

Alex Lowy Phil Hood

The
Power
of the



2x2

Matrix

Using 2x2 Thinking to Solve Business Problems and Make Better Decisions

Includes more than 50 classic models for strategic, organizational, and personal decision making



The Power of the 2 × 2 Matrix

*Using 2 × 2 Thinking to Solve Business
Problems and Make Better Decisions*

Alex Lowy
Phil Hood

Foreword by James H. Gilmore and B. Joseph Pine II



JOSSEY-BASS

A Wiley Imprint

www.josseybass.com

Advance Praise for *The Power of the 2 × 2 Matrix*

“Although we see four quadrant matrices used frequently in business settings, there is altogether too much hit and miss in their application. The culprit, pure and simple, is a lack of appreciation of what is really at work in these models. Hood and Lowy have beautifully filled that gap with their straightforward examples and clearly written guidelines. In the hands of a master, this under-appreciated management tool becomes a powerful catalyst for innovation. Reading this book is a wonderful step towards attaining that mastery.”

—Verna Allee, author, *The Future of Knowledge*

“This is a significant work, not one that just has academic appeal to a few people and then is buried, but something with classic character and wide practical application.”

—Dr. Stephen R. Covey, author, *The 7 Habits of Highly Effective People*

“Lowy and Hood’s new book on resolving management dilemmas is wonderfully thought provoking and fun to read. Not only do the authors treat us to a rich collection of insights, wisdom, and case examples, but they also provide a framework for how to construct and use 2 × 2 Thinking for decision making and problem solving. This book is destined to become a classic for management decision making.”

—Charles Fine, Chrysler LFM Professor of Management, MIT Sloan School of Management, and author, *Clockspeed*

“Multidimensionality is perhaps one of the most potent principles of systems thinking. But a fallacy to treat complementary tendencies as duality in zero sum game is responsible for the sad fact that we have kept on producing the same set of non-solutions all over again. *The Power of the 2 × 2 Matrix*, as the authors have chosen to name this exciting conception, is an excellent contribution towards initiating a long due cultural transformation. It goes a long way to operationalize a different way of seeing and thinking about our troubled world. A great job.”

—Jamshid Gharajedaghi, managing partner and CEO, INTERACT, and author, *Systems Thinking: Managing Chaos and Complexity*

“As apologists for the 2 × 2 matrix, we are delighted that Alex Lowy and Phil Hood wrote this book. We applaud them for taking the initiative to organize and prioritize representative models that illustrate the usefulness of 2 × 2 Thinking. Frankly, such a tome is long overdue, and readers will greatly benefit from the insightful selection of 2 × 2’s made by Lowy and Hood.”

—James H. Gilmore and B. Joseph Pine II, coauthors, *The Experience Economy*

“Four decades of developing leaders has convinced me that the tools we rely on most often are simple, relevant, and have purpose. *The Power of the 2 × 2 Matrix* explains why this is the case, and delivers a unique and timeless collection of many of the best tools the behavioral sciences have to offer today’s leader.”

—Dr. Paul Hersey, founder and chairman of the board, Center for Leadership Studies, the home of Situational Leadership®

“As a downstream result of our workshop with Lowy and Hood, we re-tuned our Vision, Value Proposition, Mission, Goals, and Business Strategy (and a whole lot more). We turned the business around using the output as the platform for our drive to the next level of business performance. These ideas are rock solid. I strongly recommend them based on real and positive business impact.”

—Austen Mulinder, president and CEO, Fujitsu Corporation’s North American Retail Business

“In *The Power of the 2 × 2 Matrix*, Lowy and Hood present an innovative way to solve an array of complex problems. Based on an extensive review of management classics, the book advocates that qualitative ‘both-and’ thinking is more effective in the long run than the more fashionable and often easier-to-define quantitative ‘either-or’ approach. Applied properly, the 2 × 2 matrix is a most powerful and groundbreaking tool. The book will be extremely useful to consultants, managers, and academics committed to conceptualizing new solutions through the successful application of dialectical reasoning.”

—Ikujiro Nonaka, visiting dean and professor at the Center for Knowledge and Innovation Research, Helsinki School of Economics and Business Administration, and coauthor, *The Knowledge-Creating Company*

“This book is a brilliant addition to the arsenal of tools people can use to resolve dilemmas in their everyday business lives. It offers a novel and practical perspective that is relevant to anyone who exercises leadership.”

—Hubert Saint-Onge, CEO, Konvergeandknow, and author, *Leveraging Communities of Practice for Strategic Advantage*

“The 2 × 2 matrix is the simplest expression of contingency. In a complex and dynamic world filled with critical uncertainties the most common strategy is denial. Decision makers are trapped by seeing a linear future, and mislead their organizations by failing to rigorously think through the possibilities. The need to think contingently is what scenario planning is all about and is what *The Power of 2 × 2 Matrix* makes possible.”

—Peter Schwartz, chairman, Global Business Network, and author, *The Art of the Long View*

“When Alex Lowy first told me about his and Phil Hood’s book, my immediate reaction was: Wow, that’s a book I’d like to read! This is a book for those who, like me, apply dialectical models all the time but can never remember what is on the axes of the Johari Window and the BCG matrix. The inventory of 50-plus classic 2×2 ’s is a very valuable time saver, and the tips on how to construct them are as relevant to the seasoned consultant as they are to busy corporate executives.”

—Karl-Erik Sveiby, professor of knowledge management,
Swedish Business School, Hanken, in Helsinki, and author,
The New Organizational Wealth

“In a world of trite management tomes, recycling tired themes, it is indeed refreshing to find a book that discovers a completely original truth. Who would have thought that investigating the familiar 2×2 matrix as a generic construct could reveal profound insights into business strategy and possibly even human thought? I am thankful to Lowy and Hood for unlocking this treasure.”

—Don Tapscott, chairman, New Paradigm Learning Corporation,
and coauthor, *The Naked Corporation*

“Managers are far too prone to leap to the ‘answer,’ often basing their conclusions on poor assumptions or inadequate problem diagnosis. Alex Lowy and Phil Hood have masterfully documented the art of asking the right question. This book should be required reading in any organization coping with the challenge of making critical decisions under conditions of risk or uncertainty.”

—Paul Wiefels, managing director, The Chasm Group, LLC, and author,
The Chasm Companion



The Power of the 2 × 2 Matrix

*Using 2 × 2 Thinking to Solve Business
Problems and Make Better Decisions*

Alex Lowy
Phil Hood

Foreword by James H. Gilmore and B. Joseph Pine II



JOSSEY-BASS

A Wiley Imprint

www.josseybass.com

Copyright © 2004 by John Wiley & Sons, Inc. All rights reserved.

Published by Jossey-Bass
A Wiley Imprint
989 Market Street, San Francisco, CA 94103-1741 www.josseybass.com

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400, fax 978-646-8600, or on the web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, 201-748-6011, fax 201-748-6008, e-mail: permcoordinator@wiley.com.

Jossey-Bass books and products are available through most bookstores. To contact Jossey-Bass directly call our Customer Care Department within the U.S. at 800-956-7739, outside the U.S. at 317-572-3986, or fax 317-572-4002.

Jossey-Bass also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Credits are on page 321.

Library of Congress Cataloging-in-Publication Data

Lowy, Alex.

The power of the 2x2 matrix : using 2x2 thinking to solve business problems and make better decisions / Alex Lowy, Phil Hood ; foreword by

James H. Gilmore and B. Joseph Pine II.

p. cm.— (The Jossey-Bass business & management series)

Includes bibliographical references and index.

ISBN 0-7879-7292-4 (alk. paper)

1. Problem solving. 2. Decision making. 3. Industrial management.

I. Hood, Phil, 1951- II. Title. III. Series.

HD30.29.L69 2004

658.4'03—dc22

2003026851

Printed in the United States of America

FIRST EDITION

HB Printing 10 9 8 7 6 5 4 3 2 1

The Jossey-Bass
Business & Management Series



CONTENTS

Foreword xiii

James H. Gilmore and B. Joseph Pine II

Acknowledgments xvii

The Authors xix

Introduction 1

PART ONE: 2 × 2 THINKING

1 The DNA of Great Problem Solving 9

2 Form, Method, and Mastery: 2 × 2 Thinking as Dialectical Process 24

3 The Eight Archetypal Dilemmas 37

PART TWO: 2 × 2 PRACTICE

4 Designing 2 × 2 Matrices: Making Intuition Explicit 61

5 2 × 2 Thinking in Action: Fujitsu FTXS Tackles Level 2 Dilemmas 69

PART THREE: 2×2 FRAMEWORKS INVENTORY

6 Strategic Frameworks 91

<i>Beyond Customer Led</i>	95
<i>Discontinuity and the Life Cycle</i>	99
<i>Customer as Value Manager</i>	105
<i>Customer Value Analysis</i>	107
<i>Scenarios</i>	115
<i>Gartner Magic Quadrant</i>	121
<i>Portfolio Analysis</i>	125
<i>Problems and Solutions</i>	127
<i>Dialectical SWOT Analysis: Strengths, Weaknesses, Opportunities, and Threats</i>	129
<i>Market Tipping</i>	131
<i>Corporate Strategy</i>	134
<i>Generic Strategy</i>	139
<i>E-Business Opportunity Matrix</i>	144
<i>Global Product Planning</i>	146
<i>Generic Network Strategy</i>	148
<i>Mass Customization: The Four Approaches</i>	151
<i>Attentionscape</i>	156
<i>Managing Customer Loyalty</i>	158
<i>Likelihood to Buy</i>	161
<i>Revenue and Profitability</i>	163
<i>BCG: Product Portfolio Matrix</i>	169
<i>Impact-Uncertainty Matrix</i>	173
<i>Entrance and Exit Strategies</i>	177

7 Organizational Frameworks 180

<i>Good to Great Matrix of Creative Discipline</i>	184
<i>Employee Motivation</i>	188
<i>Alliance Drivers</i>	190
<i>Team Types</i>	193
<i>Situational Leadership</i>	195
<i>The Four Power Players in Knowledge Organizations</i>	199
<i>T-Group Leadership</i>	202
<i>SECI</i>	204
<i>Human Capital</i>	210
<i>Differentiation and Integration</i>	215
<i>Means and Ends</i>	219
<i>The Change Grid</i>	221
<i>Learning and Change</i>	223

<i>Similarities and Differences</i>	225
<i>The Four Realms of Experience</i>	228
<i>Make versus Buy</i>	233
<i>Four Square Model</i>	236
<i>Product and Supply Chain Architecture</i>	238
<i>Telematics Framework</i>	244
<i>The Virtue Matrix</i>	246

8 Individual Frameworks 250

<i>Johari Window</i>	255
<i>Myers-Briggs Type Indicator</i>	261
<i>Learning Styles Inventory</i>	267
<i>I'm OK, You're OK: The Four Life Positions</i>	269
<i>Conflict Mode</i>	271
<i>Social Styles</i>	274
<i>Getting It Right</i>	279
<i>Leadership Coaching</i>	281
<i>Career Transitioning</i>	283
<i>Prisoner's Dilemma</i>	286
<i>Urgency and Importance</i>	290
<i>Influence and Concern</i>	292

Notes 295

Index 303



FOREWORD

The 2×2 matrix represents the most notable analytical tool ever to emerge in business management. Yet as a genre, this conceptual framework has been greatly misunderstood, misused, and mistrusted, even as it rose to prominence among management models. The 2×2 has been particularly maligned in recent years, perhaps in relation to the saturation of M.B.A. programs and the maturation of management consulting across the globe. All too often, eyes now roll whenever a work colleague or business consultant takes to a white board or flip chart to draw x - and y -axes.

Fast Company magazine's defunct "Consulting Debunking Unit" perhaps epitomized the tendency to throw the baby out with the bath water—to dismiss whole categories of business thinking, management practice, and professional services because of the lack of discipline or integrity on the part of a few poor professors and pitiful practitioners. But it's easy today to belittle bad apples (as we just did in our poor, pitiful selection of alliterative adjectives), for there's no lack of such inferior thinking to pick on. It's always safe to just get "back to basics." It's much harder to weed through the proliferation of management material churned out on endless fronts these days and find the true gems that can help businesses envision innovative possibilities and make better decisions. And many of these gems hold forth in the form of the venerable 2×2 .

As apologists for the 2×2 matrix, we are delighted that Alex Lowy and Phil Hood wrote this book. We applaud them for taking the initiative to organize and prioritize representative models that illustrate the usefulness of 2×2 Thinking.

Frankly, such a tome is long overdue, and readers will greatly benefit from the insightful selection of 2×2 s that Lowy and Hood made. We've pored over their work and find much relevant knowledge to be had from careful scrutiny of their study.

Too much management thinking today exists as what we like to call a “giant list of stuff” that lacks perspective on the underlying factors that contribute to items making the list, or misses linkages that connect various principles or other phenomena. Therein resides the beauty of the 2×2 matrix. The better ones (those well executed along the lines pointed out by Lowy and Hood) force new comparisons, foster fuller exploration of the subject at hand, and fashion creative tension between alternative points of view.

Consider for a moment an alternative topic—baseball—and this insightful quotation from George Will's wonderful book, *Men at Work*:

Baseball is a game you cannot play with your teeth clenched. But neither can you play it with your mind idling in neutral. Baseball is a game where you have to do more than one thing very well, but one thing at a time. The best baseball people are (although you do not hear this description bandied about in dugouts) Cartesians. That is, they apply Descartes's methods to their craft, breaking it down into bite-sized components, mastering them and then building the craft up, bit by bit. Descartes, whose vocation was to think about thinking, said (I am paraphrasing somewhat): The problem is that we make mistakes. The solution is to strip our thought processes down to basics and begin with a rock-solid foundation, some certainty from which we can reason carefully to other certainties.¹

We have René Descartes, of course, to thank for the 2×2 matrix! This model is nothing more than the first step in breaking a business down into manageable components and thereby stripping thinking down to some basics as a firm foundation. The best businesspeople too are Cartesians. Their use of any pertinent 2×2 matrix aims not at simplifying the world into four finite categories, but at moving to fuller, more reasoned certainties in an uncertain world—managing the complete Cartesian coordinate system that is business!² Indeed, this book contains many fine examples of exemplary construction of 2×2 matrices and points out how lack of mastery on the part of matrix users can distort 2×2 applications.

We once heard a wrong-headed manager say to a peer, “I cannot relate to you because I'm ISTJ,” referring to one of the sixteen types within the Myers-Briggs classification system. This gentleman was blatantly misusing Myers-Briggs to put himself in a sheltered box rather than using the tool to relate to others better or as a means to develop alternative thinking styles. Too many people similarly limit themselves when they encounter a useful 2×2 matrix, thinking the four quadrants represent the end-all and be-all of thinking on some subject (or outright dismissing the model as too simplistic). Shame, shame, shame. The power of any well-constructed 2×2 matrix rests in what one *does* with it once formulated.

For example, let's examine one of our own 2×2 models examined in this book (Figure 7.21, page 230). We once worked with a professor at Iowa State, an expert in pedagogical methods, who was interested in defending (much-maligned) "Edutainment" in teaching. We knew Edutainment to be a useful concept, but also knew it to be only one of a number of possibilities for enhancing the normally dry discourse of classroom discipline. So we brought to bear this particular model, which depicts four experiential realms—Entertainment, Educational, Escapist, Esthetic—that together make for a compelling experience. Edutainment was but one combination of the four realms, specifically:

Edutainment = Education + Entertainment (holding attention)

Realizing this, we together proceeded to identify five other dimensions worthy of further exploration as means to enhance learning:

Eduscapist = Education + Escapist (changing context)

Edusthetic = Education + Esthetic (fostering appreciation)

Escasthetic = Escapist + Esthetic (altering state)

Entersthetic = Entertainment + Esthetic (having presence)

Escatainment = Escapist + Entertainment (creating catharsis)

The results vary in how trippingly they fall from the tongue (although Edutainment flows smoothly primarily through familiarity and repetition), but the 2×2 matrix helped map out a richer territory of understanding. Indeed, debating the selection of prefixes and suffixes (and number of occurrences of each) helped us all to better understand not only each dimension, but the subject of pedagogy itself.

Lowy and Hood have done a great service in assembling this book. We particularly enjoyed seeing Pascal's Wager crafted as a 2×2 matrix, as Blaise Pascal was the intellectual and theological archrival to René Descartes in the early seventeenth century. (How edutaining!) Even with our great fondness for the 2×2 as a tool, we side with Pascal when he says, "The heart has reasons that Reason cannot understand." Recognize that no matter how brilliant a particular 2×2 matrix, its usefulness resides primarily in clarifying various managerial options. Ultimately, all decision making relies on gut feeling and intuition. At the end of the day, you must examine the Cartesian possibilities, and then go with your heart.

JAMES H. GILMORE
B. JOSEPH PINE II



ACKNOWLEDGMENTS

We owe a great deal to colleagues, clients, friends, and family who helped along the way. Without their inspiration and feedback, this book would not be. Contributions have taken many forms, each essential in its own way.

Early in the life of the project, we needed to collect a large number of outstanding 2×2 business frameworks. We solicited suggestions from pretty much everyone we encountered, yielding a robust listing of over three hundred unique titles. Two people stand out in this effort. Andy De of i2 generously shared his collection of thirty-plus frameworks, and Derek Lennox added another dozen. Derek played a significant early role in gathering and organizing suggestions. Without their assistance, the project would probably never have gotten off the ground.

Many of the world's sharpest business consulting minds helped us to unravel the mysteries of 2×2 Thinking and to construct the meta-models that appear in Chapters One through Five. We conducted interviews between January and July 2003, asking three basic questions: Why do you use a 2×2 approach? What's key in designing them? What makes the application of a framework successful? Valuable discussions were held with the following people: Verna Allee, Nicole Boyer, Stephen Covey, Jamshid Gharajedaghi, Jim Gilmore, Paul Hersey, Barry Naelbuff, William Ralston, Hubert Saint-Onge, Joseph Pine, Karl-Erik Sveiby, Simon Trussler, Paul Weifels, and Watts Wacker. We owe a great deal to these individuals for their insights, personal stories, and willingness to engage in challenging dialogue. Encouragement and suggestions from Stephen Covey, Joseph Pine, and Jim Gilmore were particularly helpful in shaping the book.

A number of colleagues gave generously by reading and commenting on chapters. Tim Warner played an important ongoing role in this capacity, often acting as our conscience by asking the tough questions that needed to be addressed. Nancy Brown, Tom Emodi, Mike Dover, Dan Swedberg, and David Ticoll all read and reread material, offering helpful feedback and suggestions.

Iris Glaser provided critical design guidance and support. We were most fortunate to have the attention of this talented young artist early in her career.

The development of a structured 2×2 method was made possible by the brave and adventurous participation of two client organizations willing to experiment with us. The first was a New Jersey software firm, LegatoVideo. Many thanks to CEO Dave Reifsnyder and the rest of the LegatoVideo senior team. The second was the Fujitsu Corporation's North American Retail business unit led by CEO Austin Mulinder. The story of Fujitsu's strategic renewal experience is told in Chapter Five. Many thanks to this group for allowing us to learn with them and to recount their story to illustrate the steps of the Dialectical Solutions Method.

Sincere thanks are given to the team at Jossey-Bass—Susan Williams, Jeff Wyneken, and Rob Brandt—who guided our efforts and helped us through each of the critical book development phases. A special thank you goes to Beverly Miller for working out final kinks in the manuscript and getting it ready for publication. Noteworthy contributions of a more general and ongoing sort were offered by the following people: Paul Bates, Dan Brousseau, Dave Button, Ron Brunt, Bob Horenstein, Alan Hutton, Del Langdon, Rich Lauf, Mark Novak, Joe Sauer, Don Tapscott, and Steve Zlotolow.

The largest debt is owed to all the framework inventors and big thinkers whose ideas fill up the pages of this book. From the early dialecticians like Heraclitus and Hegel to the authors of the fifty-five 2×2 frameworks summarized in the book, we thank you. The opportunity to speak with close to a third of the author group enriched and strengthened our learning experience.

A very special thank you is owed to our close colleague and friend Eli Singer. Eli joined the project as research associate earlier on. His talents, resourcefulness, perseverance, and knowledge have made him a valued and essential member of the team. Eli's insights can be felt on each page of the book.

Finally, we thank our wives, Julia Mustard and Connie Hood, for their patience, encouragement, and support, and our children, André, Benjamin, Jack, and Pam, and Phil's grandchildren, Juliana, Isabella, Nicolas, and Alexie, for their interest, inspiration, and questions. This book is for them and all other future problem solvers.

February 2004

ALEX LOWY
Toronto, Canada
 PHIL HOOD
San Jose, California



THE AUTHORS

ALEX LOWY specializes in the creation of innovative work, learning, and information systems. He is cofounder and past president of Digital 4Sight, a global technology think tank and strategy consulting firm with headquarters in Toronto, Canada. He has coauthored two best-selling business books, *Digital Capital: Harnessing the Power of Business Webs* (2000) and *Blueprint to the Digital Economy* (1998), with Don Tapscott and David Ticoll. He is a sought-after consultant and educator and has contributed award-winning articles to journals including *Business 2.0*, *Training and Development*, and the *Journal for Group and Organizational Studies*. In 2003, he formed the Transcend Strategy Group.

PHIL HOOD has been one of Silicon Valley's most thoughtful voices on the development and use of multimedia and pervasive computing technologies for the past twenty years. He is the former executive editor of *NewMedia* magazine and a contributing columnist to *Wired* and other publications. As the former chief executive officer of Digital 4Sight, he directed a series of multiyear research studies that explored the links between emerging technologies and business ethics and strategy. He is a senior consulting associate to Stanford Research International (SRI), an engaging speaker, and a partner with Alex Lowy in the Transcend Strategy Group.



The Power of the 2×2 Matrix