Microsoft—Outsourcing Xbox Production

When Microsoft decided to enter the video game market with its Xbox gaming console it faced a crucial strategic decision: Should it manufacture the Xbox or outsource manufacturing to a third party, and if it chose outsourcing, to whom? Although Microsoft is primarily known as a software company, it has long had a small but important hardware business selling computer mice, keyboards, and joysticks under the Microsoft brand name. However, Xbox was different. This was not a simple computer peripheral; it was a fully functional specialized computer, with multiple components including microprocessors, memory chips, graphics chips, and an internal hard drive.

Microsoft quickly decided that it lacked the manufacturing and logistics capabilities to make the Xbox itself and manage a global supply chain. After reviewing potential suppliers, it decided to outsource assembly and significant logistics functions to Flextronics, a Singapore-based contract manufacturer. Flextronics has global sales in excess of $13 billion and more than 100,000 employees. In addition to Microsoft, customers include Dell, Ericsson Telecom AB, Hewlett-Packard Company, Siemens AG, Sony-Ericsson, and Xerox Corporation. The company manufactures products for these companies in 28 countries. Its largest concentration of activities is in China, where it has 35,000 employees.

Microsoft had already contracted out the manufacture of computer mice to Flextronics, so it knew something about how the company operated and was happy with the cost and quality of Flextronics products. In looking for a supplier, Microsoft wanted a partner that could manufacture the Xbox at a low cost, maintain very high product quality, respond quickly to shifts in demand, and share detailed information on production schedules, product quality, and inventory with Microsoft on a real-time basis. Flextronics seemed to fit the bill for a number of reasons.

First, Flextronics had been pursuing an “industrial park” strategy that enabled the company to tightly manage its own supply chain, reduce the chances of supply disruptions, and lower costs, which could then be passed on to Microsoft in the form of lower prices for the Xbox. Flextronics’ industrial park strategy requires key suppliers to site their factories next to a Flextronics assembly plant at low-cost locations near customers’ end markets. Flextronics has large industrial parks in Brazil, China, Hungary, Mexico, and Poland. In addition to a Flextronics factory, each park contains manufacturers of printed circuit boards, components, cables, plastics, and metal parts needed for assembly of a product such as Xbox. The co-location of Flextronics and its suppliers at an industrial park minimizes logistics costs by facilitating just-in-time inventory systems and reducing transportation costs. Co-location also minimizes supply problems that might arise from a breakdown in globally dispersed supply chains—as occurred after September 11, 2001, and again in 2003 due to the SARS epidemic.

Second, Flextronics’ global presence enables the company to shift production from location to location as cost and demand conditions warrant, something that Microsoft wanted. Initially, the Xbox was produced in Hungary (for sale in Europe) and Mexico (for sale in North America and Asia). Within a year, however, Flextronics shifted production from Hungary to China, where labor costs were a fraction of those in Hungary. In 2003, it also moved Xbox production from Mexico to China, for the same reason. Today all Xbox production is in China. Flextronics can execute production shifts very quickly—the company says within three weeks—since all of the relevant manufacturing data are stored in centralized information systems. Thus, if China proves to be a suboptimal location for Xbox production in the future, Flextronics can shift production elsewhere.

Third, using Web-based information systems, Flextronics and Microsoft have the ability to share information in real time with each other. Microsoft feeds information on demand conditions to Flextronics, which enables Flextronics to configure its own production schedules to minimize inventory and closely match supply with demand. In addition, Microsoft has access to real-time information from Flextronics regarding production schedules, inventory, and product quality. This is crucially important because Microsoft handles the overall management of about 40 strategic suppliers for Xbox, including the manufacturers of microprocessors, graphics chips, hard drives, and flash memory (Flextronics handles the supply of commodity-like inputs, such as circuit boards and plastic molding). The information exchange between Microsoft and Flextronics ensures that production schedules between all of the players in the supply chain are tightly coordinated so that inventory is minimized, shortages are avoided, and demand and supply are balanced.
Finally, Microsoft trusted Flextronics. Microsoft had worked with the company for years, and there were strong personal relationships between employees of the two companies. This helped cement the business transaction. To facilitate joint design, which is important for reducing manufacturing costs, some Microsoft people are located at the Flextronics U.S. operations center in San Jose, California, and some Flextronics people are located at Microsoft's headquarters in Redmond, Washington. The two companies had worked together on product design before, and Microsoft knew that could be replicated with the Xbox. Microsoft also believed that Flextronics could deliver production of Xbox on time, even though assembly of the product was far more complex than the assembly of a computer mouse.32

Case Discussion Questions

1. What was the strategic advantage to Microsoft of outsourcing Xbox production to Flextronics?

2. What were the risks associated with outsourcing to Flextronics? Did Microsoft mitigate these risks? Do you think Microsoft would have been better off making the Xbox itself?

3. How did Flextronics' industrial park strategy enable the company to respond to national changes in relative factor costs?

4. How important are Web-based information systems to the relationship between Microsoft and Flextronics? What are the economic advantages of real-time information flows between Microsoft, Flextronics, and Flextronics' own subcontractors?

Notes


