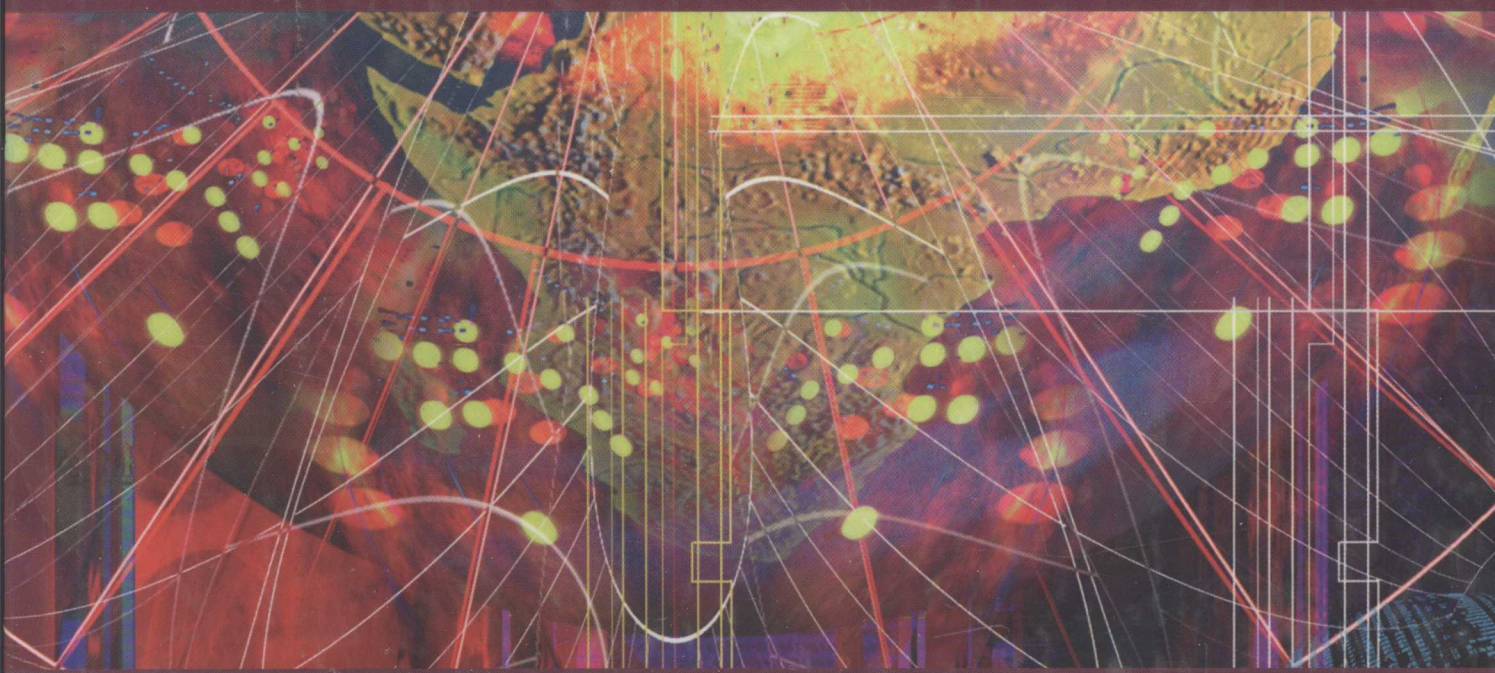
ERP in Distribution



Lawrence Jennings Reynolds

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F. Barry Lawrence

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Printer:
Thomson/West
Eagan, Minnesota

Internal Designer:
Chris Miller

Cover Designer:
Chris Miller

Cover Images:
© Digital Vision

Printed in the United States of America
1 2 3 4 5 07 06 05 04

ISBN: 0-324-17872-7

Library of Congress Control Number:
2004100554

For more information contact South-Western, 5191 Natorp Boulevard, Mason, Ohio 45040.
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My sons Alex, Ryan, and Jarrod who are always there to bring joy when I get home.

Barry Lawrence

Kay, Courtney, Christopher, Jackson, Cole, and Jim for their support.

Daniel Jennings

To the many people I have been privileged to work with who have taught me so much about industrial distribution, and as always to my wife, Suzanne, for her continued love and support.

Brian Reynolds

Preface

Enterprise Resource Planning (ERP) systems have been praised as a panacea for solving the tremendous human, inventory, facility, and equipment management problems facing all firms today. ERP has also been panned as an impossible dream that, even if realized, will never deliver its promised benefits. It is neither. ERP is a tool designed to work together with other information management processes like e-Commerce, Customer Relationship Management, automation software, supplier and logistics tracking tools, a myriad of other software solutions, and the most significant generators and managers of information in any firm: people.

What does make ERP so significant is that without information automation and connectivity (the definition of ERP) within our firm, we have no chance of communicating effectively with our supply chain partners. Customer expectations are constantly increasing, and firms that are not using information connectivity to better understand their customers (protecting the top line, revenues) and decrease unnecessary costs (protecting the bottom line, profits) are experiencing the kind of margin pressure that will soon destroy many.

ERP is where the information automation/connectivity starts for most firms. This does not mean, however, that buying a large ERP system is the only way to go. As we demonstrate in this book, innovative firms have extended their legacy systems to near ERP status or have built ERP systems from combinations of back office accounting programs and bolt-ons, supporting any shortcomings with well-designed human processes. The essence of ERP is not the system. It is the process of connecting all information flows within the firm and using that connectivity together with analysis programs that both advise decision makers and make routine decisions for the firm.

The challenges associated with ERP are formidable but are becoming less so with each passing year. IT providers are making the systems more stable and more complete (able to meet all business needs across all business categories) and data and process standardization efforts are continuing to overcome connectivity issues. Perhaps most importantly, managers are developing experience and skills with ERP successes leading to environments that are better prepared for information automation, are more able to understand the benefits, and are more willing to accept change.

As with our previous work on information automation, "e-Distribution," this book represents the experiences and thoughts of many industry practitioners and a few academics. We want to thank the business partners of the Texas A&M University's Industrial Distribution Program without whose vision and support we could not have written this work. In particular we wish to thank IBM, Master

Halco, Prelude Systems Inc., PeopleSoft, Silvon, Selltis, Intuit Eclipse, and Dimasys for their continued support and desire to solve information connectivity issues.

There are more people to thank than can be included in this preface, but the efforts of our many business partners are thoroughly interwoven into this text. A special thanks goes to our good friend Bharani Nagarathnam whose wisdom and management skills in bringing these projects to their successful conclusion touches every part of this book. We also want to thank Charles McCormick, Taney Wilkins, and all the helpful and supportive people of South-Western Publishing Company for their hard work in making this book a reality.

About the Authors

F. Barry Lawrence

Dr. Barry Lawrence is the director of the Information Systems Consortium and holder of the prestigious 3M Fellows Award at Texas A&M University. As a faculty member of the Industrial Distribution Program and Thomas and Joan Read Center for Distribution Research and Education, he is involved in graduate, undergraduate, and professional continuing education teaching activities, funded research projects, journal publication, academic society meetings and publications, service, and industry contact. His teaching activities surround classes in logistics, Supply Chain Management, distribution information systems, and distribution strategy. He is a frequent speaker for distribution associations and private firms on topics ranging from logistics and inventory management to information systems for distribution channels (e-business). He has also served as an advisor to the Professional Association of Industrial Distribution (PAID), student chapter, since 1997.

Dr. Lawrence's research interests include ERP/e-business implementation and logistics (inventory and other asset management) redesign for distribution operations. He has worked on many large industry projects generating millions of dollars in funding for the university and its students. Some of his major initiatives include the Information Systems Consortium for Supply Chain Integration, the Supply Chain Information Systems Laboratory, and the Consortium for ERP Benchmarking and Standardization. These initiatives have enjoyed high visibility and enormous success in increasing the understanding of e-business and in forging significant strategic partnerships with more than 20 information technology and supply chain solution providers.

Dr. Lawrence holds a Ph.D. in Information and Operations Management from Texas A&M University, an M.B.A. from Southwest Texas State University, and a B.B.A. in Finance from the University of Texas at Austin. He has more than 10 years of industry experience in sales and distribution business.

Daniel F. Jennings

Dr. Jennings is a full professor at Texas A&M University and was formerly the Industrial Distribution Program Coordinator and Director of the Thomas and Joan

Read Center for Distribution Research and Education at Texas A&M University. He has held three endowed professorships in his academic career.

Jennings' corporate career includes engineering, corporate planning, and managerial positions with Armstrong World Industries, Kaiser Aluminum and Chemical Corporation, Olinkraft, Inc., Boise Cascade Corporation, and Certainteed Corporation in the United States, Canada, and South America. His industry experience involves manufacturing and distribution activities.

Dr. Jennings has served as a visiting professor at universities in Russia, France, Canada, Mexico, and Australia and has conducted executive development programs in the U.S., Canada, France, Mexico, and Italy. Dr. Jennings has performed consulting assignments for a variety of firms, labor unions, and governmental agencies in five areas: strategy formulation and implementation, value chain analysis, management development, organizational change, and human resource issues that are vital to a client's business. He also conducts economic loss analysis for a variety of organizations as well as participating in numerous workshops, programs, and seminars for industrial distributors, manufacturers, and trade associations.

Dr. Jennings has published over 130 articles in academic and practitioner journals and has authored 10 textbooks. His research has been described in both *The Wall Street Journal* and *The New York Times,* and he has received several best paper awards from the Academy of Management, New York University, Baylor University, Prentice-Hall Publishing, and McGraw-Hill Publishing. He also received the Outstanding Researcher Award while a faculty member at Baylor University. Dr. Jennings received a B.S. in Industrial Engineering (with honors) from the University of Tennessee, an M.B.A. in Finance from Northeast Louisiana University, and a Ph.D. in Strategic Management from Texas A&M University and is a Registered Professional Engineer.

Brian Reynolds

Brian Reynolds is the associate director of the Thomas and Joan Read Center for Distribution Research and Education, a part of the Texas Engineering Experiment Station. He holds a B.S. in Management from Pepperdine University and an M.B.A. from Texas A&M's Lowry Mays Graduate School of Business. Brian is affiliated with Texas A&M University's Industrial Distribution academic program.

He has more than 20 years of experience in the distribution industry, ranging from field sales and branch management to general sales management for a $75 million industrial distributor. He served as the director of the Quality Process and, following that, as director of marketing and integrated supply for a $200 million distributor. He was also the project team leader for selecting and implementing new distribution software and hardware, which went live on schedule and under budget.

Brian has designed and conducted training in field sales, sales management, branch operations, quality improvement, database marketing plans, statistical process control, and integrated supply. He has served in several volunteer capacities on industry trade association committees and task forces, including serving as a co-chair

on a joint Industrial Distribution Association–Industrial Supply Manufacturers Association committee on Total Quality Process.

He has made presentations to the Industrial Distribution Association (IDA), the Industrial Supply Manufacturers Association (ISMA), the Institute for Supply Management (ISM), formerly NAPM, the International Quality & Productivity Center, the Institute for International Research, the National Association of Steel Pipe Distributors, and the Construction Equipment Manufacturers Association. He has also made numerous presentations, and conducted workshops, for industrial distributors and manufacturers.

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