

This book represents our view of the essential body of knowledge for an introductory operations management course. In the years that we have been teaching operations at The Wharton School, our students have repeatedly asked us for recommended readings to go along with the cases and lectures in our courses. Unfortunately, our students found all our suggestions either too remote from the real world (fictitious companies with unrealistic assumptions) or too technical (measured by the number of Greek letters per page).

Given those shortcomings of existing textbooks, our guiding principle in the development of *Matching Supply with Demand* has been “real operations, real solutions.” “Real operations” means that most of the chapters in this book are written from the perspective of a specific company so that the material in this text will come to life by discussing it in a real-world context. Companies and products are simply easier to remember than numbers and equations. We have chosen a wide variety of companies, small and large, representing services, manufacturing, and retailing alike. While obviously not fully representative, we believe that—taken together—these cases provide a realistic picture of operations management problems today.

“Real solutions” means that we do not want equations and models to merely provide students with mathematical gymnastics for the sake of an intellectual exercise. We feel that professional training, even in a rigorous academic setting, requires tools and strategies that students can implement in practice. We achieve this by demonstrating how to apply our models from start to finish in a realistic operational setting. For example, we do not assume the existence of inputs such as a demand forecast or a cost parameter; we actually explain how these inputs can be obtained in practice. Furthermore, we openly address the implementation challenges of each model/strategy we discuss so that students know what to expect when the “rubber hits the pavement.”

To fully deliver on “real operations, real solutions,” we also must adhere to the principle of “real simple.” Do not worry; “real simple” does not mean plenty of “blah-blah” without any analytical rigor. Quite the contrary. To us, “real simple” means hard analysis that is made easy to learn. This is crucial for an operations text. Our objective is to teach business leaders, not tacticians. Thus, we need students to be able to quickly develop a foundation of formal models so that they have the time to explore the big picture, that is, how operations can be transformed to provide an organization with sustainable competitive advantage and/or superior customer service. Students that get bogged down in details, equations, and analysis are not fully capturing the valuable insights they will need in their future career.

So how do we strive for “real simple”? First, we recognize that not every student comes to this material with an engineering/math background. As a result, we tried to use as little mathematical notation as possible, to provide many real-world examples, and to adhere to consistent terminology and phrasing. Second, we provide various levels of detail for each analysis. For example, every little step in an analysis is described in the text via an explicit example; then a summary of the process is provided in a “how to” exhibit, a brief listing of key notation and equations is provided at the end of each chapter, and, finally, solved practice problems are offered to reinforce learning. While we do humbly recognize, given the quantitative sophistication of this text, that “much simpler” might be more accurate than “real simple,” we nevertheless hope that students will be pleasantly surprised to discover that their analytical capabilities are even stronger than they imagined.

The initial version of *Matching Supply with Demand* made its debut in portions of the operations management core course at Wharton in the 2002–2003 academic year. This

edition incorporates the feedback we have received over the last five years from many students, executives, and colleagues, both at Wharton and abroad.

Although this book has been designed with MBA students in mind (regular and executive), this should not rule out its appeal to an undergraduate curriculum. Moreover, while you will probably not find this book in any airport bookstore (it is not that simple), we firmly believe that professionals in areas such as process analysis, supply chain management, and service operations also will benefit from its content.

We teach the importance of quality in operations, and so we take quality quite seriously with this text. We are proud that we discovered no major defect in the first edition and only a reasonable number of minor defects. (Though, much to our embarrassment, a rather trivial error slipped into the first page of the first edition—a humbling experience in the never-ending quest for zero defects.) We have corrected all known first edition defects and so we hope that the second edition provides even better quality. Nevertheless, as before, we know there must be some defects lurking, so we welcome hearing about them.

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