

# TABLE OF CONTENTS

<i>Acknowledgments</i>	ix
<i>Introduction</i>	xi
<b>1. The Purpose of a Lean or Six Sigma Initiative</b>	1
Gain Competitive Advantage	3
Acquire a Structured Approach to Organizational and Operational Excellence	6
Focus on Strategy-driven Results	8
<b>2. The Power and Focus of Lean</b>	17
Eliminate Waste in All Processes	17
Lean Methodology Strategy	21
<i>Case Study #1: Adopting the Lean Philosophy at a Seat Belt Manufacturer</i>	31
<b>3. The Power and Focus of Six Sigma</b>	37
Six Sigma's Goal is to Eliminate Defects	38
Six Sigma's Structure and Improvement Methodology	40
Create Predictable Processes and Reduce Variation	45
<i>Case Study #2: Using Six Sigma to Eliminate Defects at a Plastics Manufacturer</i>	48
<b>4. Lean and Six Sigma Are Different Initiatives</b>	51
Lean and Six Sigma: Focus on Different Aspects of Improvement	52
Limitations of Using Only Lean or Six Sigma	60
<i>Case Study #3: Using Six Sigma to Eliminate Defects from a Paper Manufacturing Process</i>	63
<i>Case Study #4: Applying Lean When Six Sigma Tools Are More Applicable</i>	66

## CONTENTS

<b>5. Creating the Culture for Successful Change</b>	71
Lean Thinking: Laying the Foundation for Cultural Change	73
Case Study #5: <i>A Lean Cultural Change at a Gear Manufacturer</i>	78
Strategy-Driven Six Sigma™: Laying the Foundation for Cultural Change	79
Case Study #6: <i>A Six Sigma Cultural Change at a Cabinet Manufacturer</i>	85
<b>6. Faster Six Sigma Results Come from a Lean Culture</b>	89
Benefit #1 of Using Six Sigma and Lean: Standardized Work	92
Benefit #2 of Using Six Sigma and Lean: Reduced Process Steps	94
Benefit #3 of Using Six Sigma and Lean: Accelerated Project Results	97
The Results of a Study of Lean and Six Sigma Projects	98
Case Study #7: <i>Implementing Six Sigma After Successful Lean Improvement</i>	102
Case Study #8: <i>Faster Six Sigma Results to Produce Complex Electrical Circuits</i>	107
<b>7. Lean or Six Sigma: Applying the Right Methodology</b>	111
Choose the Right Projects	112
Choose the Right Approach	116
Choose the Right People	120
Choose the Right Tools	122
<b>8. The Two-pronged Approach: Synchronizing Lean and Six Sigma</b>	125
Use Lean and Six Sigma to Attain Strategic Goals	126
Synchronize the Two Initiatives to Maximize Results	130

## CONTENTS

<b>9. Beyond Lean and Six Sigma: From Project Focus to Future Focus</b>	137
Lay the Foundation for Sustaining the Gains	140
Create a Structure That Supports Continuous Improvement	143
Focus on the Future	146
Design Processes for the Future	148
 <i>Index</i>	 151
<i>About the Authors</i>	159