other large computer firms.) Instead of spending its money on new computer technology, Dell waited until a new technology became a standard. Michael Dell explained that soon after a technology product arrived on the market, it was a high-priced, high-margin item made differently by each company. Over time, the technology standardized—the way PCs standardized around Intel microprocessors and Microsoft operating systems. At a certain point between the development of the standard and its becoming a commodity, that technology became ripe for Dell. When the leaders were earning 40% or 50% profit margins, they were vulnerable to Dell making a profit on far smaller margins. Dell drove down costs further by perfecting its manufacturing processes and using its buying power to obtain cheaper parts. Its reduction of overhead expenses to only 9.6% of revenue meant that Dell earned nearly US$1 million in revenue per employee—three times the revenue per employee at IBM and almost twice HP's rate.

Although the company outsourced some operations, such as component production and express shipping, it had its own assembly lines in the United States, Malaysia, China, Brazil, India, and Poland. A North Carolina plant had been opened in 2005 as Dell's third American desktop plant. Cost pressures had, however, caused management to rethink its manufacturing strategy. They closed the company's desktop plants in Texas and Tennessee in 2008 and 2009, respectively, and were planning to close the firm's last desktop assembly plant in North Carolina in January 2011. From then on, desktop assembly for the North American market would take place in Dell's factories in other countries and by contract manufacturers in Asia and Mexico. In Europe, the company closed its Ireland plant and sold its plant in Poland to Foxconn Technology, a unit of Hon Hai, the world's largest contract manufacturer. They then contracted with Foxconn for manufacturing services. In contrast to its global desktop manufacturing strategy, 95% of Dell's notebook computers were assembled in Dell's plants in Malaysia and China.

After its failed experiment with distribution through U.S. retail stores in the 1990s, management again changed its mind regarding its reliance on direct marketing. Over time, Dell's competitors had imitated Dell's direct marketing model, but were also successfully selling through retail outlets. A presence in retail was becoming especially important in countries outside North America. Sales in these countries were often based on the advice of sales staff, putting Dell's "direct only" business model at a disadvantage. In response, Dell began shipping its products in 2007 to major U.S. and Canadian retailers, such as Wal-Mart, Sam's Club, Staples, and Best Buy. This was soon followed by sales elsewhere in the world through DSGI, GOME, and Carrefour, among others, to number over 56,000 outlets worldwide.

Product Line and Structure

Over the years, Dell Inc. has broadened its product line to include not only desktop and laptop (listed under mobility) computers, but also servers, storage systems, printers, software, peripherals, and services, such as infrastructure services. By 2010, net revenue by product line was composed of desktop PCs (25%), mobility (31%), software and peripherals (18%), servers and networking (11%), services (11%), and storage (4%). Desktop PCs' net revenue dropped from 38% in 2006, with each of the other product lines (especially mobility) increasing as a percentage of total revenue. Although the 2010 gross margin for all Dell products was only 14.1% of sales, due to a lower average selling price, the gross margin for services, including software, was a much fatter 33.7%.

Dell's corporate headquarters was located in Round Rock, Texas, near Austin. In 2009, the company was reorganized from a geographic structure into four global business units based on customers: *Large Enterprise*, *Public*, *Small & Medium Business*, and *Consumer*. Its 2010 revenue by segment was 27% from Large Enterprise, 27% from Public, 23% from Small & Medium Business, and 23% from the Consumer unit. Interestingly, operating income as a percentage of total revenue totaled 9% for both Public and Small & Medium Business units,