

Cracked it!

Bernard Garrette • Corey Phelps
Olivier Sibony

Cracked it!

How to solve big problems and sell
solutions like top strategy consultants

palgrave
macmillan

Bernard Garrette
HEC Paris School of Management
Jouy-en-Josas, France

Olivier Sibony
HEC Paris School of Management
Jouy-en-Josas, France

Corey Phelps
Desautels Faculty of Management
McGill University
Montreal, QC, Canada

ISBN 978-3-319-89374-7 ISBN 978-3-319-89375-4 (eBook)
<https://doi.org/10.1007/978-3-319-89375-4>

Library of Congress Control Number: 2018944260

© The Editor(s) (if applicable) and The Author(s) 2018

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors, and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Cover illustration: alashi/DigitalVision Vectors/Getty

Printed on acid-free paper

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Business leaders praise Cracked It!

“When dealing with a major business issue, every decision maker is facing his own cognitive biases, rooted in experience and personality. In *Cracked It!*, the authors not only remind us of the importance of challenging even obvious solutions or ideas, by taking a step back, thinking differently, and walking in the other’s shoes – be it a customer or an audience – but they also provide practical, value-creating and proven insight.”

—Stéphane Richard, *Chairman and Chief Executive Officer, Orange*

“The future is no longer what it used to be. The business world is undergoing unprecedented disruption. Every problem is more complex. *Cracked It!* will be the bible of the true problem solvers.”

—Daniel Bernard, *Former Chairman and Chief Executive Officer, Carrefour*

“If you want to master problem solving, buy this book. It will save you from coming to sloppy conclusions and guide you through every aspect of the process of solving a problem. I used it the day after I started reading it.”

—Neil Janin, *Chairman, Bank of Georgia, and Senior Partner Emeritus, McKinsey*

“Too often at the Board or executive level, time is wasted looking for solutions to a problem which has not been clearly defined. Garrette, Phelps and Sibony provide a structured approach to defining problems which should prove useful to practitioners.”

—Paul M Tellier, *Former Chief Executive Officer, Bombardier and Canada National Railways*

Thought leaders praise Cracked It!

“Too many companies fail because of bad strategy. This book is full of frameworks and tips to help you avoid that fate.”

—Adam Grant, *New York Times bestselling author of Give and Take, Originals, and Option B with Sheryl Sandberg*

“Written by a trio of leading experts on strategy who draw both on decades of rigorous academic research and consulting experience, *Cracked It!* offers a crystal clear approach to frame and solve challenging strategic issues. A must-read for executives, consultants, business school students and leaders in charge of transforming their organizations.”

—Laurence Capron, *Professor of Strategy and Dean of Faculty, INSEAD*

“CEOs regularly pay a king’s ransom to the top management consulting firms for help in solving their most complex problems. You may not have the consultant’s connections or their knowledge of the industry, but this book will help you learn the secrets of their problem-solving process so you can tackle your own problems more effectively.”

—Chip Heath, *Coauthor of Switch and The Power of Moments*

“Why do smart and experienced executives sometimes make spectacularly bad decisions? This book exposes the flaws in analysis that lie at the root of the problem. Building on deep academic insights and lots of real-world experience, Garrette, Phelps and Sibony lay out a structured problem-solving approach to overcome the many pitfalls that executives fall into. They don’t just tell you how to get the analysis right, they also explain how to sell your advice to others. An invaluable guide to anyone who is involved in decision-making in the business world today.”

—Julian Birkinshaw, *Author of Fast/Forward, Professor and Deputy Dean, London Business School*

“This is a GREAT ‘how to’ book for tackling strategic problems and becoming a better strategic thinker. It not only describes all the major frameworks used by strategy analysts, but also shows their pitfalls and how to decide when a particular framework will be useful. All of the concepts in the book are also demonstrated with real case studies that bring the process of strategic analysis to life.”

—Melissa Schilling, *Author of Quirky and Herzog Family Professor of Management, Stern School of Business, New York University*

“Problem solving is a critical skill for managers and entrepreneurs and often under-served in business education. *Cracked It!* does a phenomenal job in presenting a full problem solving framework grounded in sound theory, tested in years of practice and fun to read.”

—Franz Heukamp, *Dean, IESE Business School*

Strategists praise Cracked It!

“A fully comprehensive and practical introduction to problem-solving tools and techniques.”

—Georges Desvaux, *Senior Partner and Managing Partner, Africa, McKinsey & Company*

“Strategy is problem solving – an important, subtle and pervasive skill for which business practitioners receive little formal training. Garrette, Phelps and Sibony provide a valuable and practical guide to the art, from framing the problem through to communicating and selling the solution, which should be invaluable to practitioners and consultants.”

—Martin Reeves, *Director, BCG Henderson Institute*

“A great read for all current and future business leaders! The secret sauce of solving hard problems and selling solutions to drive change is at your doorstep. Just go get it!”

—Eric Gervet, *Lead Partner, AT Kearney, San Francisco office*

“The companies that win will be those that use superior problem solving tools. *Cracked It!* teaches you how. It captures the real world experience of successful problem solving and presents the learnings in an engaging style.”

—Rima Qureshi, *Executive Vice President and Chief Strategy Officer, Verizon*

“The ABSOLUTE reference handbook on problem solving! It is clearly unique and it smartly introduces an amazing richness of methods, through cases and easy to understand frameworks. I have to say... I love it!”

—Jean-Baptiste Voisin, *Chief Strategy Officer, LVMH*

“In an uncertain world that defies comprehension, we are forced to make intuitive decisions... but our problem-solving process must be rational. Therein lies *Cracked It!*'s greatest value. Readers will learn how to shape an effective problem-solving process to channel intuition into rationality and avoid the mistakes that ensnare the amateur strategist.”

—General Vincent Desportes, *French Army*

Acknowledgments

As strategy professors, we interact with a broad range of audiences, from undergraduate students to MBA participants to senior executives. Despite very different backgrounds and expectations, all of them consistently tell us that they struggle with a common challenge: how to *apply* what they learn.

Our students tell us that the tools and concepts of business management are relatively easy to understand. Analyzing the structure of an industry or assessing whether a company has a cost advantage is not, after all, an extraordinary intellectual challenge for people who often have advanced degrees in non-business fields, not to mention many years of successful experience. When the time comes to apply the same tools to real business situations, reality does not conform to the stereotype presented in the textbooks—or even to the stylized examples presented in case studies. The problems business people face are complex. Situations are ambiguous. Facts are unclear. Expectations change quickly. Whether it is learned in school or on the job, business knowledge provides executives with a treasure trove of frameworks. But it does not help them to recognize and make sense of the problems.

In 2014, we set out to fill this gap by developing a course on problem solving for the core curriculum of the HEC Paris MBA. We soon realized we needed to address aspects of business communication as an integral part of the course, for reasons that will become clear as you read this book. After many iterations and refinements, the course morphed into the method described in this book.

A significant inspiration for this book is the problem-solving method developed and refined over many years by McKinsey consultants. Because the very nature of top management consulting is to help senior executives make sense of the toughest problems they deal with, problem-solving proficiency is at the

heart of what McKinsey consultants do. Like almost everything in this extraordinary firm, it is passed on from generation to generation, in the spirit of apprenticeship. Olivier is immensely grateful to the masters who taught him the ropes as a young consultant, but also to all the colleagues, from the partners to the summer associates, who challenged him in countless team meetings over a quarter century.

We are indebted to the hundreds of students and executives who participated in our problem solving and communication seminars over the past few years. Not only did they force us to clarify and refine our thinking continuously, but they also kept telling us that something was missing: the course was long enough to make them aware of the need to hone their problem-solving skills, but too short for them to become familiar with all the tools and techniques required. Where, they asked us, is the book they can read to become better problem solvers? We hope the answer is now in your hands.

Many parts of this book benefited from the input and wisdom of colleagues. To name only a few, we would like to thank Blaise Allaz, Pierre Dussauge, Thierry Foucault, Andrea Masini, Anne-Laure Sellier, and Mathis Schulte, who have been instrumental in extending the scope of our problem-solving views toward their respective areas of expertise. More generally, we are indebted to all our colleagues at our home schools—HEC Paris and McGill—as well as to friends and colleagues from other institutions we collaborate with, such as IESE and Saïd Business School, who engaged in stimulating conversations with us at various stages of the project. We insist that all remaining errors are ours.

We also benefited from research support from HEC Paris, the HEC Foundation, and the Desautels Faculty of Management at McGill University, which we gratefully acknowledge.

Turning a classroom experience into a book is an interesting challenge. We hope this book has retained some of the “hands-on” feel that we strive for in our teaching, while following the conventions that make it possible for a reader to navigate it easily. If we’ve had any success in this endeavor, our editor Jennifer Worick deserves much of the credit. Isabelle Huynh, our visual editor, helped us convert our cluttered slides into the elegant visuals you will discover. We are also grateful to Stephen Partridge and Gabriel Everington of Palgrave Macmillan for their patient and supportive work.

Working on a book is like any relationship—it requires care and attention, and sometimes, it can become all-consuming. It can provide joy one day, and frustration the next. It can also impact other relationships and benefit from them. Bernard wants to thank Béatrice for her loving care and

support, especially in the challenging personal circumstances that surrounded the completion of this work. Corey's wife, Tiffany, and kids, Chloé-Rose and Connor, went through a lot and did a lot to support him during the project, for which he is extremely grateful. Olivier is equally grateful to Anne-Lise, Fantin, and Lélia for their unfailing encouragement and patient support.

Contents

1	The Most Important Skill You Never Learned	1
	Fast and Slow Problem Solving	2
	Problem Solving and the Expertise Trap	5
	Complex Problems and “Unknown Unknowns”	7
	The Need for a Disciplined Problem-Solving Process	10
	Chapter 1 in One Page	12
2	The Five Pitfalls of Problem Solving	15
	Case 1: When the Music Industry Went Out of Tune	15
	Pitfall 1: Flawed Problem Definition	16
	Case 2: The Grameen–Danone Strengthening Yogurt	18
	Pitfall 2: Solution Confirmation	21
	Case 3: The Call Center Story	22
	Pitfall 3: Wrong Framework	23
	Case 4: New Strategy at J.C. Penney	25
	Pitfall 4: Narrow Framing	26
	Case 5: A Fat Chance for Sugar	29
	Pitfall 5: Miscommunication	32
	Chapter 2 in One Page	33
3	The 4S Method	35
	Where Does the 4S Method Come from?	35
	An Overview of the 4S Method	41
	State: A Problem Well Posed Is Half-Solved	43

Structure: The Architecture of Problem Solving	44
Solve: Between Analysis and Creativity	46
Sell: Choose the Approach That Suits Your Audience	48
Chapter 3 in One Page	51
4 State the Problem: The TOSCA Framework	53
Trouble: What Makes This Problem Real and Present?	54
Owner: Whose Problem Is This?	57
Success Criteria: What Will Success Look Like, and When?	58
Constraints: What Are the Limitations and Trade-Offs?	60
Actors: Who Are the Stakeholders?	61
Write the Core Question	62
Singing TOSCA as a Choir	65
Chapter 4 in One Page	67
5 Structure the Problem: Pyramids and Trees	69
Hypothesis-Driven Problem Structuring	71
Building a Hypothesis Pyramid	72
Hypothesis-Driven Problem Structuring: Pros and Cons	79
Issue-Driven Problem Structuring	84
Growing Issue Trees	86
Growing a Tree or Building a Pyramid?	89
Chapter 5 in One Page	92
6 Structure the Problem: Analytical Frameworks	95
Using Frameworks to Breakdown Problems	96
The Danger of Frameworks: Frameworks as Mental Models	99
Industry Frameworks: Value Drivers	101
Functional Frameworks	105
When All Else Fails, Try Good Old Logic	113
Chapter 6 in One Page	115
7 Solve the Problem: Eight Degrees of Analysis	117
From Structuring to Analyses	117
Eight Degrees of Analysis	121
Planning the Work	125
Conducting the Analysis	126
Chapter 7 in One Page	136

8	Redefine the Problem: The Design Thinking Path	139
	Design Thinking and When to Use it	142
	Five Phases, One Mindset	144
	Phase 1: Empathize	147
	Phase 2: Define	156
	Chapter 8 in One Page	165
9	Structure and Solve the Problem Using Design Thinking	169
	Phase 3: Ideate	171
	Phase 4: Prototype	182
	Phase 5: Test	186
	Chapter 9 in One Page	191
10	Sell the Solution: Core Message and Storyline	197
	Don't Tell the Story of the Search, Tell the Story of the Solution	198
	The Pyramid Principle	200
	Pave the Way for a Dialogue	204
	Design Your Storyline	205
	Go for Either a Grouping or an Argument	213
	Chapter 10 in One Page	220
11	Sell the Solution: Recommendation Report and Delivery	223
	Manage Communications Throughout the Process	224
	Beware the PowerPoint Curse	225
	Create an Effective, Modular Report	226
	Develop the Content Pages	230
	Make Quantitative Charts Relevant and Simple	233
	Use Conceptual Charts Sparingly	241
	Trim the Deck Ruthlessly	241
	Quality Control	243
	Beyond Slide Presentations	243
	Chapter 11 in One Page	248
12	The 4S Method in Action	251
	Case Study: The Kangaroo Opportunity	251
	What Is the Problem?	255
	Structuring the Problem	257

xvi **Contents**

Solving the Problem	257
Selling the Solution	259
Appendix: First Section of a Report on the Kangaroo Case Study	263
13 Conclusion: Becoming a Master Problem-Solver	271
Index	275

List of Figures

Fig. 3.1	The 4S method	42
Fig. 4.1	TOSCA problem statement worksheet	64
Fig. 5.1	The hypothesis pyramid	72
Fig. 5.2	First level of a hypothesis pyramid on the Librinova case	73
Fig. 5.3	More complete hypothesis pyramid on the Librinova case	77
Fig. 5.4	Issue tree structure	85
Fig. 5.5	Preliminary issue tree on the Librinova case	87
Fig. 5.6	More complete issue tree on the Librinova case	88
Fig. 5.7	When to use a hypothesis pyramid or an issue tree	91
Fig. 6.1	A stock analyst's framework	96
Fig. 6.2	A basic question breakdown for a private equity firm	97
Fig. 6.3	Private equity firm issue tree	97
Fig. 6.4	Private equity firm issue tree (continued)	98
Fig. 6.5	Three ways to break down questions	100
Fig. 6.6	Simple breakdown of Starbucks question	101
Fig. 6.7	Starbucks issue tree first attempt	102
Fig. 6.8	Starbucks issue tree using industry framework	103
Fig. 6.9	Starbucks issue tree using functional framework	105
Fig. 6.10	Starbucks issue tree using functional framework (continued)	106
Fig. 6.11	Starbucks issue tree using a logical decomposition	113
Fig. 7.1	First level of hypothesis pyramid on Solar case	118
Fig. 7.2	More complete hypothesis pyramid on Solar case	119
Fig. 7.3	Analysis plan for Solar case (sub-hypothesis 1)	121
Fig. 7.4	Analysis plan for Solar case (sub-hypothesis 2)	122
Fig. 7.5	Analysis plan for Solar case (sub-hypothesis 3)	123
Fig. 8.1	Process of design thinking	144
Fig. 8.2	Template for user empathy map	158

Fig. 10.1	The pyramid principle	201
Fig. 10.2	Storyline on the Librinova case	207
Fig. 10.3	Storyline patterns	217
Fig. 11.1	From storyline to slide deck	227
Fig. 11.2	First page of Mustang Airlines report	228
Fig. 11.3	First page of Summit Water report	229
Fig. 11.4	First storyline page of Summit Water report	230
Fig. 11.5	Second storyline page of Summit Water report	231
Fig. 11.6	Content page in a report on the Mustang Airlines problem	232
Fig. 11.7	Quantitative chart templates	235
Fig. 11.8	Column chart of a time series	236
Fig. 11.9	Pie and stacked columns charts	237
Fig. 11.10	Waterfall chart	238
Fig. 11.11	Bar chart	238
Fig. 11.12	Frequency distribution	239
Fig. 11.13	Paired bar chart showing ranking correlation	240
Fig. 11.14	Correlation of price per watt and installed capacity of renewable energy sources	240
Fig. 11.15	Conceptual chart templates	242
Fig. 11.16	Report and presentation checklist	244
Fig. 12.1	Issue tree on the Kangaroo case study	258

List of Tables

Table 6.1	Selected marketing frameworks	108
Table 6.2	Selected strategy frameworks	109
Table 6.3	Selected organization and change frameworks	110
Table 6.4	Selected operations frameworks	110
Table 6.5	Selected finance frameworks	111
Table 8.1	How to be a good observer	150
Table 8.2	How to conduct semi-structured interviews	152
Table 8.3	How to build a journey map	160
Table 8.4	Synthesizing user needs, user insights, and design imperatives	162
Table 9.1	Using SCAMPER to ideate	179