How to Measure Anything Workbook
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To Readers and Instructors,

This is the companion workbook for How to Measure Anything: Finding the Value of Intangibles in Business. While the book itself is not written as a textbook for universities, this workbook should help make the book a good text for a course in statistics or measurement. Like most workbooks, not every statement or argument in the book is covered—but the reader who has read and understood the material should do well with these questions.

This workbook is new with the third edition of HTMA (so be sure the correct edition is being used). The workbook covers each chapter of the book in order. The questions tend to focus on multiple choice, true/false, definitions, and calculations. Depending on the level of the course and the assumed background of the students, instructors may want to assign to the class projects involving the construction of more elaborate spreadsheet solutions. Otherwise, use of the prepared “power tools” provided on the website at www.howtomeasureanything.com may be sufficient for some courses. For a more challenging option, instructors can always ask students to develop some of those same power tools themselves.

Additional material specifically for instructors can be found at www.wiley.com. I believe the best exercises come from hands-on experience with team projects. Some suggestions for these projects are provided in the instructor materials but any difficult decisional analysis or measurement problem can be addressed with the methods covered in HTMA.

While the book was already being used in some university courses, this workbook and instructor materials will make it more widely adopted in higher education. Dealing with decisions under uncertainty and managing difficult measurements will be part of almost any modern career path after college, especially for those who successfully progress into upper management in industry or government. By reaching people before they enter the workforce, my hope is that some of the misconceptions this book discusses can be addressed early. Eventually, some of those students will get to positions where they will see firsthand some of the problems this book describes. Hopefully, some of those former students will be in
a position to solve major problems in business and society at large with a little help from the quantitative methods I try to teach.

Thanks again to all readers who through their growing demand made a third edition feasible. And special thanks to the early adopters among the previous professors who looked at a book written for general management and saw a teaching tool that should be introduced at a much more fundamental level in someone’s career.

I give special thanks to my staff, especially Tom Verdier and Chris Maddy, who helped with question generation, proofing, and generally keeping the project on track.

Douglas W. Hubbard
Doug Hubbard is the president and founder of Hubbard Decision Research and the inventor of the powerful Applied Information Economics (AIE) method. His first book, *How to Measure Anything: Finding the Value of “Intangibles” in Business* (John Wiley & Sons, 2007, ed., 2010, 3rd ed., 2014), has been one of the most successful business statistics books ever written. He also wrote *The Failure of Risk Management: Why It's Broken and How to Fix It* (John Wiley & Sons, 2009), and *Pulse: The New Science of Harnessing Internet Buzz to Track Threats and Opportunities* (John Wiley & Sons, 2011). He has sold over 75,000 copies of his books in five languages.

Doug Hubbard's career has focused on the application of AIE to solve current business issues facing today's corporations. Mr. Hubbard has completed over 80 risk/return analyses of large critical projects, investments, and other management decisions in the past 19 years. AIE is the practical application of several fields of quantitative analysis, including Bayesian analysis, Monte Carlo simulations, and many others. Mr. Hubbard's consulting experience totals more than 25 years and spans many industries, including insurance, banking, utilities, federal and state government, entertainment media, military logistics, pharmaceuticals, cyber security, and manufacturing.

In addition to his books, Mr. Hubbard has been published in *CIO Magazine, Information Week, DBMS Magazine, Architecture Boston, OR/MS Today,* and *Analytics Magazine.* His AIE methodology has received critical praise from The Gartner Group, The Giga Information Group, and Forrester Research. He is a popular speaker at IT metrics and economics conferences all over the world. Prior to specializing in Applied Information Economics, his experiences include data and process modeling at all levels as well as strategic planning and technical design of systems.
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PART I

Questions