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## Apple Computer: The iPod, the iMac, and the Business **Lessons of Closed Systems**

teve Jobs has had much to celebrate lately. But the Apple CEO was particularly happy in February 2006 when he announced that the iTunes Music Store had sold its billionth song, to a teenager in Michigan who had bought a copy of Coldplay's "Speed of Sound." That milestone is all the more impressive when you remember that Apple has numerous competitors in the digital music world. Yahoo Music Unlimited and the legal incarnation of Napster are gunning for iTunes customers. Sony and Samsung are trying to create iPod slayers.

And the field is only getting more crowded. By the summer of 2006, Amazon may launch a digital music service with a branded MP3 player, possibly made by Samsung. It is already being referred to in the industry as the aPod. Amazon won't discuss its plans, but sources tell Fortune that Amazon is targeting people over 40 years old—it refers to them as "the NPR crowd" who aren't as likely to own iPods as MySpace users.

Yet Apple's challengers all face the same problem: Jobs's company will no doubt dominate the digital music market for years to come. That's because Apple has learned its hard lesson about closed systems.

In the microcomputer desktop market, Apple shrank from an industry leader to a niche player because it designed closed systems with proprietary hardware and software that were often incompatible with thousands of application software products that proliferated in the PC universe. Microsoft set out to replicate the basic features of the Macintosh operating system in each succeeding version of its Windows OS, encouraged software developers to write apps for it, and then licensed Windows to mass-market PC

## FIGURE 3.13



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Source: John Flournoy/MHHE DIL.

manufacturers like Dell, HP and IBM. When the technology dust settled, Apple ended up with barely 3.2 percent of the U.S. desktop market.

And that's the way it was when Apple introduced the first iPod in October 2001. The iPod was another closed system, but this time Steve Jobs created a closed system with mass appeal. Fulcrum Global Partners estimates that iPods now account for 73 percent of the 30 million MP3 players currently in use in the United States. That's partially because Apple released versions of the iPod and iTunes for Windows. But it's also because Jobs cut a deal with the Big Five record companies in 2003 that locked up his device. The music companies wanted to sell songs on iTunes, but they were afraid of Internet piracy. So Jobs promised to wrap their songs in Apple's FairPlay-the only copy-protection software that is iPod-compatible.

Other digital music services such as Yahoo Music Unlimited and Napster reached similar deals with the big record labels. But Apple refused to license FairPlay to them. So those companies turned to Microsoft for copy protection. That satisfied fearful music companies, but it means none of the songs sold by those services can be played on the wildly popular iPod. Instead, users of the services had to rely on inferior devices made by companies like Samsung and San Disk that supported Microsoft's Windows Media format.

The situation has been a disaster for Apple's competitors. iTunes holds a commanding lead over its rivals, selling more than 75 percent of all digital songs, according to NPD Group, a company that provides tracking of consumer music purchases. The second-place digital music store, eMusic, can't sell any major-label hits because it refuses to copy-protect them. Instead, it relies on independent labels for content. But eMusic has a 9 percent share of the market, largely because you can play its unprotected MP3s on an iPod. Meanwhile, Rhapsody, Napster, Sony, Wal-Mart, AOL, and Yahoonearly all of which have deals with the major labels but are stuck with Microsoft's technology-are fighting over the remaining 16 percent of the digital music-store market.

Most of these music services argue that they have something to offer music lovers that Apple doesn't: digital music subscriptions providing customers the chance to listen to more than a million songs for a monthly fee of roughly \$10. You can't burn these songs onto CDs, and they become unplayable if you don't pay your bill. But Napster argues that it is cheaper to listen to music this way than to buy thousands

True enough. But the software that Microsoft developed to allow this heavily protected music to be moved to portable devices has been so buggy that a lot of subscribers have given up and just listen to songs on their computers.

Poor Microsoft. Nearly every music service and MP3 player maker other than Apple supports Windows Media and its copy-protection software. But not enough music