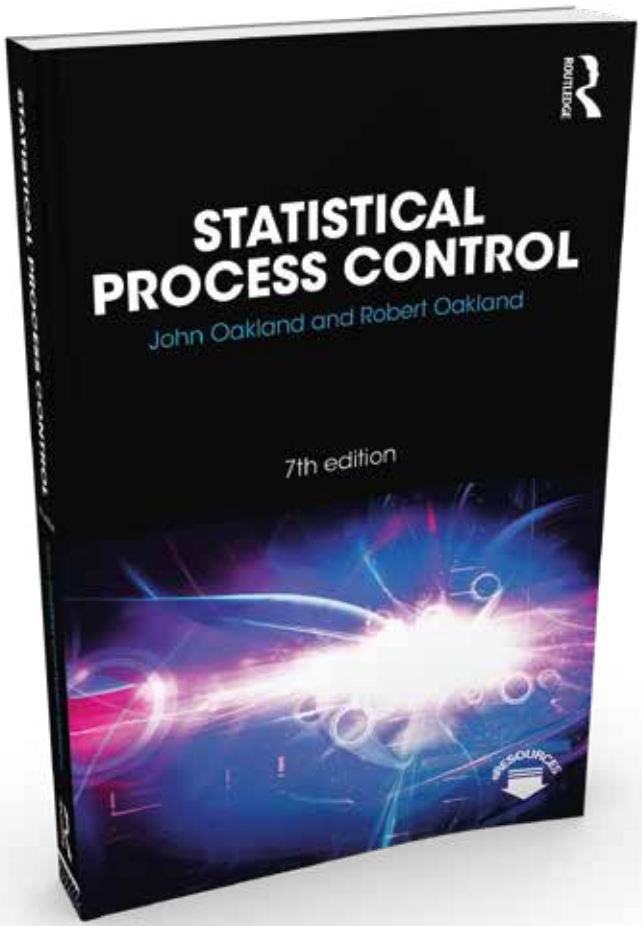
Statistical Process Control (7th Edition) by John Oakland and Robert Oakland applies to industry, academia and the public sector, including drug and medical device development processes. Both authors are consultants with decades of industry experience. Indeed, John Oakland wrote the first edition of this book in the mid-eighties.

Effective implementation of statistical process control contributes to market competitiveness and increased profitability for many successful organisations. For those interested in process control for quality management and process improvement, the book is informative and not intimidating. The content allows for self-instruction by those unfamiliar with statistical process control.

Statistical Process Control gives examples for implementing quality management and business excellence systems and lean and six-sigma initiatives. Each chapter outlines learning objectives at the start, provides case studies and refers to appendices as applicable for supporting information in the body and summarises chapter highlights at the end including references for the reader to follow-up on if desired. Each chapter ends with discussion questions and worked examples to promote group interaction. The appendices, glossary of terms and the index provide further clarity to the reader. Additionally, the publisher's website *www.routledge.com* provides supporting Excel spreadsheets of data tables and corresponding assessments in the book to ease data transfer into statistical software packages to conduct analyses.

Overall, the book gives a refreshed perspective on the implementation of well-established quality improvement initiatives. It contributes to driving cultural improvement by helping departmental perspectives to blend and align to reach the common goal of producing fit for purpose process outputs. It highlights common behaviour found in companies attempting to manage out-of-control processes, remove waste and redesign business activities.

The book presents questions that ask whether to replace detection strategies with prevention strategies.



In focusing on prevention strategies, the emphasis is on activity at the front end of the process, e.g. quality by design (QbD). This approach saves effort, time and money spent on detection of issues near the end of processing activity.

Statistical Process Control outlines quality design and conformance costs. The described quality costs contribute to understanding approaches for right first time, meeting specifications and avoiding the cost of getting it wrong. As variability decreases, quality and productivity increase and statistical methods of quality control help visualise this at various time points in relation to the whole.

Processes are the central theme running throughout the book; processes require *understanding*, have *variation*, must be *controlled*, have a *capability* and need *improvement* – these form the five sections of this valuable textbook.

In summary, Statistical Process Control presents approaches for those wanting to understand and apply controls to the total quality strategy of their company to enhance profitability.

Statistical Process Control (7th Edition) by John Oakland and Robert Oakland is available from all leading booksellers and online retailers.

PROFILE

Jennifer holds a PhD Molecular Microbiology and an MSc in Pharmaceutical Manufacturing Technology. She has worked in QA roles in medical device and pharmaceutical manufacturing and clinical trial sectors since 2010.