

Lessons from a

**LEAN
CONSULTANT**

**Avoiding Lean Implementation
Failures on the Shop Floor**

CHRIS A. ORTIZ

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on the Shop Floor

Chris A. Ortiz



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*This book is dedicated to my wife, Pavlina,
and my two boys, Sebastian and Samuel,
who support me in my business
and writing endeavors.*

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Preface

By itself, implementing lean manufacturing on the factory floor will not generate the desired results unless certain systems are in place, production support staff operate efficiently, and the operators are fully engaged and committed to the change. As a lean consultant, I have traveled around the country and have seen a variety of companies and manufacturing operations. Each one was unique in its approach to lean manufacturing.

I am often asked why some companies are successful and others fail in their lean implementations. Or more simply put, what did they do to get the results they obtained?

Lessons from a Lean Consultant outlines the fundamental mistakes companies make in trying to implement lean manufacturing. I provide solutions for upper managers, engineers, and supervisors who are struggling to keep their lean implementations afloat or are looking for advice on how to mold their production operators into the powerful change agents they need to be. *Lessons from a Lean Consultant* helps prepare managers for working in a lean shop floor environment. Lean succeeds or fails depending on the commitment from management. Dealing with the ups and downs of lean implementations can be tough. This book shows what is expected of managers and their subordinates.

From my perspective, the lean manufacturing training and consulting business has changed over the years. It used to be common practice for companies to spend tens of thousands of dollars on individuals who taught generalized, theory-based curriculums. I am not implying that all consultants operated in this manner, but many did. This type of training and guidance has become outdated, and companies are looking for hands-on approaches to lean training.

This change in the market has affected my books on lean manufacturing. I saw this market transformation about two years ago and wrote *Kaizen Assembly: Designing, Constructing, and Managing a Lean*

Assembly Line in an attempt to cater to the nuts-and-bolts needs of the market. *Lessons from a Lean Consultant* takes the same approach to lean management and culture change, providing detailed, real-life solutions to those who are struggling with workers who do not want to adapt to lean methods or adhere to the systems and procedures in place. In short, this book takes a nuts-and-bolts approach to lean management and culture transformation.

Chapter 1 briefly tells the story of how an attempt to implement lean manufacturing failed in a company for which I was the senior lean manufacturing engineer. Chapter 2 lays the foundation for the book by outlining the importance of meeting customer needs and developing a competitive balance between cost, quality, and delivery. Chapter 3 provides a step-by-step guideline to creating a company kaizen program, an organization's foundation for continuous improvement. Chapter 4 helps the manufacturing professional identify the early stumbling blocks that commonly occur during the planning and implementation of lean manufacturing in a factory environment. This chapter defines the cornerstones of the early stages of lean manufacturing: 5S, visual management, data collection, waste removal, and process design.

Chapters 5 and 6 illustrate the importance of developing a relationship with your line operators and teaching them how to work and interact in a lean process. Success requires solid up-front planning and training of existing and new employees. Chapter 7 feeds off of Chapters 5 and 6, explaining in detail the incentive and pay-for-skill systems that help you encourage cross-training and develop a flexible workforce.

Chapter 8 takes a unique approach to lean leadership. This chapter emphasizes how the best leaders treat people, with or without a lean journey. In short, if company leaders manage through negative reinforcement, the organization will struggle to adapt to a lean culture.

Appendixes A and B illustrate forms, documents, and templates that are useful during your lean journey. The Glossary lists and defines the key lean terms you should know.

It's my hope that professionals working in the manufacturing sector holding titles such as plant manager, engineering manager, lean manager, and even lean engineer will find value in this book. My goal is to provide a tool for creating a solid lean program in which the people in direct control of its success are driving the improvements, thereby ensuring that their implementations endure and prosper.

Acknowledgments

First and foremost, I have to give thanks to my family—my wife, Pavlina, and my two sons, Sebastian and Samuel. Without their support and encouragement, it would have been nearly impossible for me to devote the time to this book that I did. All of my professional efforts are to ensure our success together.

Second, I want to thank the staff at Prentice Hall who first took interest in this book and their professional approach to making it become a reality. I want to acknowledge my editor, Bernard Goodwin, for his passion for lean manufacturing and for taking on my project. I also have to thank Betsy Hardinger for her support in helping shape the manuscript.

The final name to mention is Debra Riffin. Debra was critical to the completion of this manuscript. I want to thank her for editing and proofreading the manuscript and helping me better convey my thoughts. Debra, you were a valuable asset.

It is important also to recognize the countless number of manufacturing professionals I have had the luxury of working with over the years. My clients are the true experts. I learn from them, and the relationships I have developed with them are critical to my company's success.

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About the Author

Chris Ortiz is a senior lean consultant and the owner of Kaizen Assembly. He has spent the majority of his professional career working for *Fortune* 500 companies, teaching and guiding them to become more efficient businesses. Chris has also led more than 150 kaizen events around the United States.



Ortiz is also an instructor at five Washington state community and technical colleges. He has developed a reputation for delivering fast-paced, highly detailed, and interactive classroom-style courses.

He is the author of the book *Kaizen Assembly: Designing, Constructing, and Managing a Lean Assembly Line* (Boca Raton, FL: Taylor and Francis Group, 2006). His lean implementation techniques have been featured in a variety of trade magazines, newspapers, corporate newsletters, *Industrial Engineer* magazine, *Industrial Management* magazine, and other lean manufacturing newsletters and periodicals.

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