SRDC- The National e-Commerce Extension Initiative

Case Study



Farmchem Corporation

Floyd, Iowa Justin Peterson, Vice-President

This case demonstrates the usefulness of the Internet in developing new products and markets for an agricultural input and service provider. Farmchem developed a wireless tank inventory monitoring system and information on tanks' inventory levels may be sent by wireless Internet to the customer or Farmchem representatives. The tank monitoring system provides Farmchem with the option of expanding into non-agricultural markets such as businesses in the petroleum and water treatment industries.

Profile

Farmchem manufactures, distributes and services equipment for crop input manufacturers and retailers. Products and services provided include tank monitoring systems; weigh systems; bulk herbicide and fertilizer equipment; pumps, meters, motors, and accessories; tanks and accessories; sprayer equipment, controls and accessories; safety equipment; and custom application equipment. Farmchem has available more than 9,500 products and parts from more than 180 different suppliers. Farmchem, through its subsidiary Xcelerated Integrations, Inc., also is an industry leader with its vendor managed inventory (VMI) system. The VMI consists of a custom designed wireless tank monitoring system of sensors, monitors and telemetry options to measure tank inventory, convey information to the customer, and integrate this information into the customer's business. The bulk system inventory management program currently is in use in more than 15,000 tanks across 45 states. Farmchem employment in 2007 was 27 full-time workers: eight workers in Floyd, 12 workers at the Mason City customer service center, and 12 nationwide field service technicians. Approximately 16 of the 27 employees are associated with the Xcelerated Integrations, Inc.

History

Farmchem was founded in 1974 by Ray Murray of Floyd, Iowa. The company's initial business focus was the design, manufacturing and distribution of innovative products to crop input dealers. Much of the manufacturing consisted of the custom assembling of components produced by other parts suppliers. Farmchem filled a market niche because many parts manufacturers were not interested in custom designing the final product nor marketing to customers. Farmchem's products were marketed at trade shows to regional and national companies serving extensive markets. The company initiated sales over the Internet in 1998. Orders for Farmchem products and services may be made by phone, fax, or online, and Internet sales now constitute approximately 50 percent of traditional product sales.

In the late 1990s, Farmchem developed an electronic monitoring system for liquid levels in the bulk tanks of dealers and suppliers. The system consists of four principal components: a sensor appropriate for the particular liquid to be measured, a monitor that converts the information from the sensor into tank level data, Internet telemetry that transfers the data to a central server, and an Internetbased data management system that provides the data in the desired form and format to the appropriate parties. The tank monitoring system was later modified to include bulk seed monitoring capabilities. Xcelerated Integrations (XI) was formed as a subsidiary of Farmchem to focus on the tank monitoring side of Farmchem's business. The XI operation was started in Floyd, Iowa then moved to Kansas City to work with other IT businesses, and next moved to Mason City, Iowa. Xcelerated Integrations developed into an industry leader in tank monitoring and the company currently controls

approximately 98 percent of agricultural market.

Business Location

Farmchem's operations are located in Floyd, Iowa (2000 population 425) and the Xcelerated Integrations customer service center is located 25 miles west Year online: **1998** Area Population: **425** Web site:





of Floyd in Mason City (2000 population 29,172) Mason City and Floyd are located near Interstate 35, approximately 110 miles north of Des Moines.

Role of e-Commerce

Farmchem was a relatively early adopter of IT software and hardware. The catalog for Farmchem's products was incorporated into the company's Web site, and orders may be placed and paid for online. Farmchem's initial e-commerce strategy was focused on marketing the core product lines and providing better service for their traditional customers. Peterson noted, however, that the availability of online ordering had relatively little impact on Farmchem's traditional markets. The company already had nationwide distribution, thus few new markets became available. In addition, the company continued its paper marketing strategies (catalogs and sales flyers) so e-commerce provided no savings on printing and mailing costs for catalogs. Peterson stated that much of the contact with clients (and sales) still occurs faceto-face, thus electronic marketing has to be carefully chosen to be effective. No major changes in staffing or employees' responsibilities resulted from the use of e-commerce, and the investment in infrastructure and software for the online catalog (less than \$50,000) was relatively small. Technical expertise for Farmchem's Web site and online catalog were provided internally by Farmchem's information technology staff. The server for Farmchem's Web site is hosted by the Mason City location and high speed Internet services are provided by AT&T and Quest.

A potentially significant role for e-commerce exists in the activities of Farmchem's subsidiary Xcelerated Integrations. XI's bulk inventory management system is custom designed, manufactured, installed, and serviced for each customer (e.g. chemical manufacturers with products stored in tanks at numerous retail locations or retail stores with tanks at multiple branch locations). The XI system measures, records and transfers information regarding tank inventory to a central location. The collected data may be transferred by cable to a data logger or sent by e-mail to an address designated by the business that purchased the system. In addition, the inventory records may be sent by wireless Internet to the XI customer service center in Mason City. The XI customer service representatives review the data to ensure that the information is collected correctly and then transfers the data to a password-protected Web page. XI also offers alert paging services whereby clients are notified by text message to their cell phone or directly to their e-mail account.

XI's tank monitoring system is a significant part of Farmchem's business and offers much potential for future growth.

Peterson estimates that hardware and software expenditures for XI's information technology system were about \$10 million. Local economic development agencies and the Papajohn Center for Entrepreneurship at Northern Iowa Community College assisted Farmchem with training programs and other start-up needs for XI.

Farmchem hopes to market its XI tank monitoring system to businesses outside of the agricultural sector. Potential customers for Web-based inventory monitoring management systems include businesses in the petroleum, food products and water treatment industries. According to Peterson, any business that stores inventory in bulk containers could improve their inventory management and delivery scheduling with timely and accurate data on inventory conditions.

Challenges and Lessons for Rural Entrepreneurs

Peterson stated that Farmchem's Floyd and Mason City locations did not present any major problems relating to firm competitiveness. He noted only two potential drawbacks:

- Air travel to visit customers or to bring clients to the lowa headquarters is not simple since the nearest commercial airports are Des Moines and Minneapolis.
- It takes a little longer to find skilled labor in rural areas than it would in an urban location.

From e-Commerce as a Startegy for Improving Business Vitality: Lessons Learned from Small Businesses by Deborah M. Markley, David L. Barkley, and R. David Lamie

> See related case studies and learn more about e-commerce at http://srdc.msstate.edu/ecommerce.

These case studies are a part of the National e-Commerce Extension Initiative hosted by the Southern Rural Development Center.