

THE EXECUTIVE
BREAKTHROUGH SERIES

In the Age of the Real-Time Enterprise

Managing for Winning
Business Performance
with Enterprise
Logistics Management

THOMAS G. GUNN

In the Age of the Real-Time Enterprise

**Managing for Winning
Business Performance with
Enterprise Logistics Management**

 **THOMAS G. GUNN**

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**I dedicate this book to my wife, Sandra.
Loyal supporter, highly knowledgeable of
business, and my most perceptive critic—
without her encouragement, hard work, and
sound advice, this book would not have
been possible.**

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*In the Age of the
Real-Time Enterprise*

Introduction

Xerox Corporation reduces inventory by one-third, or \$650 million, and reduces supply chain cost by another \$150 million while customer satisfaction increases. Digital Equipment Corporation reduces inventory over \$700 million. Sun Microsystems Computer Corporation reduces manufacturing cycle time from 280 to 175 days, freeing up \$1.2 billion in cash. Wal-Mart stores have only 40 percent of the inventory storage space of their competitors. And store sales of 7-Eleven Japan are 30 percent above their closest competitor. In addition, the company enjoys an operating margin double that of the same competitor.

North America's leading manufacturers—*all* its major computer companies, Deere & Company, Caterpillar, Northern Telecom, General Electric, Sikorsky Aircraft, Pratt & Whitney, the Trane Company, Pitney Bowes, and others—are replanning their manufacturing operations in minutes to an hour, rather than in six to forty hours.

Compaq Computer Corporation saves over \$50 million in three and one-half years using an advanced manufacturing planning tool. Deere & Company reduces its dealer restocking order-to-delivery cycle 60 percent, from twelve weeks to five using the same new tool.

Xerox Corporation creates the position of corporate vice president, integrated supply chain, reporting directly to its chairman and CEO.

United Parcel Service invests more than \$2 billion in modern information systems over the past six years.

In the retailing business, a major revolution is in the making as power shifts from manufacturers to retailers and the final consumer.

In 1993, Pittiglio, Rabin, Todd & McGrath, a respected high technology consulting firm conducted a benchmarking study of how effectively manufacturers produced and delivered their products. Their first kind of manufacturer produced and sold systems, typified by a mainframe computer and its many peripherals. Their second kind of manufacturer produced and sold commodity goods, such as power hand tools found in consumer product stores.

First, they reported the time required for each type of manufacturer to plan, make or source, and deliver its goods as follows.

	DAYS BEST-IN-CLASS	DAYS AVERAGE
Systems	166	267
Commodity	76	170

Then they reported in the same manner on the performance of dozens of surveyed companies against several other important performance factors.

Total logistics cost as a percent of sales:

	BEST-IN-CLASS	AVERAGE
Systems	6.7%	14.5%
Commodity	4.8%	12.7%

Cash-to-cash cycle:

(Calendar days)

	BEST-IN-CLASS	AVERAGE
Systems	63	124
Commodity	33	118

Percent orders shipped on the customers' requested date:

	BEST-IN-CLASS	AVERAGE
Systems	87.2%	59.1%
Commodity	99.0%	72.5%

Value-added per employee:

(US\$ × 1000)

	BEST-IN-CLASS	AVERAGE
Systems	142.2	99.4
Commodity	171.4	104.0

How can even the average players compete against this kind of operating supremacy, much less those companies below average?¹

WHAT IS GOING ON HERE?

The companies cited earlier are leaders in implementing a new vision, a way to manage the world of logistics so that they can win in today's intensely competitive global marketplace. They are doing these things at the corporate level, for that is how they are measured in terms of marketplace image, and by Wall Street. They are implementing enterprise logistics management (ELM), a holistic approach to managing their manufacturing operations and their value-added pipeline or total supply chain—from suppliers to final customers.

That they are able to implement this new ELM concept at a corporate level is due to the power of today's information systems, which can track and manipulate huge sets of data on a real-time basis. They can prepare new plans with production data in minutes, not hours or days. They can communicate, either within the corporation or with its external business partners—customers, suppliers, or information utilities—at the speed of light.

Why is it so important for all manufacturers to implement ELM? Because leaders in business understand the truth of the following observation by Peter Drucker, and recognize the urgent need to capitalize on it: "The economy is changing structure. From being organized around the flow of things and the flow of money, it is becoming organized around the flow of information."²

In this economy, information—the most accurate, the most rich, and the most real-time—will be the key to global competitive advantage.

Manufacturing is being transformed rapidly from a make-to-stock to a make-to-order business in which a customer order triggers both the design (or final form) of the

specific product as well as the production and delivery schedule.

ELM is the next step in more sophisticated management of a vital part of today's manufacturing business. It is essential in the transformation of the *art* of management to the *science* of management so that better business performance will result. ELM is a vision for the global, integrated, real-time enterprise logistics management that is crucial for any manufacturer to survive, grow, and prosper.

This book is organized so that people with different interests and backgrounds can start in different places. Senior management might want to start with chapter 8 before going on to chapter 6 and the other chapters.

Materials management and production scheduling people might find reading the book from the beginning more interesting, if only because they are likely to identify strongly with the material found in chapter 1. Those managers or practitioners highly experienced in the use of manufacturing resource planning (MRP) and (JIT) might start with chapters 4 and 5 to obtain a new perspective before reading the rest of the book. The information systems professional probably will want to start with chapters 7 and 8 before covering the rest of the material.

Enterprise logistics management is here today in concept and in reality in some leading manufacturing companies. It's critically important for each reader to fit his or her company's business under the ELM vision and work with a sense of urgency to implement their company's version of ELM. All other things being equal, competitive supremacy and the greatest customer satisfaction will come to those companies that can operate soonest and most completely in the ELM manner. Get started now. Good luck.

CHAPTER 1

Enterprise Logistics Management: Today's Reality

FIVE CASE EXAMPLES

The CEO of a \$600 million manufacturing company assembled his entire staff on a Friday afternoon for an emergency meeting. He was not a happy person. In a terse voice, he outlined the problems that were crippling his company's performance. On the one hand, he was receiving several phone calls a week from cherished customers berating his company's delivery performance as being unreliable and slow. On the other hand, many key suppliers were calling to complain that the company continually jerked them around with order quantity and delivery date changes. Internally, he pointed out that their own performance indicators showed that a lot of things were wrong—high inventory and overhead, excessive overtime and freight premiums, and low productivity and return on assets. He also pointed out the high frustration level of the company's employees due to their inability to resolve these problems.

They needed to fudge their numbers and work around the company's "systems" to accomplish *any* results. Sound like an unusual company? Not so.

The reality of logistics management is that senior management, as well as logistics management, in many corporations does not have the accurate and timely information it needs to manage its business so that it performs in a world-class manner *and* gives its customers the kind of service they desire. This is true at an aggregate functional level as well as at a detailed product level. It is especially true in large global corporations. Consider the following five, unfortunately typical, scenarios.

Case 1

It is not uncommon to go to a company's senior management meeting where a particular product or product line is being discussed and find that *no one* has all the necessary information or correct numbers in a consistent format on a timely basis for the product in question.

Here's the usual situation concerning any one product. The inventory management people have the figures from last Saturday (Sunday's computer run), but today is Thursday, and they are not sure what has transpired since. Moreover, they are a bit concerned because they cannot find 100 units of this product that the inventory management records show to be in the overstock section of the warehouse. In addition, due to an unusual amount of warehouse activity and overtime, they are afraid that all the inventory movement won't be able to be entered into the computer system in time for Saturday night's weekly update run.

Purchasing has scheduled materials and components due in monthly time buckets and they're not sure how many units have been received or shipped from the supplier yet,