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Praise for Conquering Innovation Fatigue

"Conquering Innovation Fatigue is like no other innovation book you have ever read. The ideas are truly revolutionary, and practical. I will ask all my clients to read this book. Because, like me, I believe they also want to get to the future first. The authors know what they are talking about. They have received their unique innovation knowledge, expertise, and insight into a practical 21st-century guide that will take you on a remarkable journey. This is a book that is desperately needed in the industry."
—Jules Nüssbaumer, President, South African Creativity Foundation, and bestselling author of more than 80 books.

"Conquering Innovation Fatigue provides practical advice and fresh perspective on conquering barriers to successful innovation. Understanding the nine major fatigue factors and applying the emerging factors in this book will help corporations improve the quality of their innovation investments."
—Beth Springer, Executive Vice President, The Creon Company

"Innovation is hard, exhausting work. Lindsay, Perkins, and Karanjikar understand this, and have identified a number of ways to overcome innovation fatigue. This book will help innovation leaders the starting power they must have to get out of innovation all the way from inception into the market."
—Harry Cheekhough, Adjunct Professor and Executive Director, Center for Open Innovation at the Haas School of Business at University of California, Berkeley

"Essential reading for those with ideas that deserve to go to market. This book was written by experienced entrepreneurs of the difficult roads going from concept to commercial reality. It teaches us how to anticipate and avoid roadblocks and detours, guiding the way to potential and corporate success."
—E.J. (Woody) Irwin, retired, former president, Institute of Paper Science and Technology, and former group vice president, Hercules, Inc.

"A must for any CEO who wants to drive change and introduce winning technologies."
—Robert van der Merwe, Chairman, President, and Chief Executive Officer, Checkpoint Systems, Inc.

"I enjoyed this book! It provides a compendium of stories about the diverse set of individuals who have successfully made innovation successful. Some tales are uplifting, some discouraging, some challenging—but all are enlightening. Inventions, innovation managers, business leaders, and policymakers each gain deeper insight into their role in making innovation happen."
—Dr. Miles F. Drake, Senior Vice President, R&D, and Chief Technology Officer, Verykool Inc. Company
Conquering Innovation Fatigue

OVERCOMING THE BARRIERS TO PERSONAL AND CORPORATE SUCCESS

Jeffrey Dean Lindsay, Cheryl A. Perkins, and Mukund R. Karanjikar
To those who yearn to create,
To those who see what can be.
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Foreword

Innovation is hard work. No matter where you are in the innovation process, there are traps that can slow you down or worse yet, cause you to surrender. As an inventor in a research organization, I experienced this first hand. As a corporate leader, the biggest challenge I currently face is where the next big idea will come from and how it can be guided and nurtured into a commercial success.

In Conquering Innovation Fatigue, Lindsay, Perkins & Karanjikar take a unique approach to highlight what we can learn from the metaphor of innovators as immigrants who must overcome many new barriers and challenges in their journey to business success. By drawing upon case studies, they tell stories of success and advances in innovation—and how to turn the drain of fatigue into creative energy to be captured by individuals and organizations.

If innovation were easy, we wouldn’t be talking about it. This book challenges the reader to look at the role they play in the innovation process. Whether you are an inventor, a corporate leader or a policy maker, there are practical examples on how the role you play will either amplify or dampen innovation. There are recommendations that you can implement immediately. For corporate leaders and policy makers, it reminds us to listen to the neglected voice of the innovator. By beginning with targeted innovation inspired by the right strategy and enabled with the right minds—we can breathe life into innovation for our company—or our nation.

In this book, you will find useful tools to guide you through the steps you need to take to inspire, nurture and energize your innovation efforts—be they personal, corporate or national. Some are new and others are useful reminders of steps we should be taking on a daily basis. It will teach you how to:
Recognize and overcome the nine major innovation fatigue factors.

Prepare for successful licensing or marketing of inventions with holistic intellectual assets (“360˚ IA™”) and other tools for success.

Use the “Circuit of Innovation™” model that guides innovators in connecting their products to the marketplace.

Avoid the unintended innovation-killers that can result from well-meaning corporate policies and actions.

Exploit low-cost intellectual assets (not just patents!) to increase the odds of success with disruptive innovation, or reduce the risk of competitive disruption.

Turn the problematic “innovation funnel” upside down to create more efficient, targeted innovation using the new “Horn of Innovation™” paradigm—a rich music-inspired model that makes much better use of innovator skills and business strategy.

Tap the innovation power of Da Vinci (but probably not the Da Vinci you know!), as described in sections on “Da Vinci in the Boardroom” and “Da Vinci in the Laboratory.”

Strengthen open innovation for success, including university-industry collaboration.

Good Luck as you navigate the innovation journey!

Jean E. Spence
Executive Vice President
Research, Development & Quality
Kraft Foods
Preface

There is a personal side to innovation that is often overlooked. In our personal experiences and in our interactions and interviews with numerous innovators, we have found that there are many lessons from the “voice of the innovator” that are often missed when innovation is discussed. Innovation always begins at the individual level, in the minds of human beings. Standing between prospective innovators and success are a host of “innovation fatigue factors” that can discourage and hinder innovation. These fatigue factors affect both individuals—whether employees or independent inventors and entrepreneurs—and entire organizations.

After an overview in Part One, we explore the fatigue factors and their solutions in Parts Two through Four, corresponding to fatigue factors at three levels: individuals, organizations, and the external environment. Finally, in Part Five we explore broader “energizing factors” with further recommendation to individuals, corporations, and policy makers. Sprinkled throughout are case studies of the good and the bad, of the pains of innovation fatigue and the joys of successful innovation.

In addition to what we feel is an original perspective, we offer several original case studies and concepts that may be useful for others. These concepts include the innovation paradigm called “the Horn of Innovation™”—an innovator-centric model that turns the familiar “innovation funnel” around. We also present the “Circuit of Innovation™”—an electrical metaphor for bringing the energy of innovation to the market, “Da Vinci in the Boardroom™”—an approach to innovation that couples open innovation with multidisciplinary talent, and “Disruptive Intellectual Asset Strategy”—an effort to fill a gap in the literature on disruptive innovation by showing how low-cost, proactive intellectual asset strategy can overcome some of the barriers to pursuing disruptive opportunities or averting disruptive threats. (We generally prefer...
to speak of intellectual assets (IA) rather than intellectual property (IP), a subset of IA that lacks defensive publications and other valuable elements that are not strictly owned.)

Our work is intended for three groups: (1) entrepreneurs and innovators, including the often-overlooked corporate employee involved in R&D or other creative operations, as well as lone inventors, university researchers, and start-ups; (2) corporate leaders and strategists, including those developing strategies for innovation and intellectual assets; and (3) policy makers and influencers.

Through it all, we emphasize innovation at the personal level, seeking to help aspiring innovators find solutions in their spheres of influence. At the same time, we encourage business and political leaders to listen to the “voice of the innovator” and to consider unintended consequences that many tactics and policies may have on innovation.

We often invoke the metaphor of the innovator as an immigrant in a foreign land to describe the gaps that can exist between aspiring innovators and those who don’t speak their language or understand their ways. Leaders of companies, institutions, and even government agencies who learn to deal with the “foreign” nature of innovation can give needed help to “immigrant” innovators and realize added economic success. Open innovation, for example, is a concept based on learning to embrace the foreign. While many speak of it, few succeed because they fail to bridge cultural divides or make their processes “immigrant friendly.”

The story of innovation often involves a journey into unfamiliar territory where at least one person—sometimes an entire company or more—becomes the stranger in a strange land, facing barriers that can bring fatigue and despair. Others have made this tiring journey and can help us understand the path to success. The path of innovation does not need to be so difficult. As we discuss in our chapter on the “Horn of Innovation™,” innovation, like the cornucopia of Greek mythology (based on a goat’s horn that could turn wishes into reality), can truly turn the visions of the human mind into rich bounties that enhance life on this planet. There’s no reason to let fatigue get in the way.

Our quest to help others overcome innovation fatigue will be an ongoing effort. The blog at InnovationFatigue.com will provide additional thoughts, resources for readers, and a place to share your feedback and experiences. Please join us there as we seek to help more innovators, entrepreneurs, and leaders find the path to innovation success.
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Numerous people and organizations have assisted our work. We thank the clients of Innovationedge for sharing their experiences and their passion for innovation, and giving us an opportunity to make a difference. We thank our families for their support and encouragement. Thanks to John Cronin, Ted Farrington, Casey Hill, Ivan Schrodt, Rob Williamson, and Terry Adams for early encouragement and ongoing discussions with Jeff in intellectual asset and business strategy. Thanks to Verna Allee for important inspiration on ecosystems for innovation. We appreciate the information and guidance we received from Neal Verfuerth, Paul Rasband, Henry Chesbrough, Merrilea Mayo, Steve Goers, Frank Crikelair, Ashley Crikelair, Nancy Edwards Cronin, Doug Dugal, Mahendra Doshi, Nicole Marshall, Walter Reade, Kendra Lindsay, Meliah Lindsay, Fung-jou Chen, Mark Perkins, Alexander B. Magoun, Woody Rice, Chakshu Kalra, A.S. Rao, Anil K. Gupta, Amy Achter, Tom Mildenhall, Rosann Kaylor, Rex Lewis, Oliver Schwabe, Scott Rickert, Robert Gruetzmacher, Nancy Hermanson, and many others, including some who prefer anonymity. Thanks to the Management Roundtable for opportunities to help lead others in open innovation. Thanks also to Mark Benyo of Benyo Designs for creating the fatigue factor icons and providing other assistance.
PART I

INTRODUCTION
CHAPTER 1

An Introduction to Innovation Fatigue

“Ingenuity should receive a liberal encouragement.”

Thomas Jefferson

Exhibit 1.1 Are there better paths to avoid fatigue in the maze of innovation?

Conquering innovation fatigue begins with understanding the journey of innovators at a personal level. It begins with recognizing the “fatigue factors” they face and then seeking for solutions to help them reach success. A useful metaphor for the innovator’s journey
is that of the immigrant. In nearly every nation, there is a history of tension between established citizens and newcomers. The newcomers generally lack resources, don’t understand how “the system” works, and struggle to understand the language of the natives. They may be ridiculed for their different ways and mistrusted by those in power, but the newcomers who persevere and conquer often reshape history and create prosperity for generations to come.

In the world of business, the brightest minds seeking innovation are sometimes like immigrants standing on a strange new shore, filled with visions of success but often facing harsh barriers. Who can they trust? Where should they go? How do they find shelter and protection? In fact, many great innovators like Nikolai Tesla, the father of the electric age, were literal immigrants who faced severe challenges in realizing their visions. Though each story is unique, there are several common classes of “innovation fatigue factors” that hinder individual and corporate success in innovation today as in the past. Understanding and overcoming these barriers is vital not only to individuals—whether corporate employees, university researchers, lone inventors or entrepreneurs—but also to corporations and nations themselves.

Innovation is the successful translation of new concepts into economic value and the process of creating and realizing value from that which is new. Whether it’s a technology, product, process, or method of doing business, innovation goes beyond invention and discovery to involve the social aspect of changing behaviors such as how we eat, shop, dress, or drive.¹ The pathway from an idea or invention to broad change in society is often complex and multifaceted, like the journeys of immigrants as they become established in a new land.

For inventors and entrepreneurs, there are always risks, delays, and pains on the route to innovation, but greater success and speed is possible with the right approach and the right help. Our goal is to help prospective innovators, entrepreneurs, and corporations succeed sooner, more visibly, and more profitably (for those who care about profits). Innovation fatigue can be conquered.

Common Innovation Fatigue Factors: An Overview

Few things make creative people wearier than empty talk about innovation. Leaders may boast of innovation, but a different impression arises when one talks to frustrated and alienated inventors, or surveys
the missed continents of opportunity that were somehow circumnavigated. Some of them may sincerely seek innovation but lack the know-how to make it happen. How do we find real success in innovation?

Are companies facing innovation fatigue? Based on our experience, yes, many are. Supporting evidence comes from several sources, including a 2007 study by Boston Consulting Group/BusinessWeek polling 2648 senior executives. BCG reports that “top executives worldwide are more upset than ever about the slow pace of innovation at their companies.” Also reported is that only 46 percent of the executives are happy with the return on their innovation investment, and only 66 percent rank innovation as a top-three priority, down from previous years. Many who would like to increase the pace of corporate innovation find their innovation engines sputtering. What’s going wrong?

One concerned CEO is Jean-Pierre Garnier of GlaxoSmithKline. He speaks of the “innovation malaise” in the pharmaceutical industry and blames declining R&D productivity for the massive erosion in shareholder value in pharmaceutical stocks, where share price on the average plummeted from 32 times earnings to just 13 over a few years. Other industries such as IT, industrials, and discretionary consumer products have shown steady erosion in shareholder returns over the past decade.

Many publications praise various organizations for their commitment to innovation based on actions and statements from those at the top. While leaders are talking innovation, our interviews and experiences sometimes show that their prospective innovators are beset with “innovation fatigue.” Leaders often fail to understand the frustrations of innovators in the organization. As a result, the actual innovation performance of many organizations may be far below their potential, contributing to the statistics indicative of innovation fatigue.

In our discussions with inventors and entrepreneurs over the years, we have found persistent themes about the disincentives innovators face. In general, we find that fatigue factors can be grouped into three broad categories pertaining to individuals, organizations, and external factors.

1. **People Fatigue (Fatigue from the Way People Act)**

“People fatigue” includes the personal flaws of individuals, including inventors and those they work with. Greed, for example, can result in theft from the inventor, while excessive demands from
6  An Introduction to Innovation Fatigue

the inventor can also block progress. Arrogance or excessive pride from others can result in the “Not Invented Here” (NIH) syndrome that can shut down opportunity, while the same flaws in the inventor can hinder the cooperation needed to work with allies.

We recognize that all fatigue factors ultimately reflect some aspect of human nature, though it may be implemented at the corporate or governmental level. Nevertheless, we assign fatigue factors to the people category when they arise from one-on-one interactions with individuals in which an undesirable trait of one party tends to destroy potential success of an innovation or discourage future innovation.

2. Fatigue Factors in the Organization (Strategy, Culture, Actions)

Many fatigue factors arise from strategies, policies, and cultures in an organization. We focus on corporations, though some of the principles apply to other entities as well. We consider, for example, the impact of errant metrics or poor decision making in evaluating opportunities. There are also process-related fatigue factors due to structures and systems in corporations. For example, weak performance management systems and incentives can contribute to innovation fatigue. At the strategic level, “open innovation fatigue” results in many missed opportunities. One of the most critical issues for corporations, though, is the tenuous thread that links the “will to share” of the creative employee to the intellectual asset engines of the corporation. When trust is breached or other discouragements befall prospective innovators, innovation engines can quickly shift into neutral, unbeknownst to management. Factors that make innovators feel devalued are one part of this problem. We address these issues and suggest solutions.

3. External Fatigue (Factors in the Environment)

Beyond the fatigue factors that arise from individuals and organizations, a host of external factors can contribute to innovation fatigue. These environmental factors can include barriers to protecting and exploiting one’s intellectual assets (IA) arising from patent systems, legislation, regulation, and other aspects of government policy. Also included are roadblocks to open innovation such as barriers to university-industry cooperation from legislation and tax policy.
Within the scope of these three classes of fatigue factors, we explore nine specific fatigue factors:

**Nine Leading Fatigue Factors**

**People Fatigue:**
1. Theft of the invention and exploitation of inventors.
2. Innovator deficiencies (e.g., unreasonable expectations, impatience, unhealthy pride).
3. The NIH syndrome (“Not Invented Here”).

**Organization-Level Fatigue (Strategy, Culture, Actions):**
4. Breaking the will to share (loss of cooperation from the innovation community).
5. Fundamental flaws in decision making and vision.
6. Open innovation fatigue (corporate barriers to external innovation and collaboration).

**External Fatigue:**

The factors can be grouped as shown in Exhibit 1.2, illustrating that similar themes occur in each of the three main categories of fatigue factors. Whether at the individual, organizational, or external level, factors can be grouped in terms of threats to intellectual property and trust, barriers to collaboration, and flaws in judgment and behavior (including corporate and governmental behaviors or policies). The classifications are not crisp, for some fatigue factors can cross groupings and categories, but these groupings may be helpful in analyzing innovation barriers and finding solutions.

To conquer invention fatigue, we must understand the impact of fatigue factors at the people, organizational, and external levels, recognizing that whatever the level, the harmful impact is on individuals, whether inventors or entrepreneurs, whether self-employed or within a corporation or institution. This requires not only understanding the fatigue factors that beset innovators, but first understanding the personal incentives that drive innovators.
8 An Introduction to Innovation Fatigue

Incentives and Innovation: It’s Not Just About Profit

We are passionate about innovation, for it is much more than a source of profit: it is also a source of fulfillment and even joy to the innovator and others. Joseph Schumpeter, in his economic surveys of innovation and entrepreneurship, spoke of motivations such as the “will to conquer” and the “joy of creating, of getting things done, of simply exercising one’s energy and ingenuity.”° But where there is joy and victory, there can be anguish and fatigue. All three of us have experienced the joys of innovation success and the bitterness of innovation setbacks as various “fatigue factors” are encountered. A missing element in much of the literature on innovation, in our opinion, is the personal voyage that individuals experience, including individuals on teams within corporations, as

Exhibit 1.2 Grouping of leading fatigue factors