

Can Technology Save Sears?

CASE STUDY

Sears, Roebuck used to be the largest retailer in the United States, with sales representing 1 to 2 percent of the U.S. gross national product for almost 40 years after World War II. Since then, Sears has steadily lost ground to discounters such as Walmart and Target and to competitively priced specialty retailers such as Home Depot and Lowe's. Even the merger with Kmart in 2005 to create Sears Holding Company failed to stop the downward spiral in sales and market share.

Over the years, Sears had invested heavily in information technology. At one time it spent more on information technology and networking than all other noncomputer firms in the United States except the Boeing Corporation. The company was noted for its extensive customer databases of 60 million past and present Sears credit card holders, which it used to target groups such as tool buyers, appliance buyers, and gardening enthusiasts with special promotions. For example, Sears would mail customers who purchased a washer and dryer an offer for a maintenance contract and follow up with annual contract renewal forms. These efforts did not translate into competitive advantage because Sears's cost structure was one of the highest in its industry.

In 1993, under the leadership of Arthur Martinez, Sears embarked on a \$4 billion five-year store renovation program to make stores more efficient, attractive, and convenient by bringing all transactions closer to the sales floor and centralizing every store's general offices, cashiers, customer services, and credit functions. New point-of-sale (POS) terminals allowed sales staff to issue new credit cards, accept charge card payments, issue gift certificates, and report account information to card holders. The POS devices provided information such as the status of orders and availability of products, allowing associates to order out-of-stock goods directly from the sales floor. Some stores installed ATMs to give customers cash advances against their Sears credit cards. Sears also moved its suppliers to an electronic ordering system. By linking its computerized ordering system directly to that of each supplier, Sears hoped to eliminate paper throughout the order process and expedite the flow of goods into its stores.

Sears was among the first major retailers to change the way it sold based on shifting consumer habits. For example, Sears introduced a service that

lets shoppers buy online and pick up their goods in stores in 2001—well ahead of competitors Walmart in 2007 and Target Corp. in 2013.

Despite these improvements, Sears has lagged in reducing operating costs, keeping pace with current merchandising trends, and remodeling its 1,725 stores, many of which are run-down and in undesirable locations. It is still struggling to find a viable business strategy that will pull it out of its rut. The Sears company has continued to use technology strategies to revive flagging sales: online shopping, mobile apps, and an Amazon.com-like marketplace with other vendors for 18 million products, along with heavy in-store promotions. So far, these efforts have not paid off, and sales have declined since the 2005 merger with Kmart.

Sears continued to pin its hopes on technology, aiming for even more intensive use of technology and mining of customer data. The expectation was that deeper knowledge of customer preferences and buying patterns would make promotions, merchandising, and selling much more effective. Customers would flock to Sears stores because they would be carrying exactly what they want.

A customer loyalty program called Shop Your Way Rewards promises customers generous free deals for repeat purchases if they agree to share their personal shopping data with the company. Sears would not disclose how many customers signed up for Shop Your Way Rewards, but Shop Your Way generates a bigger share of sales every year.

The data Sears is collecting are changing how its sales floors are arranged and how promotions are designed to attract shoppers. For example, work wear has been moved closer to where tools are sold. After data analysis showed that many jewelry customers were men who bought tools, the company created a special Valentine's Day offer for Shop Your Way Rewards members that offered \$100 credit for \$400 spent on jewelry.

Sears wanted to personalize marketing campaigns, coupons, and offers down to the individual customer, but its legacy systems were incapable of supporting that level of activity. In order to use complex analytic models on large data sets, Sears revamped its data management technology. It used to take Sears six weeks to analyze marketing campaigns for loyalty club members using a traditional large mainframe

computer and Teradata data warehouse software. With new technology called Hadoop for managing very large datasets (see Chapter 6), the processing can be completed weekly. Certain online and mobile commerce analyses can be performed daily, and targeting is much more precise, in some cases down to the individual customer.

Sears's old models were able to use 10 percent of available data, but the new models are able to work with 100 percent. In the past, Sears was only able to retain data from 90 days to two years, but with the new "big data" management technology, it can keep everything, increasing its chances of finding more meaningful patterns in the data. Hadoop processing is about one-third the cost of conventional relational databases. With Hadoop's massively parallel processing power, processing 2 billion records takes Sears little more than one minute longer than processing 100 million records.

Sears spent several hundred million dollars improving its stores in 2011, including technological enhancements. Workers use iPads and iPod Touches to access online reviews for customers and check whether items are in stock. Working with McKinsey & Co. consultants, Sears opened a test store in 2009 called Mygofer in Joliet, Illinois. Mygofer was touted as a revolutionary combination that would meld the convenience of the Internet with the instant gratification of a brick-and-mortar store. The company gutted an 80,000-square-foot Kmart, but the store did not stock items for sale. The idea was to have shoppers place their orders at computers in the front of the store, then pick up their goods at a delivery bay out back. Sears Holdings CEO hoped to roll out hundreds of Mygofer stores if the experiment succeeded. However, some days, more people returned goods than bought them. Shoppers didn't like the fact that they couldn't see and touch things. Sears management had projected that over four years Mygofer would eventually generate \$8 million in annual sales. Annual sales struggled to top \$1 million. CEO Eddie Lampert stated that going to a store with no products may have been weird for shoppers, but the idea was ahead of its time.

Experts believe that experiments like Mygofer are a diversion from Sears's overarching problems: a deteriorating store network and a brand image that doesn't resonate with today's consumers. Other retailers like Macy's and Nordstrom are also struggling to keep relevant in a world where shopping is steadily moving to the web. But Macy's and Nordstrom are still profitable. Sears Holdings spends nearly \$1.90 a square foot on Sears stores

and roughly 60 cents a square foot on Kmart stores, according to Matt McGinley, an analyst with Evercore ISI Institutional Equities. That compares with \$9.70 a square foot spent by Walmart and \$5.75 by Macy's. While Sears spent more than \$1 million setting up the Mygofer store in Joliet, the company was starving a profitable crosstown Kmart.

Lampert wants to focus on technology projects that he hopes will turn Sears around, acknowledging that today's shoppers are less likely to browse and buy in stores. One new service lets Sears customers browse for shoes and apparel online and then reserve items to try on in physical stores. Sears is also creating digital displays for products that are more likely to engage customers with reviews, instructional videos, and *Consumer Reports* ratings.

A service called In-Vehicle Pickup lets customers order goods online and have them delivered to them while they wait in their cars. Sears's In-Vehicle Return/Exchange in Five enables customers to return or exchange purchases in the parking lot within a guaranteed time period of five minutes. Sears improved its online ordering system so that orders could be shipped more quickly and economically by using Sears physical stores as well as distribution centers to fulfill them.

Sears is refashioning its consumer electronic departments as Connected Solutions shops that sell "smart home" devices like a garage door that can be opened or closed remotely with a smartphone, smart thermostats and remotely controlled air conditioners, smart water heaters, home security, and baby monitors. Other "smart home" devices include a wireless-enabled steerable riding mower that indicates when it needs a tuneup and features an app with videos to show you how to do the maintenance yourself along with a smart battery charger and maintainer that monitors voltage and keeps a car battery charged. The company has assembled a first-rate team of tech talent in Seattle to beef up capabilities for diagnosing appliance problems remotely.

Sears is also piloting radio frequency ID (RFID) tags in 15 stores in the hope of increasing sales and margins by giving a more accurate picture of the merchandise stores have in stock. Management said this fall that initiatives like digital signs and radio tags on inventory could bring in \$500 million a year in savings and increased sales.

Sears has made some headway with e-commerce. Customers appreciate the in-store pickup for online orders. Shop Your Way, considered a leader in creating personalized offers, is driving more business. Tech should be a bright spot for Sears. But what good

is that if no one wants to buy what Sears has to offer? For example *Fortune* reported a January 2016 survey by Prosper Analytics & Insights that found women preferred Goodwill stores over Sears when shopping for clothing. Net losses in the past five years have totaled \$8 billion. The company's annual comparable sales have not grown since Sears and Kmart merged in 2005.

Analysts say Sears is reaping what it sowed from years of underinvestment in stores and uninspired merchandising. The struggling retailer spent much of 2015 selling off valuable assets like Lands' End and its stake in Sears Canada along with hundreds of other stores to avoid a cash crunch. Another 50 stores went up for sale in 2016. Sears management says these moves will give the company the financial resources to speed up its transformation into a more tech-driven retailer. More likely according to critics, Sears and CEO Lampert are in a race against time, trying to modernize retailing as sales crater. Lampert continues in the Sears tradition of trying to solve problems by ramping up new technologies while at the same time curtailing some of the mundane investments needed to keep the giant retailer generating sales. By all accounts, Sears remains a fading brand saddled with too many nonperforming physical stores in undesirable locations.

Even with better data analytics, knowledge of customers, loyalty programs, and e-commerce

innovations, the question still lingers about whether Sears is effectively using technology to solve its enormous business problems. Is it truly able to offer customers personalized promotions, and are they working? What is the business impact? Where are the numbers to show that Sears's big bet on technology is making the company more profitable? Will Sears's technological forays be able to halt its downward spiral?

Sources: Phil Wahba, "Sears Hedge Fund Manager CEO Calls Criticism of Faltering Retailer 'Unfair,'" *Fortune*, February 25, 2016; "Sears Ranks Below Goodwill Among Women Shoppers," *Fortune*, February 5, 2016; Andrew Gebhart, "Sears Smart Home Lineup Isn't Sexy but Could Be Quite Useful," *CNET*, April 20, 2016; "Sears Holdings," www.fortune.com, accessed April 20, 2016; www.sears.com, accessed April 23, 2016; Steven Russolillo, "Sears's Retooling Can't Fix Everything," *Wall Street Journal*, December 2, 2015; and Suzanne Kapner, "Sears Bets Big on Technology," *Wall Street Journal*, December 16, 2014.

CASE STUDY QUESTIONS

- 3-13** Analyze Sears using the competitive forces and value chain models. What are Sears's strengths? What are its weaknesses?
- 3-14** What was the problem facing Sears? What management, organization, and technology factors contributed to this problem?
- 3-15** What solution did Sears select? What was the role of technology in this solution?
- 3-16** How effective was the solution selected by Sears? Explain your answer.