## **Management Information Systems 13e**

KENNETH C. LAUDON AND JANE P. LAUDON

CHAPTER 15 MANAGING GLOBAL SYSTEMS

## **Lean Manufacturing and Global ERP: Humanetics** and Global Shop





**SUMMARY** 

Humanetics is a small, private precision machining firm located in Carrollton, Texas. In order to expand into a global corporation, Humanetics needed to find an enterprise-wide system that could coordinate not only its local American production, but also its production in Mexico and China. L= 8:15.

URL http://www.youtube.com/watch?v=bOy1Q7s9lls

CASE

Enterprise resource planning systems (ERP) started out in the 1990s in the manufacturing sector in the United States as systems that could track incoming orders and automatically churn out the required inputs, their prices, suppliers, and total cost. They were initially called "material requirements planning" systems, and later, "manufacturing resource planning" systems (MRP). MRP systems soon expanded their capabilities beyond tracking resources and into related areas, such as planning and scheduling of production, project management, inventory management, accounting and finance. These systems expanded into supporting management functions—tracking sales, customer relationship management—and became known as enterprise resource planning systems. In both the back and front office, ERP systems today attempt to integrate all the critical activities of the firm into an integrated and seamless experience. ERP systems promise to create one system for the firm using a single database.

As it turns out, for many large firms, this is an enormous and largely unfulfilled promise simply because there are too many older legacy systems to integrate, too many separate corporate divisions that don't want a single integrated system, and too much variation across global systems already in place. For smaller and medium sized firms, however, it's still an achievable goal.

Globalization, while opening up new markets, also complicates the business world for many smaller firms. Coordinating production in one country can be difficult, but coordinating multiple factories in foreign countries, in different time zones, and with different work forces and managers, can be daunting. In this environment, enterprise systems built in the "home" factory environment offer manufacturers the possibility of using an ERP system as the force for integrating and coordinating a global firm. By enforcing standardization of production, procurement, inventory, and production methods, ERP systems enable and support globalization.

Global Shop Solutions is an ERP solutions provider to small manufacturing firms. These firms have anywhere from ten to five hundred employees, far too small for the Oracles, IBMs, and other Fortune 500 providers of enterprise software. Global Shop Solutions was founded in 1976 by Dick Alexander. The company remains in the hands of the Alexander family, something firm believes adds to the public image of the company and builds trust with its customers. Global Shop Solutions has customers in aerospace and defense, sheet metal fabricators and machine shops, screw machine shops, machine builders, repair facilities and electronics, wood shops, medical instrumentation, stampers, store fixtures, and other discrete manufacturers.

The strategy of the firm is to focus on small manufacturing firms by helping Global Shop Solutions' mission is to help manufacturing companies streamline their operations for increased sales, lower costs and improved on-time delivery. Global Shop Solutions consistently delivers these results through One-System ERP Solutions™ that include unsurpassed levels of customer training, service and support. With a proven implementation process and Built-in Customization™, Global Shop Solutions provides a comprehensive enterprise management system that can grow with the size and needs of its customers.

Humanetics is a precision manufacturing and metal fabrication firm with headquarters in Carrollton, Texas, and four manufactuing plants in north and central Texas, Mexico, and China. Because it is a private company, there is no publicly available financial information for the firm. Humanetics was founded in 1958 by Robert A. Hasty, a machine shop foreman for Otis Engineering (now Halliburton). Originally the firm produced Hasty's patented medical device used in neurosurgery, but then quickly grew into the manufacturer of other medical devices, precision machined parts, and health care products like adjustable patient beds. Today the firm manufactures hardware for a diverse group of industries including: cellular, telecom, satellite

communications, banking, printing, power supply, postal automation, airport automation, semiconductor, ATM, defense, aerospace, computer, medical, heating/air-conditioning/dehumidification, and many others. Expanding to a global company with plants in Mexico and China, Humanetics hoped to be able to supply its customers with both low cost production, but also high quality products that met engineering standards. The Global Shop Solutions ERP system has played a central role in allowing Humanetics to achieve these objectives.

## VIDEO CASE QUESTIONS

- 1. What are some of the software modules used by Humaneutics? Pick one of these modules and describe how this module could firm compete and meet customer requirements.
- 2. What does the video say is the payback that Humanetics has received from using Global Solutions?
- 3. What role does the "global shop document control" capability play in the globalization of the firm?
- 4. How does the firm use Global Solutions to monitor and increase productivity among its workers?

## **COPYRIGHT NOTICE**

Copyright © 2013 Kenneth Laudon.

This work is protected by United States copyright laws and is provided solely for the use of instructors in teaching their courses and assessing student learning. Dissemination or sale of any part of this work (including on the World Wide Web) will destroy the integrity of the work and is not permitted. The work and materials from this site should not be made available to students except by instructors using the accompanying text in their classes. All recipients of this work are expected to abide by these restrictions and to honor the intended pedagogical purposes and the needs of other instructors who rely on these materials.