The Six Sigma Handbook
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**Thomas Pyzdek** holds more than 50 copyrights including *The Six Sigma Handbook*, *The Quality Engineering Handbook* and *The Handbook of Quality Management*. His works are used by thousands of universities and organizations around the world to teach process excellence. He offers online training and certification in Six Sigma, Lean and Lean Six Sigma. Pyzdek has provided training and consulting to employers and clients in all industries since 1967. He provides consulting guidance from the executive suite to “Belts” working in the trenches. Pyzdek is a Fellow of ASQ and recipient of the ASQ Edward’s Medal and the Simon Collier Quality Award, both for outstanding contributions to the field of quality management, and the ASQ E.L. Grant Medal for outstanding contributions to Quality Education. Pyzdek serves on numerous editorial boards, including *The Quality Management Journal*, *Quality Engineering*, and *International Journal of Six Sigma and Competitive Advantage*.

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The Six Sigma Handbook

Fourth Edition

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Even a brief overview of Six Sigma literature will uncover more than a few approaches to implementing Six Sigma. Some have been remarkably unsuccessful, while others have provided the vision and means for the organization to prosper. Online chat groups provide a global sounding board for the discontented as well as the enthused. For some, Six Sigma is dead, and for those, perhaps it should be. They are ready to move on to the “next big thing.”

What I tend to find most intriguing about these discussions are the details. What specifically failed in an implementation? Why didn’t Six Sigma work? What alternative provides an improved approach? Invariably, the failures suffered from predictably flawed approaches, hampered by the usual suspects of implementation issues: lack of commitment and/or resources, and poor or misdirected focus. The fundamentals of the Six Sigma approach remain sound: Prioritize specific issues impacting customers, shareholders and/or employees, and problem-solve over a relatively rapid time frame using data-driven cross-functional project teams sponsored by the functional stakeholder groups. Effectively-managed projects will quickly identify any organizational issues, highlighting the advantage of the project as the means to achieve manageable bites of improvement. Are there best practices that improve success rates? Absolutely! Best practices in Six Sigma are continuously evolving, just as Six Sigma itself evolved from earlier best practices in quality improvement. Those who truly “get it” know that Six Sigma will die only when organizations stop caring about their customers, employees and shareholders. Did Six Sigma really “kill innovation at XYZ Company?” Of course not! Can an overly bureaucratic approach to innovation stifle creativity? Yes, just as overzealous standardization emphasizes process consistency and internal productivity at the expense of an improved customer experience. These failures result from neglecting a key tenet of Six Sigma: customer focus.

This fourth edition seeks to address many of these challenges, with expanded materials on innovation, strategic development, Lean, and constraint management. If this is your first copy of The Six Sigma Handbook, you may find the implementation approach includes many of the practices advocated by “newer” disciplines, such as Business Process Management (BPM) or Business Process Improvement (BPI). The overall approach remains consistent with the earlier editions of the text, with elaboration and best practices added to more fully develop the approach in the reader’s mind.
You’ll notice many references to free online materials within the text, such as Excel file templates that can be used for analyzing projects, or videos that provide an in-depth narrative on specific topics. Additional links will be added over time to further extend the learning potential offered by the text, so be sure to regularly check back into the online site at www.mhprofessional.com/SSH4. We expect to offer additional learning options, some free and some at reasonable expense, based on reader feedback.

With well over 100,000 copies in print for its first three editions, The Six Sigma Handbook is well-established as a key reference guide for forward-thinking managers and customer-focused process improvement specialists alike. We’d like to thank our faithful readers who have made this work a lasting tribute to the concepts and techniques known as Six Sigma. We hope this fourth edition provides additional insight and direction to achieve ever-higher levels of value for your customers.

Paul Keller