

Chapter 4.13

Building Enterprise Network Infrastructure for a Supermarket Store Chain

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EXECUTIVE SUMMARY

Enterprise network infrastructure has served as a vehicle on which data and information can be transferred between functional units regardless of their location. Creating the network infrastructure that enables firms and organizations to adapt to rapidly changing business needs has never been more important than now. Building the enterprise network infrastructure requires careful planning, effective design, and appropriate strategies for successful implementation. The current case study examines how a regional supermarket store chain in the retail food industry develops its enterprise network infrastructure to outperform its larger competitors. A detailed description of the evolution of the company's enterprise network infra-

structure is presented to show how the strategy of network infrastructure development has aligned with the organization's growth strategy for the past two decades. The current case study highlights critical success factors for firms to build an effective enterprise network infrastructure that include IS planning firmly tied to critical business goals, strategic collaboration with technology vendors, and careful evaluation and selection of network services and technical details.

ORGANIZATIONAL BACKGROUND

The retail food industry can be broadly defined as businesses that cover diverse aspects of grocery productions and sales, ranging from making,

processing, packaging, distribution, to retailing and catering food. In 2004, the retail food industry in the United States took nearly 10% of its Gross Domestic Product. It consists of businesses that include conventional supermarkets, superstores, convenience stores, membership clubs, independent food stores, and dot-coms. While the retail food industry relies on government regulations and administration for establishing an efficient consumer market, it has heavily utilized continuous innovation in the areas of technology, transportation, and logistics for an efficient flow of products and related information (Kahn & McAlister, 1997; Li, Lin, Wang & Yan, 2007; Walsh, 1993). The competition in the industry is extremely high and so typically the management is under constant pressure for sales growth and market share while dealing with competitive challenges.

ABC¹ Corporation is one of the successful privately owned, regional supermarket store chains in the retail food industry in the United States. Headquartered in one of the cities in Northern California, ABC employs more than 16,600 employees and owns 139 grocery stores and one distribution center in several West Coast States of the United States. Its store chains sell groceries including bakery, dairy, deli, frozen foods, general grocery, meat, liquor, natural foods, pharmacy, produce, seafood, snacks, and so forth. In the fiscal year of 2006-07, the estimated sales of the company were \$3.4 billion with its annual growth rate of 2.1%, thus placing the company in the upper 50% of the “Top 75 North American Food Retailers” (Supermarket News, January 2006). ABC Corporation is currently under the management team of two owners, a president as CEO, and a CFO. The mission of the company is to be “the place where customers love to shop and employees love to work”. The company values “excellence in business practices” such as leadership, accountability, respect, teamwork, excellence, responsibility, learning, and integrity.

As part of a growth strategy, ABC Corporation has made some serious acquisitions in its history

that led the company to be one of the leading supermarket store chains in the region. In 1956, the company operated just nine grocery store sites with around \$8 million in annual revenues. In 1973, after acquiring ten drug stores put up for sale in the region, the company began to deal with both the grocery and drug items in the same store. The company boosted its annual sales volume up to nearly \$1.8 billion after the acquisition of another store chain with 17 grocery store sites, which had developed a reputation for their superb product quality and excellent customer service throughout a West Coast state. By the mid-1990's, the company grew up to operate 81 stores, thus making it one of the giant supermarket chains. In 1998, the company acquired an up scale grocery chain with 27 stores. Again in 1999, the company purchased additional 27 stores from two grocery store chains so that it could compete against larger chains such as Safeway, Albertson, and Lucky.

ABC Corporation has operated under centralized control from its headquarters, which aims at making its operations efficient and cost effective. When a customer buys a specific item from a particular store and pays for the item at the cash register, this information is immediately passed on to the headquarters. At the headquarters, the system reduces the inventory stock level for the purchased item at that particular store by a quantity of one (or whatever quantity is sold) in the central database. By this way, the company can keep a real-time inventory amount of every product item in every store. The ABC's real-time inventory accounting system allows the company to restock the store shelves in an efficient and effective manner. When a reorder quantity reaches an optimum level, the company can immediately place a reorder request to the vendor and receive the merchandise at its warehouse locations. The warehouses can then break up the shipment and distribute the product to the individual store sites that are running low on the shelf inventory. Each store also uploads daily transaction data to the headquarters so that each day, customer buying

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