

PREFACE OF THE BOOK “LEAN IN ACTION”

WHY I WROTE THIS BOOK

At the beginning of the 21st century, a few people in Bulgaria knew what Lean production was. Then we could count on the fingers of two hands the number of companies that hesitantly was approached to the ideas and practices of Lean.

I was tempted to write this book for the purpose of share the knowledge and practical experience that my company Alpha Quality had the chance to acquire, understand, reconsider and systematise. This experience is based on two lines. One line is that ever since the emergence of Lean in Bulgarian industry, we have helped the companies pioneers breathe life into advices of consultants, who say "do this" but not "how is it done". We continue to provide this help to this day. The other line is that since 2012, we have been accompanying end-to-end quite a few Lean projects that started from scratch and took on a life of their own.

In 2013, we developed a 5-day Lean Master Class training course. In 20 lectures, we present all the famous Lean instruments. To date, the course has been conducted 12 times publicly and 20 more times as in situ company training.

In 2014, we founded a Lean Club for 18 large and well developed industrial companies who are our clients. These are all big and very big companies, mainly subsidiaries of international concerns. We selected companies that were not only making progress in Lean but also agreed to show and explain the paths they have taken. These companies exchange working visits to show their results and share experience and ideas. To date, more than 38 visits have taken place.

Due to the growing interest, in 2018, we established a second Lean Club. Another 14 companies are included in it, again our clients. Most of them are Bulgarian-owned, the scale of the business is modest and the implementation of Lean has only recently been worked on. They have already made more than 18 visits.

In these nearly 60 on-site visits of the two Lean clubs, all the participants were able to draw for themselves invaluable, useful, and sometimes unexpected practical lessons that no one would find in any books or articles.

This prompted me to describe everything I have learned so far in a systematic way.

The book follows the logic of the 20 lectures of the five-day Lean Master Class. The book also describes the rich and interesting experience of the member companies of the two Lean clubs. The book builds on 460 examples borrowed from 140 companies from 40 branches of industry, services and other activities.

ITS GOALS

The first goal of the book is to present the approach of Lean production as an internally connected system of ideas, principles, work tools, and good practices. Some of ideas and principles of Lean are not new or unfamiliar to the world of production and business. However, there are ideas and principles which are an expression of a new and non-trivial look at efficiency and way of thinking for it. At first glance, some of them appear illogical and contradictory to sound reason. But this is only at first glance. When we perceive the genius logic embodied in them, seriously we will be amazed at why we hadn't thought of them up to now.

The approach of Lean Production is armed with a large multitude of work tools. Some of them are simpler, others are not. Each Lean tool can resolve a given circle of production and business efficiency tasks. Most of the Lean tools are relatively autonomous tools. There are also more complex tools which include, or require other tools to be mastered before them. So it is important to know the overall structure of the numerous Lean tools so that you can implement them in the way which is most useful to you. That is the first goal of the book.

The second goal of the book is the following. In Bulgaria, Lean Production was talked about in the late 1990s. Now hundreds of companies are going down the path of Lean at one speed or another. We know them well, and we have analysed the work of many of them. This is why we created our two Lean Clubs, for the purpose of share ideas and experiences. Thanks to experience, almost all the examples in this book are not borrowed from literary sources but are examples from real companies. Good or bad, all of these examples are instructive. They show us the shortcuts through the unknown forest and protect us from overhanging branches and hidden stones under the grass.

This is the second goal of the book – to share with its inquisitive readers the rich and ever helpful experience of the companies with real practical experience.

The book has a third goal. It is to show that Lean is a broad philosophy whose application is not limited only to industrial production. For this goal, there are many examples in the book for applying Lean ideas and principles in branches outside industry – agriculture, construction of any kind, transport, medicine, administrations, and several other sectors of production and services.

Lean's principles have a place in everyday life, and also in personal and social life. They are applicable in all spheres of human activity and everywhere where processes of product creation take place, be it a tangible or intangible product.

HOW TO READ IT

I would kindly invite my readers to join me on a journey through Lean, shoulder to shoulder, like good old friends setting out on new adventures. We, who have an interest in Lean, are a close-knit society in which empathy creates synergy.

If this is your first book about Lean, read it chapter by chapter since each chapter introduces terms and definitions used thereafter. In this way, you will smoothly and gradually master the essence of the rich and colourful palette with which the technocratic and cultural picture of Lean Production is painted. If you are familiar with Lean, read in any order that suits you and only what interests you. The book is written in such a way that its chapters can be read individually.

If somewhere in the book a Lean term is only mentioned but explained in detail elsewhere, there is a corresponding reference to it. The most basic and important definitions and explanations are deliberately repeated many times. This has a didactic purpose, since repetition is the mother of knowledge.

These repetitions allow the chapters of the book to be read in any order.

If there is more than one definition of a term in literature, I have tried to include them all and not miss one. With this book I also introduce some new terms.

Some of Lean tools are described in more detail, others tools are only sketched.

These tools, which are Lean's heavy artillery, are shown and described in detail.

Important conclusions and recommendations are given on a grey background.

To make them easier to understand, some examples are given schematically and simplistically, even vulgarized, without excessive technical details. There are also examples from everyday and sport. They are memorable and easy to understand.

For your convenience, there is Abbreviations and Terms in Alphabetical Order (see pp. 761-780), a Brief Table of Contents of the book (see pp. 787-788), and an Advanced Table of Contents (a kind of Subject Catalogue); see pp. 789-816.

The book helps with the implementation of Lean Production. However, before you do that, take a self-assessment test of your Lean knowledge. See pp. 781-784.

I have written this book to support the Lean endeavours of its readers.

I will be glad if you find useful tips and hints. If you decide to apply them to the practices of your business, please write to me and tell me how you do it.

SECOND EDITION

The first edition of the book, entitled *Lean Practices* and published in 2022, was welcomed by industrial managers, company owners, and university professors.

This second edition, entitled *LEAN IN ACTION*, is from 2024. It is complemented by answers to the numerous questions asked by dozens of inquisitive readers of the first edition. I would sum up most of these questions into five groups.

The first group of questions expressed doubts that some of the principles and work tools of Lean Production are applicable outside the assembly industries.

The second group of questions also expressed doubt, this time about whether Lean is appropriate for short-series productions and for engineering companies.

The third group of questions was related to the restrictions on applying Lean to continuous industries, to agriculture, and to administration and service sectors.

The fourth group of questions was about how to maintain low stock levels of materials in the context of slow running or completely blocked supply chains.

The fifth group of questions was focused on whether it is possible to achieve efficient production with a low quality of technical and operative personnel, combined with inefficient systems for personnel management and outdated systems for operative planning and operative management of the production.

Second edition of the book is expanded compared to first by a ninety pages to give more examples from industry and other economic and non-profit sectors.

I am not mentioning the names of some companies on purpose to delicately preserve their anonymity if examples of their practices are drastically negative.

These examples aim to guide and make it easier for the reader to learn lessons about the correct and wrong approaches and about the good and bad practices.

The book has been translated into English language for the purpose of broaden the readership, to make it accessible to English-speaking managers in Bulgaria, and to disseminate Bulgarian experience in the field of Lean around the world.

The experience is interesting due to certain characteristics of the Bulgarian industrial and business environment, which is still marked by monopolies and deficits and where production and logistical chains are incomplete and chaotic.

The Bulgarian experience is also interesting because of the specific traits of the Southern folk psychology, which are impervious to the hard and sometimes violent instruments of the rationalist school of the companies's management.