Inventory is a big factor in many businesses, particularly in manufacturing. Inventory records are the most likely area of the business to be computerized and every ERP system and CRM system is built around an inventory management function.

Basic inventory management maintains what’s called a perpetual inventory record. Simply stated, the system accepts inventory movement reports (transactions) and maintains a continuous record of the quantity on-hand. Of course, inventory management software does a lot more than that. Here are some of the tools that can and should be integrated with inventory management to give you the control and visibility you need to support efficient operations.

**Bar-code data collection**

The perpetual inventory system is highly dependent on timely and accurate reporting. Manual reporting can be plagued by delays, errors, missing transactions, and undue burden on the workforce to collect and enter the data. Automated data collection, most often through bar-code scans, removes much of the reporting burden while greatly improving accuracy and timeliness of transactions.

**Cycle counting**

Inventory accuracy is very important to the effective planning and control of inventory. Sadly, most inventory tracking systems are woefully inaccurate without an active and disciplined cycle counting system in place. Cycle counting replaces the cumbersome and error-prone periodic (usually annual) physical inventory count with a regular program of counting selected items such that more important items are counted more often that less important ones. The magic of cycle counting is that it provides a structure for identifying and eliminating the source of errors to improve accuracy in a sustainable way.

**ABC analysis**

Cycle counting is usually set up using ABC analysis to identify the more important and less important items mentioned above. The most common ABC analysis (also called Pareto analysis) method is to rank all inventory items according to the total value of each on an annual basis (annual “usage” or movement times unit cost). Typically, the top 20% of items represent 80% of the annual value through
the warehouse (80/20 rule). The next 30% (B items) account for 15% of the value and the remaining 50%, the C items, total 5% of annual value. In addition to setting cycle counting frequency, ABC classifications should drive item location in the warehouse, lot sizing and safety stock rules, and other management parameters to put your focus on the items that matter, where you can get the most return for your investment.

**Integrated planning and execution**

The primary focus of ERP is to improve customer service (meeting demand) while optimizing resources including inventory (and thereby reducing costs). While the inventory system provides critical information for the planning and execution systems within ERP, these functions return the favor by managing the use and replenishment of inventory to minimize shortages and lowering the overall inventory investment.

**Lot tracking and traceability**

Not every company needs serial number or lot tracking traceability; more and more are collecting this information in recognition of the increasing risk of product recalls. In addition, life cycle information, genealogy, configuration history and product performance data can be of great value to engineering, development, product servicing, spare part provisioning, and other areas of the business.

Inventory tracking is a requirement for financial control and basic business management processes. But inventory management and inventory data can be a valuable resource in the quest for performance improvement, higher levels of customer service, cost control, product development, and overall company success. Integrated inventory management systems, a critical part of ERP, provide the basic tools and significant additional capabilities to make ERP even more beneficial for your company’s future.