BLOCKCHAIN REVOLUTION

HOW THE TECHNOLOGY BEHIND BITCOIN AND OTHER CRYPTOCURRENCIES IS CHANGING THE WORLD

Don Tapscott
and **Alex Tapscott**

Portfolio / Penguin

CONTENTS

Also by Don Tapscott
Title Page
Copyright
Dedication
Praise for Don Tapscott and Alex Tapscott
Acknowledgments
Preface

PART I: Say You Want a Revolution

CHAPTER 1: The Trust Protocol
In Search of the Trust Protocol
How This Worldwide Ledger Works
A Rational Exuberance for the Blockchain
Achieving Trust in the Digital Age
Return of the Internet
Your Personal Avatar and the Black Box of Identity
A Plan for Prosperity
Promise and Peril of the New Platform

CHAPTER 2: Bootstrapping the Future: Seven Design Principles of the Blockchain Economy
The Seven Design Principles
1. Networked Integrity

2. Distributed Power
3. Value as Incentive
4. Security
5. Privacy
6. Rights Preserved
7. Inclusion
Designing the Future

PART II: Transformations

CHAPTER 3: Reinventing Financial Services
A New Look for the World's Second-Oldest Profession
The Golden Eight: How the Financial Services Sector Will Change
From Stock Exchanges to Block Exchanges
Dr. Faust's Blockchain Bargain
The Bank App: Who Will Win in Retail Banking
Google Translate for Business: New Frameworks for Accounting and Corporate Governance
Reputation: You Are Your Credit Score
The Blockchain IPO
The Market for Prediction Markets
Road Map for the Golden Eight

CHAPTER 4: Re-architecting the Firm: The Core and the Edges
Building ConsenSys
Changing the Boundaries of the Firm
Determining Corporate Boundaries

CHAPTER 5: New Business Models: Making It Rain on the Blockchain
bAirbnb Versus Airbnb

Global Computing: The Rise of Distributed Applications
The DApp Kings: Distributed Business Entities
Autonomous Agents
Distributed Autonomous Enterprises
The Big Seven: Open Networked Enterprise Business Models
Hacking Your Future: Business Model Innovation

CHAPTER 6: The Ledger of Things: Animating the Physical World
Power to the People
The Evolution of Computing: From Mainframes to Smart Pills
The Internet of Things Needs a Ledger of Things
The Twelve Disruptions: Animating Things
The Economic Payoff
The Future: From Uber to SUber
Hacking Your Future for a World of Smart Things

CHAPTER 7: Solving the Prosperity Paradox: Economic Inclusion and Entrepreneurship
A Pig Is Not a Piggy Bank
The New Prosperity Paradox
Road Map to Prosperity
Remittances: The Story of Analie Domingo
Blockchain Humanitarian Aid
Safe as Houses? The Road to Asset Ownership
Implementation Challenges and Leadership Opportunities

CHAPTER 8: Rebuilding Government and Democracy
Something Is Rotten in the State
High-Performance Government Services and Operations

Empowering People to Serve Selves and Others
The Second Era of Democracy
Blockchain Voting
Alternative Models of Politics and Justice
Engaging Citizens to Solve Big Problems
Wielding Tools of Twenty-first-Century Democracy

CHAPTER 9: Freeing Culture on the Blockchain: Music to Our Ears
Fair Trade Music: From Streaming Music to Metering Rights
Artlery for Art Lovers: Connecting Artists and Patrons
Privacy, Free Speech, and Free Press on the Blockchain
Getting the Word Out: The Critical Role of Education
Culture on the Blockchain and You

PART III: Promise and Peril

CHAPTER 10: Overcoming Showstoppers: Ten Implementation Challenges
1. The Technology Is Not Ready for Prime Time
2. The Energy Consumed Is Unsustainable
3. Governments Will Stifle or Twist It
4. Powerful Incumbents of the Old Paradigm Will Usurp It
5. The Incentives Are Inadequate for Distributed Mass Collaboration
6. The Blockchain Is a Job Killer
7. Governing the Protocols Is Like Herding Cats
8. Distributed Autonomous Agents Will Form Skynet
9. Big Brother Is (Still) Watching You
10. Criminals Will Use It

Reasons Blockchain Will Fail or Implementation Challenges?

CHAPTER 11: Leadership for the Next Era
Who Will Lead a Revolution?
The Blockchain Ecosystem: You Can't Tell the Players Without a Roster
A Cautionary Tale of Blockchain Regulation
The Senator Who Would Change the World
Central Banks in a Decentralized Economy
Regulation Versus Governance
A New Framework for Blockchain Governance
A New Agenda for the Next Digital Age
The Trust Protocol and You

Afterword
Notes
Index