

How to Make Money in the Vacuum Tube Business

At its peak in the early 1950s, the vacuum tube business was a major industry in which companies such as Westinghouse, General Electric, RCA, and Western Electric had a large stake. Then came the transistor, making most vacuum tubes obsolete, and one by one all the big companies exited the industry. One company, however, Richardson Electronics, not only stayed in the business but also demonstrated that high returns are possible in a declining industry. Primarily a distributor (although it did have some manufacturing capabilities), Richardson bought the remains of a dozen companies in the United States and Europe as they exited the vacuum tubes industry. Richardson now has a warehouse that stocks more than 10,000 different types of vacuum tubes. The company is the world's only supplier of many of them, which helps explain why its gross margin is in the 35 to 40 percent range.

Richardson survives and prospers because vacuum tubes are vital parts of some older electronic equipment that would be costly to replace with solid-state equipment. In addition, vacuum tubes still outperform semiconductors in some limited applications, including radar and welding machines. The U.S. government and Generic Motors are big customers of Richardson.

Speed is the essence of Richardson's business. The company's Illinois warehouse offers overnight delivery to some 40,000 customers, processing 650 orders a day whose average price is \$550. Customers such as GM not really care whether a vacuum tube cost \$250 or \$35 what they care about is the \$40,000 to \$50,000 downtime loss that they face when a key piece of welding equipment isn't working. By responding quickly to the demands such customers and being the only major supplier of many types of vacuum tubes, Richardson has placed itself in a position that many companies in growing industries would envy a monopoly position. In 1997, however, new company, Westrex, was formed to take advantage of the growing popularity of vacuum tubes in higher stereo systems, and by 1999 was competing head to head with Richardson in some market segments. Clearly, competition can be found even in a declining industry.