WESCO International, Inc. is an industry leader in electrical products distribution and procurement services. Through its primary operating company, WESCO Distribution, Inc., this Fortune 500 company provides electrical products for construction; power distribution; commercial and institutional infrastructure; industrial maintenance, repair, and operation (MRO). It also is the nation’s largest provider of integrated supply services. Headquartered in Pittsburgh, Penn., WESCO serves more than 130,000 customers worldwide with products from more than 24,000 suppliers. The company operates 350 full-service branches and five fully automated distribution centers, providing its customers with local supply services and a global support network throughout North America and select international markets.

Discovering the Limits of Decentralization

WESCO has won a large and loyal clientele with a physical and human infrastructure that puts inventory, expertise and services right where its customers need them. For many years the company’s management strategy was to enable autonomy in the field. Local managers made their own purchasing and inventory stocking decisions, set their own prices, and negotiated their own contract terms. Corporate visibility into branch-level activities, let alone oversight, was limited.

The global economic downturn of 2000-2001, however, revealed serious problems in this model, at least as it was executed with the information technologies then in place. In that suddenly-transformed business environment, local decision-making was challenging, at best, given the incomplete and out-of-date management information that was causing inefficient inventories, margin erosion, and sharply higher operating costs. In response, WESCO management moved to centralize a wide range of business policy functions and to re-evaluate the decision-support capabilities within its IT infrastructure.

That infrastructure reflected both the decentralized nature of WESCO operations and the stripped down, do-more-with-less attitude that defines the company culture. WesNet, its core production system, was and still is a distributed point-of-sale (POS) system that runs on local servers in all WESCO offices and distribution centers. All sales, purchasing, and inventory data originate on this system and are partially consolidated in nightly uploads to a central server at company headquarters.

While WesNet capably served the company’s transaction processing requirements, it offered limited support for cross-company aggregation, analysis, and reporting – functions normally performed by an ERP system. WESCO management avoided that costly and disruptive implementation as a matter of principle. Instead, a data warehouse built on a large Informix database provided the company’s primary facility for data consolidation and management.

While the concept of using a data warehouse as a thrifter ERP surrogate appeared sound, the Informix system was underpowered and overloaded. Replacing it with a more capable and versatile relational database management system (RDBMS) became an urgent priority. Because WESCO had already
signed an enterprise license agreement with Oracle that included the database and user licenses, Oracle became the default platform choice.

A Plot Twist in the Platform Purchase
But with the migration to Oracle well under way, events took an unexpected turn. WESCO’s account representative persuaded CIO Steve Van Oss (now CFO) and IT Director John Conte to pause and consider a data warehouse from Teradata Corporation. Out of courtesy to a longstanding business partner (Teradata provided the original POS application and hardware platform), and with little expectation of actually having to change course, Conte and Van Oss agreed to a benchmarking exercise. To their surprise, the Teradata system was far superior to their intended solution, turning in benchmark performances that averaged 20 times better than either Oracle or Informix.

When the dust settled, WESCO had ordered a new Teradata system.

A Spider Web for Actionable Information
When the Teradata system entered production in December 2000, the vast increase in power and efficiency transformed WESCO’s ability to collect and manage its operating data. First dozens, then hundreds of new reports and analyses were created, providing decision makers at every level and in every location with accurate, relevant, timely, granular, and actionable information.

“We’ve used Teradata like a spider web around our transaction processing systems to capture every significant piece of actionable information,” explains Van Oss. “We’ve built a multi-year archive of key data – sales data, purchase order data, inventory data, accounts receivable and accounts payable, supplier information – all of it captured in weekly, daily, or multiple daily loads into the Teradata system, depending on the type and priority of the data.”

That data has opened new windows into the company’s operating processes, driving performance improvements in every aspect of WESCO’s business. Sales and margins are up. Inventory aging is down. Discounts are more accurately applied to sale and purchase prices, and the aggregate value runs easily into the millions of dollars.

“I could make a pretty strong argument for a Teradata return-on-investment value at any point between five and 50 million dollars,” says Van Oss. “But a better way to look at it is that this tool has become an integral part of the way we run our business. It’s part of our central nervous system. We could not run our business as we do today without it. The roots are deep in the company.”