

Hosting to the Rescue?

In their search for new products to sell along with their shiny new networks, Qwest and several other new carriers sank a lot of money into an Internet-era product called hosting. Hosting is the placement of data centers near Internet access points to house computer servers that are frequently accessed from the Internet. The idea of placing shared computers in common facilities was originally used as a way to make early mainframe computers affordable by more companies. It was most famously pioneered by Electronic Data Systems in the 1960s. But the time share model, as it was called back then, fell out of favor as smaller, more affordable computers gained power, as predicted by Moore's Law. As computers became smaller, more companies could afford their own computers and could build out the space required to house them. The model came back into favor as the Internet became popular and the computers that supported the most popular Web sites became constrained more by bandwidth than by the power or size of the computer itself.

Hosting was initially seen as a way to get around the lack (or expense) of last-mile bandwidth. If installing high-speed Internet circuits to a company's data center was too expensive, then the company could place its World Wide Web servers in a hosting center where high-bandwidth circuits could be shared. But that solved only half of the problem, and the easy half at that. Bandwidth at the Web site user's end of the connection was still constrained.

At the height of the dot-com boom, companies with market capitalizations incremented in the billions of dollars offered hosting and other web-site acceleration snake oil. Level 3, Exodus, Digex, Akamai, Digital Island, and Global Center were all companies that promised to make the World Wide Web work better. While each of them offered different software solutions, the hosters all had one thing that Web site owners needed; access to big Internet pipes. The hosters all boasted client lists including many large and powerful corporations. They played the dot-com game and appeared to have real-world assets. But no matter how much they greased the pig, it still wouldn't fit through the narrow passages of dial-up Internet access that were the only connections available to most end-users.

Perhaps it was investors' reaction to frustration with the slow response time of the dial-up connections. Perhaps it was just the greed of the time, but the stocks of Internet hosting and related companies became some of the biggest stars of the dot-com era. They also fell the hardest.

Akamai, a hoster that specialized in caching content around the Internet so that it would be closer to a user when requested, went public in October 1999 after being in business just less than 15 months. In its short pre-IPO history, it had less than \$4 million in revenue and accumulated net losses of \$60 million. In typical dot-com fashion, Akamai went public with much fanfare. The stock opened its first day of trading at \$110 per share. Within 10 weeks, the shares rose to more than \$345. Stocks like those of Akamai were the first to de-pressurize when the dot-com bubble burst. The stock went from \$305 per share on March 10, 2000, to \$56 per share on April 17, 2000. The stock sank further over the next three years, hitting a low of 56 cents per share on October 7, 2002.

The stock defied logic for a long time, though. In late 2003, the stock traded as high as \$14 per share, giving Akamai a market capitalization of more than \$1.5 billion. Through 2003, the company still had not made a profit. The company averaged barely \$150 million in revenue from 2001 to 2003 and accumulated net losses of \$3.6 billion.

The entire software development and server infrastructure put together by the hosters could not make their business model any more lasting than that of the mainframe time share companies of the 1960s. In fact, Moore's law was operating at a much higher level, having continuously halved the cost of a given amount of computing power every 18 months for more than 30 years since the time-share business model had been in favor.