

# Contents

- 1 STARTING THE JOURNEY** 1
  - How Deep-Tech Startups Are Different 2
  - Are You Ready to Be an Entrepreneur? 5
  - Consider Your Personality and Your Personal Situation 6
  - Early Issues and Challenges 8
  - Unlucky Beginnings: Mixco Case Study 12
  - Assess Your Probability of Succeeding 13
  - Points to Consider 14
  
- 2 THE LEAN CANVAS, PART 1: LAYING THE FOUNDATION** 15
  - PhotoThin Inc.: Focusing on a Profitable Application 15
  - 1 Problem: What Customer Problem Does Your Technology Solve? 19
  - 2 Solution: How Does Your Technology Solve the Customer's Problem? 20
  - 3 Existing Alternatives and Competitors, Plus Initial Market Sizing 22
  - 4 Unfair (Competitive) Advantage 27
  - 5 Unique Value Proposition and High-Level Concept Statement 30
  - Points to Consider 32
  
- 3 INTELLECTUAL PROPERTY** 33
  - Chemfine Ltd.: Licensing and Sponsored Research 33
  - The Importance of Intellectual Property 34
  - A Very Brief Review of Intellectual Property 34
  - The Basics of Patents 35
  - Developing a Patent Strategy 44
  - Financial Returns from Inventions 46
  - Points to Consider 47

## **4 LICENSING PATENTS FROM RESEARCH INSTITUTIONS 49**

Wave Turbine: When Patents Have Multiple Owners 49

Who Owns Your Invention? 50

Working with Your TTO to Obtain a Patent 54

The License Agreement 56

Negotiating for a License 58

Negotiating Style 62

Points to Consider 66

## **5 THE LEAN CANVAS, PART 2: ANALYZING THE MARKET, REVENUE, AND COSTS 67**

BoneScan: Developing Your Concept 67

6 Customer Segments, Customer Research, and Market Sizing 68

7 Early Adopters 75

8 Channels: Marketing, Sales, Delivery, and Service 78

9 Revenue Streams and Market Size 80

10 Model the Cost Structure 83

11 Milestones and Metrics 86

Points to Consider 89

## **6 CREATING THE ENTITY AND FOUNDERS' EQUITY 91**

Equigene: Early Equity Distribution Trouble 91

Incorporating Your Company 92

Equity and Ownership 93

Division of Founders' Equity 95

The Option Pool 97

Founders' and Employees' Shares Purchases 99

Determining the Number of Shares to Issue 99

Valuation and Dilution 100

Points to Consider 102

## **7 BUILDING THE COMPANY 103**

SparkSys: Finding Your Role 103

Should You Be CEO? 104

Building Your Team 107

Avoiding Common Pitfalls 109

Getting Professional Help You Can Afford 112

Keeping the Leader Strong and Healthy 113

Points to Consider 116

<b>8</b>	<b>PREPARING AN INITIAL BUSINESS PLAN: THE DECK</b>	<b>117</b>
	Deck Requirements	117
	What Investors Expect in a Deck	119
	Finalizing and Presenting the Deck	129
	Points to Consider	134
<b>9</b>	<b>PRO FORMA FINANCIAL MODELING</b>	<b>135</b>
	Broad Intelly: They Snooze, You Lose	135
	Forecasting	136
	Suggested Structure for Pro Forma Statements	138
	Financial Data for Your Pitch Deck	150
	Points to Consider	151
<b>10</b>	<b>RAISING NONDILUTIVE CAPITAL AND LOANS</b>	<b>153</b>
	ParadiseSys: The Value of Nondilutive Funding	153
	Nondilutive Capital	154
	Sourcing Nondilutive Capital	155
	Commercial Arrangements Yielding Cash Before Product Is Ready	162
	Points to Consider	165
<b>11</b>	<b>UNDERSTANDING DILUTIVE CAPITAL</b>	<b>167</b>
	Monaco Energy: Why Experience Matters	167
	Pursuing Dilutive Capital—Some Warnings	168
	Dilutive Capital: Often a Necessity; Always a Cost	169
	Valuing Your Company and Term Sheets	170
	Points to Consider	183
<b>12</b>	<b>RAISING DILUTIVE CAPITAL</b>	<b>185</b>
	SmartCells: A Savvy Funding Strategy	185
	Why Pursue Dilutive Capital?	186
	How Much Money Should You Raise?	187
	Sources of Dilutive Capital	189
	Points to Consider	199
<b>13</b>	<b>NEGOTIATING WITH INVESTORS</b>	<b>201</b>
	ZarboBio: Investor Chemistry	201
	Valuing Your Company	202
	Pricing a Round	203
	Points to Negotiate	205

Negotiating for Win-Win Outcomes 207

Points to Consider 209

**14 RUNNING—THEN EXITING—THE COMPANY 211**

Fourth Leaf: A Successful Board 211

Building a Board and Running Board Meetings 212

Exits: Liquidity for You and Investors 215

Points to Consider 218

**15 FINAL WORDS: ENJOY THE JOURNEY 221**

A Few Key Words in Parting 221

Advice from Others in Your Shoes 222

Enjoy the Journey 230

Acknowledgments 231

Appendix: The Saga of Blue Sky Electronics, a Sad Tale of Stock Dilution 233

Notes 241

Author Biographies 245