## E-commerce. business. technology. society. KENNETH C. LAUDON AND CAROL G. TRAVER



chapter 12 B2B E-commerce

case 1 Ford AutoXchange B2B Marketplace

watch the video at

http://www.youtube.com/watch?v=qyO9QSo0FjU

summary

This is a fascinating video on a B2B "electronic marketplace" initially developed by Ford called AutoXchange. In this vision of B2B commerce,

the Internet would transform the relationship between over 100,000 tier 1 and tier 2 auto parts suppliers, and a small handful of very large, global automobile companies. In this electronic marketplace, thousands of suppliers would compete against one another to provide parts to the auto industry giants. In this way, the auto industry hoped to reduce the cost of parts, increase quality, achieve greater flexibility, and rationalize the supply chain process. Ultimately, the effort failed. Find out why. *L= 4:58*.

case

The automotive industry designs, builds, markets and sells motor vehicles around the world. In 2013, over 87 million motor vehicles in total were manufactured worldwide.

Ford Motor Company is an American multinational corporation and the world's fifth largest automaker based on worldwide vehicle production, following Toyota, General Motors,

Millian

Volkswagen, and Hyundai. In addition to the Ford, Lincoln, and Mercury brands, Ford also owns a small interest in Mazda of Japan and Aston Martin of England.

While the global auto industry is very large by any standard, generating over \$1 trillion in sales worldwide each year, the size of the auto supplier industry worldwide is equally impressive. There are an estimated 250,000 direct suppliers to the auto industry worldwide, with about 100,000 suppliers in the U.S. alone. Coordinating the flow of parts and sub-assemblies (transmissions, differentials and axles, and sheet metal) is a massive, and very expensive task.

Ford's AutoXchange was one of the first efforts to develop a large scale B2B (business-to-business) electronic marketplace for the automobile industry. In the end, it did not succeed, at least not in the form proposed in the video. Why it did not succeed is an interesting story of how mistakes in understanding industry supply chains led to poorly conceptualized information systems which ultimately did not work. While the effort to build industry-wide electronic marketplaces largely failed (and not just in the auto industry), the ideas and technologies were later used by individual firms separately. Today, private firm industrial networks (owned and operated by individual firms who invite a select group of suppliers to participate) are commonplace.

Ford's AutoXchange was a grand vision of how Internet technology would overcome competitive pressures in an entire industry, and entice thousands of industrial supply businesses into an online, competitive marketplace where prices would be driven down through the workings of a transparent, online marketplace much like the stock market. The idea was quite simple: build a digital marketplace which was open, transparent, and competitive to benefit the large buyers of automotive parts.

These marketplaces were referred to as "B2B Markets" because they brought together suppliers businesses with purchasing businesses and did not involve the consumer. Ultimately this vision of open B2B markets came up against some powerful institutional forces. As it turns out, no rational business (or management team) wants to be a seller in an open, transparent marketplace where price is the most important and visible criterion of success. As a result, suppliers to these kinds of open digital markets often refused to participate.

While the broad vision failed, many of the technologies developed in this effort were re-deployed by the companies involved, and survive today as private supply chain networks operated by the major car manufacturers.

Your task in this case is to figure out why the original vision did not work out as planned, and what this tells you about the role that organizational and institutional factors play in the deployment of large technology projects.

One grand vision of the dot com era was an open transparent marketplace where thousands of suppliers would compete against one another to sell their products to a few giant purchasers. In 1998 GM set up a B2B (business-to-business) exchange for its auto parts suppliers, initially called TradeXchange. The idea was to streamline production by sharing information electronically.

As described in the video, Ford created a similar exchange called AutoXchange with of course different software, formats and interfaces. To solve this problem for their common suppliers Ford, GM and DaimlerChrysler announced in February 2000 that they had agreed to join together to create a single B2B supplier exchange called Covisint. The three firms had combined annual spending of \$240 billion.

The Federal Trade Commission started an informal antitrust review of the Big Three exchange but soon gave it clearance. In April 2000, French automaker Renault S.A. and Nissan of Japan joined. Also among the founding firms were Commerce One, GM's technology partner in TradeXchange and Oracle Ford's technology partner in Auto-Xchange. In April 2001 Kevin English was named Chairman, President and CEO of Covisint.

Industry observers at the time wondered whether the two companies hired to move all of Ford and GM's suppliers online had what it takes to get these huge projects up and rolling by the first quarter of the next year, as both promised. The feat not only required enormous commitment from suppliers, which will need to be convinced they can save money, but also huge technology and applications-hosting capabilities from the companies picked for the jobs: Oracle and Commerce One. Neither of these companies had ever built such a huge online trading platform.

Suppliers to the major auto OEMS felt that the Covisint was not intended to optimize the supplier chain but rather was just the latest tool to squeeze revenue from suppliers. They were particularly hostile to the online auction. There was friction between the OEMs and also technical difficulties due to differences in legacy systems. Outside observers felt that the big three were more interested in the market capitalization of Covisint than in their supply chains. Covisint never achieved the level of success envisioned. In December 2003 Covisint sold the online auction portion of its business to FreeMarkets Inc, which agreed to merge with Ariba soon after. In March 2004 Compuware acquired the products and technology of Covisint, LLC. It is believed that Covisint had about \$25 million in annual revenue and around 135,000 users.

But the ideas and technologies for creating online networks which individual firms can use to communicate and collaborate with their suppliers are alive and well. There are few "open" networks where thousands of suppliers compete with one another, but there are many "invitation only networks" where a few trusted suppliers are allowed entry. All the major

automakers now operate these kinds of private networks. Price competition is usually not present, and the emphasis is on quality, just-in-time delivery, and flexibility.

Resources: Ford.com, http://www10.edacafe.com/nbc/articles/view\_weekly.php?articleid=209168.

## video case questions

- 1. Who do you think would pay the cost for suppliers to put their parts catalogs onto these marketplaces like AutoXchange? Who should have paid costs?
- 2. What were the benefits of these systems and who would reap them?
- 3. Why did the Federal Trade Commission open an investigation of these marketplaces?
- 4. What role do you think the technology played in the demise of these systems?
- 5. Why would more "closed" private market places be attractive to both the industry giants who buy the parts, and the suppliers?

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