

## Frugal Innovation

In light of growing discourse on ‘frugal innovation’, this book offers novel approaches to innovation based on extensive empirical research. The study complements a decade of scholarly attention on frugal innovation by taking a research-based approach to innovation in resource-scarce and complex institutional contexts. The findings suggest that concepts such as frugal, reverse, *jugaad*, social, grass-roots and inclusive innovation in fact represent heterogeneous assemblies of innovation for social, environmental and economic value. The conceptual framework invites attention to more plural sources and elements in the study of models of innovation to inspire further research in the fields of strategy, innovation, entrepreneurship, economic sociology and development studies. The design framework offers models, metrics and competencies for practitioners and policy-makers to identify, evaluate and design frugal innovations. The comprehensive view of frugal innovation demonstrates how firms can implement globally competitive strategies by pursuing innovation for humanity to improve lives for everyone, everywhere.

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Policymakers around the world and especially in emerging markets can leverage frugal innovations to better promote human welfare. The models and tools in this book should support leaders in their efforts to foster equitable growth and sustainable development.

– *Shaukat Aziz, Chairman of the Oxford Emerging Markets Symposium Steering Committee and former Prime Minister of Pakistan*

This book should give tremendous impetus for serious and rigorous academic research on innovation under severe constraints.

– *Vijay Govindarajan, Coxe Distinguished Professor at Tuck, Dartmouth and author of the New York Times best seller, Reverse Innovation*

This book complements previous books in helping to establish frugal innovation as a field that merits serious attention in the diverse worlds of academia, practice and policy. It extends prior work by developing models, frameworks and tools to help scholars, innovators and managers to deliver meaningful and much needed innovation for all of humanity.

– *Jaideep Prabhu, Professor of Marketing at Judge Business School, Cambridge and co-author of best sellers Jugaad Innovation and Frugal Innovation*

To solve the wicked problems confronting humanity and the planet, we need frugal innovators –wise problems solvers who operate with a business mind, social heart, and ecological soul. Building on earlier works on frugal innovation, this scholarly book offers a rigorous theoretical framework to understand, teach, and practice the art and science of designing and delivering frugal solutions that integrate six key elements: affordability, accessibility, simplicity, sustainability, quality, and purpose.

– *Navi Radjou, Fellow at Judge Business School, University of Cambridge and co-author of best sellers Jugaad Innovation and Frugal Innovation*

Frugal innovation is a topic of considerable interest to companies, policy makers and researchers. It offers both innovation to connect the poorest and most disadvantaged citizens to the benefits of new products and services and opportunities for firms to identify new and potentially lucrative markets. This important book offers

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important new conceptual and practical insights into frugal innovation and should be seen as essential reading for anyone engaging with this topic.

– Alex Nicholls, *Professor of Social Entrepreneurship, Saïd Business School and Fellow in Management, Harris Manchester College, University of Oxford*

Targeted to scholars and providing a solid foundation for future research, *Frugal Innovation* also offers keen insights on how social entrepreneurs conceive of innovation in multiple dimensions. Practitioners will find experience-based frameworks that help them synthesize and communicate the integrative nature of innovations that benefit the underserved. Like social entrepreneurship, ‘frugal innovation’ is a term with many meanings. Integrative, synthetic, and clear, the authors examine multiple dimensions of innovation and distill frugal innovation as a hybrid approach tuned to environments with extreme resource constraints and resource voids. Both researchers and practitioners will benefit from learning how social entrepreneurs themselves perceive innovation.

– Thane Kreiner, *Howard and Alida Charney University Professor and Executive Director, Miller Center for Social Entrepreneurship, Santa Clara University*

New models of innovation are desperately needed in global health systems which are being squeezed by increasing demand, declining budgets and rising complexity of disease. This book shows how frugal innovations can play a vital role in containing soaring healthcare costs while upholding quality standards, which simply cannot be compromised in healthcare.

– Ara Darzi, *Professor of Surgery at Imperial College London, member of the United Kingdom's House of Lords and former Parliamentary Under-Secretary of State at the Department of Health*

*Frugal Innovation: Models, Means, Methods* is a must-read for academics, entrepreneurs, corporates and investors. It will advance how to get to inclusive solutions not merely based on cost

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effectiveness and financial returns but combining them with purpose and impact. This book shows that frugal innovation is not just another innovation term, but that empirically based models and theories that the authors have proposed will help enable creating and scaling solutions under resource constraints both by social entrepreneurs and traditional businesses.

– Venkata Gandikota, *President and Co-Founder, The Nordic Frugal Innovation Society*

This book is needed! The marrying of social value and business value has gained steam in many circles with a focus on value – both human and economic. Frugal Innovation widens the path for intrepid innovators by grounding insightful conceptual frameworks upon an extensive base of empirical evidence.

– Kristian Olson, *Director of the Consortium for Affordable Medical Technologies and Associate Professor, Harvard University Medical School*

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# Frugal Innovation

## Models, Means, Methods

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We dedicate this book to the late Pamela Hartigan, who spread her optimism far and wide to help make a better world, served by better business.



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Entrepreneurs, whether primarily commercial or social in orientation, are cut from the same cloth: resourceful, pragmatic, innovative and opportunity-oriented. All entrepreneurs need to keep in mind social and financial goals. Social entrepreneurs prioritise social gain and pursue financial gain to sustain and expand their social mission and its growth.

– Dr Pamela Hartigan, 1948–2016

Director, Skoll Centre for Social Entrepreneurship at the  
Saïd Business School, University of Oxford

## Contents

List of Figures	<i>page</i> xv
List of Tables	xvi
Foreword	xviii
<i>Anita McGahan</i>	
Preface	xxi
Acknowledgements	xxiv
List of Abbreviations	xxv
Introduction	1
PART I MODELS OF FRUGAL INNOVATION	7
1 Outline of the Context, Literature and Methodology	9
1.1 The Inspiration for This Book	9
1.2 Theoretical Framing from the Literature	10
1.2.1 Why Focus on Innovation?	12
1.2.2 Why Focus on Institutional Voids and Resource Scarcity?	13
1.2.3 Why Study Social Entrepreneurs to Inform Models of Innovation?	14
1.2.4 Under-Researched Assumptions about Social Innovation and Social Entrepreneurship	15
1.3 What Do We Know about Social Innovation?	17
1.4 Innovation under Constraint	19
1.5 The Question of Frugal Innovation	21
1.6 How Does This Book Approach Innovation Differently?	23
1.7 The Conceptual Framework	24
1.8 Research Questions	31

## XII TABLE OF CONTENTS

1.9	Approach and Method	32
1.10	Contribution to Organisation Theory and Strategic Management	35
2	Conceptualising Innovation: Model 1	38
2.1	Introduction	38
2.2	Analysis and Coding	39
2.3	Aggregating into Third-Level Theoretical Concepts	58
2.4	Generating a Model and Towards Theory	59
2.5	Discussion	59
2.5.1	Social Innovation	65
2.5.2	Challenge-Based Innovation	66
2.5.3	User-Based Innovation	67
2.5.4	Efficiency-Driven Innovation	67
2.5.5	Combining the Four Types to Define Frugal Innovation	67
2.6	Summary	70
3	Conceptualising Innovation under Constraints: Model 2	71
3.1	Introduction	71
3.2	Analysis and Coding	73
3.3	Aggregating into Third-Level Theoretical Concepts	82
3.4	Generating the Theoretical Model	84
3.5	Discussion	97
3.6	Summary	99
PART II TOWARDS A THEORY OF FRUGAL INNOVATION		101
4	Integrative Results and Theory Development	103
4.1	Introduction	103
4.2	Approach to Theory Development	104
4.3	Developing a Theory of Frugal Innovation	108
4.3.1	Intersection of Technology and Social Innovation	111

4.3.2	Intersection of Institutional and Social Innovation	120
4.3.3	Intersection of Technology and Institutional Innovation	125
4.3.4	The Technology–Social–Institutional Nexus	129
4.4	Summary	133
5	Test of Models Using Secondary Cases	141
5.1	Introduction	141
5.2	Intersection of Technology and Social Innovation	143
5.2.1	Aravind Eyecare System (Social)	143
5.2.2	General Electric’s Electrocardiogram and Ultrasound Machines (Efficiency-Based)	144
5.2.3	Tata Nano (Challenge-Based)	146
5.2.4	Ansari X Prize (Challenge-Based)	147
5.2.5	One Laptop per Child (Challenge-Based)	149
5.3	Intersection of Institutional and Social Innovation	149
5.3.1	Grameen Bank (Social)	149
5.3.2	Mumbai Dabbawalas (User-Based)	150
5.4	Intersection of Technology and Institutional Innovation	152
5.4.1	Mobile Phone Banking (Efficiency-Based)	152
5.5	The Technology–Social–Institutional Nexus	155
5.5.1	Narayana Health Cardiac Hospital (Social)	155
5.5.2	\$300 House (Challenge-Based)	157
5.6	Summary	158
6	Emerging Concepts in Innovation	160
6.1	Introduction	160
6.2	Reverse Innovation	162
6.3	Grassroots Innovation	167
6.4	Inclusive Innovation	168
6.5	<i>Jugaad</i> Innovation	169

## XIV TABLE OF CONTENTS

6.6	Frugal Innovation	171
6.6.1	Conceptualising Frugal Innovation	174
6.6.2	Mechanisms Enacted in Frugal Innovation	183
6.7	Summary	187
7	Implications for Research, Practice and Policy	189
7.1	Introduction	189
7.2	Implications for Researchers	192
7.3	Implications for Practitioners	196
7.4	Implications for Policymakers	202
7.5	Limitations	206
7.5.1	Research Question 1	208
7.5.2	Research Questions 2 and 3	209
7.5.3	Results and Claims	210
7.6	Future research	212
7.7	Summary	214
	Conclusion	216
	PART III TOOLS FOR PRACTICE AND RESEARCH	223
	Appendices	225
	Appendix A. Toolkit to Identify and Categorise Frugal Innovations	226
	Appendix B. Lessons from the Frugal Innovation Lab	229
	Appendix C. Detailed Research Methodology and Design	233
	References	262
	Bibliography	298
	Index	308

## Figures

1.1	Identifying gaps in the literature	<i>page</i> 12
1.2	Conceptual framework	30
1.3	Main constraints on innovation in underserved markets	31
2.1	Coding sequence for ‘conceptualise innovation’	47
2.2	Model 1: Matrix model of perceptions of innovation	60
2.3	Bridging the gap between social and business priorities through frugal innovation	63
2.4	Interpretative theoretical perspectives on models of (frugal) innovation	65
3.1	Coding sequence	74
3.2	Model 2: Theoretical dimensions and the overlap between resource constraints, institutional voids and affordability constraints	97
4.1	Theoretical model of frugal innovation	109
4.2a	Development from Jaipur Knee to ©ReMotion Knee	116
4.2b	Price-performance space for frugal innovation ©ReMotion Knee	117
4.2c	Frugal innovation is not cheap	118
4.2d	Overlay of two figures in support of the finding that frugal innovation is not cheap	118
6.1	Growing trend in articles related to frugal innovation	161
6.2	Arbutus Medical DrillCover	171
6.3	Definitions of frugal innovation at different levels of abstraction	180
6.4	Mapping the ecosystem for an emerging field	187
7.1	Reverse diffusion of frugal innovation in the Rogers diffusion curve	215
A.1	Categorising frugal innovations in lifecycle	228
B.1	Ten core competencies of frugal innovation from the Frugal Innovation Lab	230
C.1	Contextual elements of research sites	241
C.2	Retroduction as an iterative combination of induction and deduction	256

## Tables

1.1	Summary of main findings	<i>page 36</i>
2.1	Stages of analysis: How social entrepreneurs conceptualise innovation	40
2.2	First-order codes: Conceptualise innovation	44
2.3	Summary of codes and themes	46
2.4	Distribution of passages that support data triangulation findings	47
2.5a	Interview data: Social innovation n = 75 passages	48
2.5b	Interview data: Challenge-based innovation n = 59 passages	50
2.5c	Interview data: User-based innovation n = 54 passages	53
2.5d	Interview data: Efficiency-based innovation n = 54 passages	55
3.1	Stages of analysis for research subquestions 2 and 3	75
3.2	Number of passages coded from each data source (baseline)	79
3.3	Frequencies of themes by types of respondents discussing institutional voids and resource scarcity	79
3.4	First-order codes for research subquestions 2 and 3	81
3.5	Number of passages that support third-level theoretical dimensions	82
3.6	Intermediate table summarising constructs and themes	83
3.7	Sample data supporting the theoretical dimension of institutional innovation – 293 (archives) + 188 (interviews) = 481 passages	85
3.8	Sample data supporting the theoretical dimension of technology innovation – 182 (archives) + 109 (interviews) = 291 passages	89
3.9	Data supporting the theoretical dimension of social innovation – 289 (archives) + 144 (interviews) = 433 passages	93
4.1	Contradictory assumptions among social entrepreneurs	106

4.2a	Data supporting the intersection of Schumpeterian and social innovation	134
4.2b	Data supporting the intersection of Schumpeterian and institutional innovation	135
4.2c	Data supporting the intersection of institutional and social innovation	137
4.2d	Data supporting the social-Schumpeterian-institutional nexus	139
5.1	Categorising case examples in accordance with Innovation Models 1 and 2	142
6.1	First-order codes that support reverse innovation needs gaps	165
6.2	Comparing frugal innovation with related concepts	179
6.3	The definition of frugal innovation has many facets	182
7.1	Implications of two models in relation to theory, practice and policy	193
A.1	Frugal identification tool	227
B.1	Ten core competencies of frugal innovation from the Frugal Innovation Lab	230
B.2	Examples that support the ten core competencies of frugal innovation	231
C.1	Research questions and objectives	234
C.2	Overview of the research design	235
C.3	Components of the research process adopted for this study	236
C.4	Total number of interviews during Phases 2 and 3	240
C.5	Innovation summary documents	243
C.6	Respondent profiles for Phase 2	247
C.7	Respondent profiles for Phase 3 (all from site A)	251



## Foreword

You are holding in your hands one of the most extensive studies of what has come to be called ‘frugal innovation’. Rooted in several years of sustained empirical work, this volume deals comprehensively with the various constructs associated with low-cost innovation in resource scarce and institutionally complex contexts. The authors reveal the many facets of frugal innovation through a process of discovery grounded in practices of social entrepreneurs, and in prior studies by academics. The result is real progress: understanding what frugal innovation means and why it is important – and why it should be important – to innovation scholars, practitioners and policymakers.

Doctoral students and scholars will find the surveys of the literature and theory to be essential resources for understanding frugal innovation and related constructs. For those seeking to advance knowledge about frugal innovation, primary and secondary case studies offer fascinating opportunities to understand how this idea is implemented in practice. The authors draw on the literature and experiences of actual innovators to build a theoretical framework for scholars who seek to increase the body of knowledge about this concept. In addition to identifying what frugal innovation is and means, the authors test the boundaries of the idea, and then offer a series of tools for practitioners seeking to implement frugal innovation as a process.

The ideas that permeate this book reflect that low-cost innovation is fundamentally about change that does not drive more luxury but focuses on equitability. In the end, the phenomenon raises fundamental questions about the purpose of the systems of innovation that dominate the landscape of change in most established contexts. Innovation under principles of frugality leads to foundational

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Frontmatter  
[More Information](#)

---

FOREWORD XIX

questions about the purpose of the system that we customarily rely upon to generate change. At its heart, frugal innovation challenges orthodoxy.

**Anita McGahan**

*Rotman Chair in Management and Professor of Strategic  
Management at Rotman School of Management, University of Toronto*

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Frontmatter  
[More Information](#)

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## Preface

Almost a decade has passed since the idea of frugal innovation began to be globally recognised. With so much already achieved, this is an opportune time to further help to authenticate the growing but occasionally confusing frugal innovation agenda for researchers, practitioners and policymakers. This book complements other books on frugal innovation by breaking critical ground in drawing from the perspectives of social entrepreneurs as a focal lens to base pluralistic arguments for frugal innovation underpinned by empirical research and theory development. It builds on and extends original doctoral thesis by Dr Yasser Bhatti, successfully defended at the Saïd Business School, University of Oxford in the summer of 2014.

Social entrepreneurs, as well as multinational firms, are creating the market for frugal innovations – potentially profitable and socially valuable solutions that are affordable, adaptable and accessible. Often, frugal innovations are the result of efforts to tackle local problems of global concern in the fields of education, healthcare and housing. By starting our analysis with social entrepreneurs and building on the assumption that they carry out social innovation, we transition to frugal innovation as a concept that helps to capture the plural sources and elements of innovation, beyond just social innovation, that they actually see as important in their work, context and indeed as occurring around them. As a unique source transcending private and public sectors, they provide fresh insights on broader issues of equitable and sustainable growth through innovation which is becoming increasingly important for markets, civil society and governments.

Our research shows how the emerging trend in frugal innovation deals with, makes use of and overcomes resource constraints

## XXII PREFACE

and institutional voids to create social value and generate profit, the former improving lives and the latter making solutions sustainable. We discuss how the concept of frugal innovation (defined through the findings of this study) compares with the nuanced meanings found in the existing literature and argue that frugal innovation is best construed as ‘means and ends to do more with less for the many’, thereby moving beyond the view that frugal is mainly about cost, affordability or simply constraint.

With conceptual frameworks and theoretical models, the primary audience for this book consists of strategic management researchers and organisational theorists studying: (i) strategy and innovation; (ii) social entrepreneurship; (iii) development studies; (iv) sustainability and (v) design and engineering. The presentation style, arguments and analyses are tailored for academic researchers and policymakers, as well as for postgraduate MSc and PhD candidates writing research-based dissertations.

In addition, with design frameworks and practical models, this book also provides tools to help practitioners and policymakers to identify, measure and evaluate frugal innovations. It aims to create awareness among entrepreneurs and firms of ways to improve lives by providing greater social value. Given increasing competition from low-cost global competitors, this study should help businesses and social entrepreneurs, as well as large firms, to learn about core competencies associated with frugal innovation to become more globally competitive. The findings can benefit practitioners and policymakers in the following ways:

- Entrepreneurs of all kinds, whether primarily social, such as Jacqueline Novogratz of the Acumen Fund, or commercial, such as Elon Musk of Tesla Motors, who seek to maximise the triple bottom-line benefit to profits, people and the planet by doing more with less for many;
- Firms and organisations that support and promote frugal innovation, including TATA (India), General Electric (USA), Haier (China), Danfoss (Denmark), Nissan (Japan) and many others, as well as those adopting frugal innovation strategies to discover new markets and applications abroad or at home;

- Policymakers and think tanks, such as the European Commission Directorate-General of Research and Innovation (Belgium), NESTA (UK), Social Innovation Generation (Canada), the Rockefeller Foundation (USA), the SERCO Institute (UK), the Schwab Foundation for Social Entrepreneurship (Switzerland) and the Grameen Foundation (Bangladesh and global) that seek to promote inclusive growth and development through business.

We hope that this book will advance the academic research agenda in innovation studies and raise awareness in both the practice and policymaking communities. There is still much work to be done and we invite readers to share their views with us so that we can collectively advance knowledge about innovation and for humanity.

## Acknowledgements

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## Abbreviations

BOP	Base of the Pyramid
EDEA	Entrepreneurial Design for Extreme Affordability
FIL	Frugal Innovation Lab
GSBI	Global Social Business Incubator
RBV	Resource-Based View
SCU	Santa Clara University
SE	Social Entrepreneur/ship
TCA	Thematic Content Analysis