Changes to This Edition

The fourth edition has benefited from the comments and suggestions from students, faculty, and practitioners from around the world.

The implemented changes can be divided into three categories: an update of data and case examples, the addition of two chapters related to content that was not previously covered in the book, and an overall streamlining of the exposition of the existing content.

The world has changed again between this and the previous edition. Ride sharing, apartment sharing and electric vehicles were not yet a thing “back then.” Consequently, we have updated data and examples to try to maintain the timeliness of the content.

We have added two new chapters to this book. The first new chapter is about forecasting, which is an absolutely essential input to all operations models. The growth of available data only makes forecasting more relevant. The second new chapter is on scheduling. We covered scheduling in early texts, but not to the extent the topic deserves given our continued emphasis on service operations. Now we provide a dedicated and more extensive coverage of scheduling.

We have made a number of small changes that make the material easier for students to absorb. For example, we have streamlined the exposition of labor utilization calculations and we have de-emphasized the use of the expected loss function in the newsvendor and order-up-to models. Instead of the loss function, we provide the “expected inventory function,” which allows students to arrive at the
necessary answer with fewer steps. Furthermore, we find that students are better able to intuitively grasp what the inventory function does better than they can come to terms with the intuition for the loss function.