Business Process Design, Management, and Improvement

Connecting Process and Strategy for Competitive Advantage
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This text is an attempt to gather together and organize the fragmented evidence on the importance of the process view to modern business organizations. After encouraging progress in the 1990s in changing the way we view the business organization, the academic literature has been largely silent on the topic during the first part of this century. This can be seen from the fact that there are still only three textbooks that are primarily related to processes, and two of these are primarily operations management texts. Without a continued effort to organize business thought around a process view, we are in danger of slipping back into the functional silos of old. Although much of the material in this text originally appeared primarily within the operations management literature, this is not just an operations management text. Indeed processes are important to every functional area of study because (1) processes are involved in every function in the organization from accounting and finance to marketing and human resource management, and (2) because most of the critical processes in the modern enterprise are cross-functional in nature and can no longer be managed in isolation. To this end, I have tried throughout the book to utilize examples and cases from all aspects of business. The cross-disciplinary aspect of process management is further illustrated by the key enabler of process innovation, namely information technology. Modern information technology is what enables the reintegration of processes that heretofore have operated in fragmented ways in separate functional silos.

I have also attempted to provide insight into the most useful tools in process design, management, and improvement. Some of the most important tools are presented in their own section of the text, and others are covered within the context in which they are primarily used. Because all processes inherently involve variability, insights from the study of queuing phenomenon are particularly relevant to the study of processes. The author still remembers an Executive MBA student over 30 years ago, the CEO of a large hospital, who commented that now that she was aware of what they were, she saw queues everywhere in her organization. Also, since the most important processes are somewhat complex, traditional queuing theory must be supplemented with more flexible tools, such as simulation. Simulation analysis has been shown to be especially useful in the design and improvement of processes, and coverage of simulation techniques, along with a description of a simulation tool that accompanies the text, occupies a large portion of the first section of the book.

The software that accompanies this text is an important part of the package. All of the software is contained in Microsoft Excel files and should work on all versions of Excel from Office 2007 on. Some of the software, such as the SPC and goodness of fit routines, do not require macros and can be used as is without regard to security settings within Excel. The more complex software, such as Queue Solver, and the XLSim simulation package, contain macros written in VBA code and require special security settings in Excel. These settings are described in some detail in Chapter 5.

The primary goal of this text is to promote the process view of the business enterprise and to emphasize the importance of processes throughout the organization. Secondarily, it is hoped
that the reader will develop an appreciation for the use of simulation and other process-oriented
tools in practice.

Although there is only one name on the cover of this book, it is the product of the efforts
of many people. I especially want to thank my undergraduate and MBA students at Gonzaga
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