

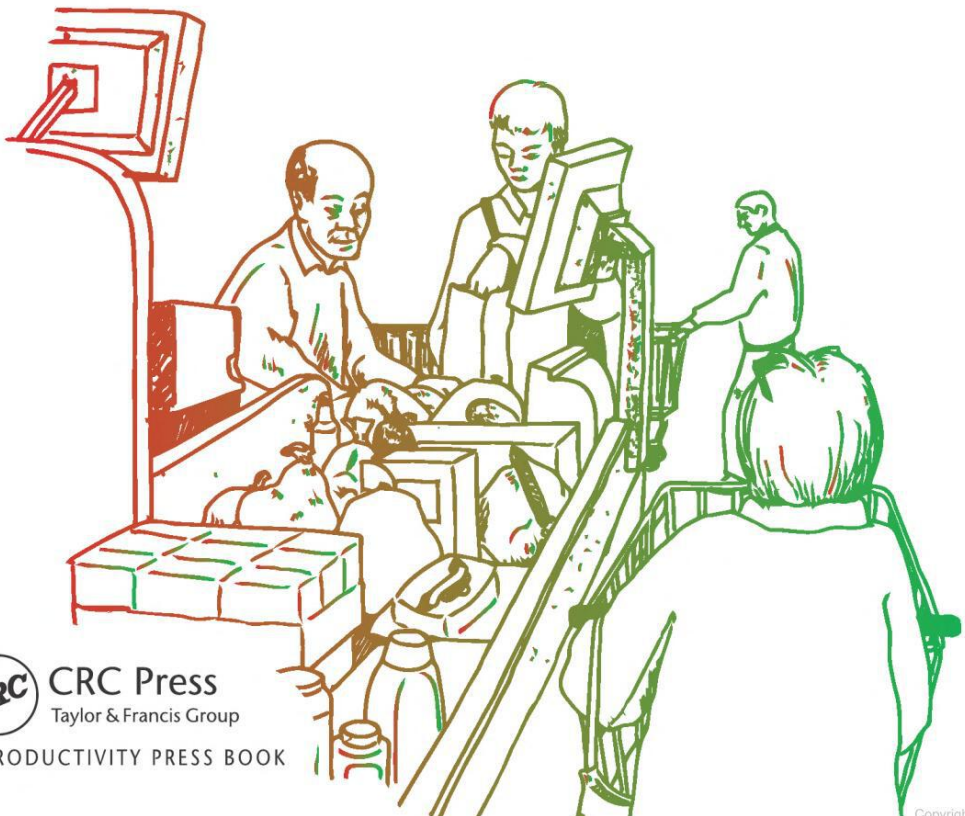
THE LEAN ANTHOLOGY



A Practical Primer in
Continual Improvement

Rebecca Goldberg • Elliott N. Weiss

Illustrations by Michael Twery



CRC Press
Taylor & Francis Group

A PRODUCTIVITY PRESS BOOK

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INTRODUCTION

Living Lean: A Practical Primer in Continuous Improvement is a collection of everyday stories about the Lean process improvement journey. The stories are easy-to-understand, simple accounts of everyday people negotiating life. The characters observe and integrate the principles of Lean into their personal and professional lives. This format benefits readers without a manufacturing background—as well as those with a manufacturing background—by presenting information in a familiar context and by extending Lean beyond business settings. Since these stories describe real situations, they are holistic in nature. The scenario and dialogue might incorporate lessons about several topics; however, a primary lesson is revealed in each.

Our definition of Lean is *the relentless pursuit of creating value by strategically eliminating waste*. Each *Lean Anthology* story describes a complete, real-life setting in which one or several Lean principles or tools are explored and then applied to achieve a desired outcome from a leadership point of view. The stories help the reader to understand and intuitively apply a different approach to the strategic elimination of waste as part of a plan for saving money, generating revenues, or freeing up resources. These resources might include time, money, or something else.

A SIMPLE FRAMEWORK: THE 5 CS

Our underlying framework for leading a Lean journey can increase an individual's effectiveness as a consultant, business leader, entrepreneur,

XIV INTRODUCTION

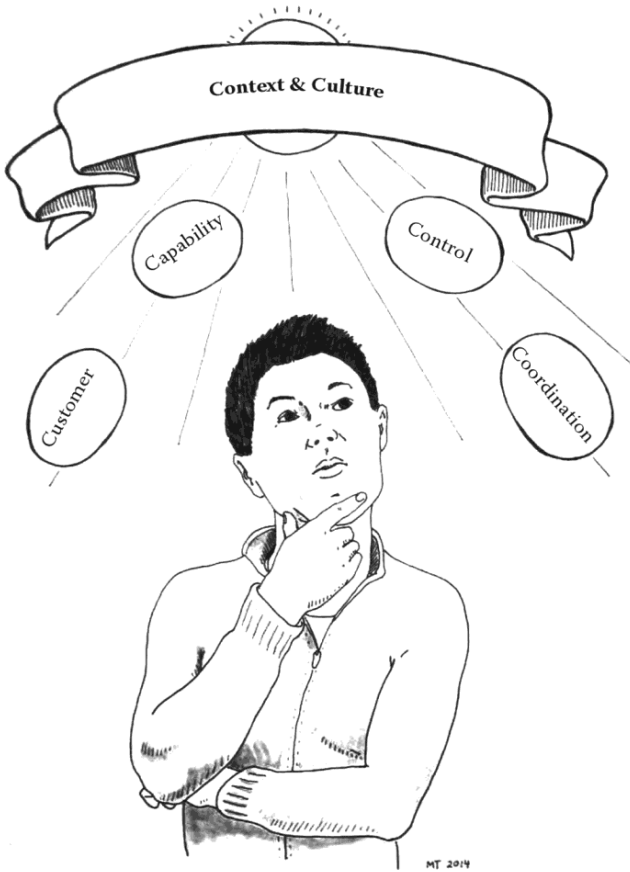
or family member. This framework is defined by the tasks and challenges of operating settings. We categorize them as follows:

- **Customer:** Understand the user-defined value proposition.
- **Capability:** Develop the ability to deliver on organizational and individual promises.
- **Control:** Measure and improve processes, services, and products.
- **Coordination:** Work with suppliers and customers along the entire value chain.
- **Context and culture:** Recognize the environment within which the organization is operating, including competitive forces, the culture of the organization, industry dynamics, and the global economic environment.

While the framework begins with the customer value proposition, we emphasize that these steps represent a cycle. While the *customer* step is listed first, one must first consider the final step—*context*—within which the business will operate. The *context and culture* of an environment help identify the *customer* requirements guiding the design of the operations. These requirements directly influence decisions about process *capability* in the areas of cost, quality, delivery, flexibility, innovation, and information. *Control* systems such as workforce planning, inventory monitoring, and scheduling are put in place to optimize the effective deployment of the firm's resources.

Managing internal processes, however, is not sufficient by itself; *coordination* with external entities such as suppliers and customers throughout the entire supply chain is also required for success. We then return full circle to reconsidering the *context*, which has undoubtedly changed, and then shift again to understanding the *customer* and designing processes and systems that deliver distinctive customer value.

The stories in this book are organized into these five sets of concepts. The 5 Cs framework represents five stages of strategic operations design and improvement:



1. **Customer:** The order-winning criteria (OWC) and customer-defined value proposition are identified first. The firm or individual must determine what the current and potential customers want to buy and are willing to pay for. OWC are often categorized as cost, quality, speed, flexibility, innovation, and information. These are linked to who the customer is, what the customer's behavior "looks like," and what the customer needs. The value proposition should be defined with an eye to the customer's current product or services and the degree of familiarity that the

potential customer base has with the firm's potential product or service offering. The fundamental question for this step is "What are my core competencies and my defendable, unique potential for creating value for this customer group?"

2. **Capability:** Processes are developed and infrastructure is built that supports the capabilities required to deliver the value proposition *based on the OWC*. Processes and infrastructure may be altered over time to better deliver what the customer expects. These changes may reflect a superior or new understanding of who the customer is or for what the customer is willing to pay. This stage likely requires some investment of resources and is important from a strategic standpoint.
3. **Control:** After capabilities are developed, organizations must continually ensure that the customer's needs are being met. Mechanisms must be put in place to manage the internal organizational systems. These systems include inventory management, facility scheduling, labor planning, and quality control. Traditional operations management models have prescribed that inventory should be held to save on the setup costs required for production of an item. Current management practice at progressive companies advocates the reduction and eventual removal of inventory wherever possible. Rather than advocating one of these philosophies over the other, we emphasize context as the key decision driver, as well as decisions related to *changing* the parameters of the system.
4. **Coordination:** Once the internal structures of an organization are optimized, a leader must look outside the organization, both upstream (to suppliers) and downstream (to customers), in order to best *coordinate* the end-to-end functioning of the system. *Coordination* deals with the systems, tasks, and decisions involving the relationship between manufacturing or service organizations and their customers and suppliers. The versatility of the supply chain is a critical component of a firm's competitive advantage in today's marketplace. Operating decisions within a coordination context may include vendor selection, just-in-time purchasing relationships, global plant location and distribution decisions, production scheduling, and distribution network

design. The operations manager needs to consider many factors when making such decisions, such as the location and availability of inexpensive skilled labor, the length of the distribution pipeline, transportation costs, political and foreign exchange risk, tax considerations, and operating capabilities.

5. **Context:** The *context* of a business or individual is what drives each of the previous four steps in the strategic development and execution of an operations design. The *context* includes both internal and external stakeholders. External stakeholders might include investors, suppliers, distributors, customers, the media, and governing or regulating bodies. Internal stakeholders might include private investors, employees, and partners. Competition must also be considered.

All these stories contain some element of context evaluation, because each is a real-world example. Each character is driven by some context-dependent need to create the change that they seek. In the business world, a context analysis might also focus on competitive forces, such as new entrants, barriers to entry, the power of suppliers and consumers, and available substitutions.

Understanding and taking advantage of Lean principles, whether in a personal or business context, can mean the difference between taking a reactive approach (How can I remove the issue I am facing *right now*?) and a proactive position (As I address this problem, how can I take steps to build capability for the future?). The latter, proactive approach requires a leadership perspective and the strategic application of a set of tools and principles like those described in this book.

Since the 5 Cs business development framework is cyclical, there is an opportunity to improve with each new set of circumstances. For instance, a leader could use information gained while defining the *customer* value proposition to inform the *capability* and *control* development process. Then, the insights gained in the *coordination* step can improve engagement with the organization's *context* (markets, stakeholders, and competition) to gather additional insights about the current climate. A better understanding of *context* can then be used to refine the organization's value proposition for its *customers*, continuing the cycle.

HOW TO USE THIS BOOK

As you read these stories about Lean, give some thought to any parallels you notice in your own life, whether on a personal or professional level. The purpose of this book is to help you discover new ways of improving your personal and professional processes. Each story begins with a brief summary and a suggested focus for your reading. The questions provided will help you place the story within a context for deeper understanding.

An explanation is provided after each story that highlights key concepts for an operations manager involved in continuous process improvement or Lean transformation. Study questions are provided that help you frame the learnings. Each chapter also contains a section called “Brain Play” to help extend your learning to other contexts.

The stories are organized along the 5 Cs framework, and they may be read in that order. Although some concepts build upon previous chapters, the stories can also be read independently, or selected by Lean concepts or business or personal concepts of interest.

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The authors would like to thank those people who provided situational context for the stories, including Todd Pearson, Erika Deibert, David Dube, Tracy Scott, Bob Liebe, Kate McKone, Brian Venuti, Peter Wilbert, Zeke Weiss, Jackson Oliver, and Wyatt Oliver. Kevin Klau and Ray Butler of Danaher Corporation introduced Elliott to the practical aspects of Lean. We would also like to thank those who gave us feedback for previous versions of this book, including John Leschke, Donald Stevenson, Steve Momper, Lia Norton, Leslie Mullin, and Beth Woods. The Darden School of the University of Virginia and Alec Horniman provided us with the resources and intellectual environment to make the book possible. Thanks also to our families and friends for supporting us and encouraging us through this venture.

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Rebecca Goldberg is a strategy and operations consultant with more than a decade of experience. She has extensively published articles and case studies in the *Washington Post*, *Bloomberg Businessweek*, *Business & Economy*, and in the University of Virginia and Columbia University case collections. She writes in the areas of strategy, operations, and technology life cycles, as well as in negotiation, team dynamics, and collaboration. She has consulted with significant global clients in a variety of industries, including health care delivery, pharmaceuticals, consumer goods, integrated technology solutions, professional services, insurance, and the military. She holds an MBA from the Darden School of Business; a BA from Tufts University, magna cum laude with highest thesis honors; and a BFA from the School of the Museum of Fine Arts, Boston. She lives in Richmond, Virginia, with her two sons.



XXII ABOUT THE AUTHORS

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He is married with four children and one grandchild.

ABOUT THE ARTIST

Michael Twery grew up in Lynchburg, Virginia. He studied at the Rhode Island School of Design and the San Francisco Art Institute, where he received his BFA & MFA degrees in Painting. Michael has worked as an artist-in-residence and art instructor for over 25 years and exhibited work for over 35 years. He currently works out of his studio in downtown Lynchburg doing commissions and creating new bodies of work. He may be contacted through his website mtartspace.com<<http://mtartspace.com>>.





PART I

Customer

image

not

available