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Technology Strategy and Management

Platforms and Services: Understanding the Resurgence of Apple

Combining new consumer devices and Internet platforms with online services and content is proving to be a successful strategy.

ON MAY 27, 2010 the technology world experienced a remarkable passing of the baton: Apple went beyond Microsoft to become the world's most valuable technology company in terms of stock market value. It was also on that day the second most valuable U.S. company overall, behind only Exxon Mobil.^a Given Apple's struggles with operating losses and a steep decline in market value in the early 2000s, this resurgence is extraordinary. It reflects not only a series of product innovations but also a shift in strategy that takes advantage of two important trends in the world of high technology: the rising importance and value of an industrywide *platform* company with a large and growing global ecosystem for complementary innovation (versus a standalone *product* company that has to do the lion's share of innovation on its own); and the rising importance and value of services, especially automated services that deliver the digital content and software applications that make these hardware products and platforms so valuable to users.

In terms of platform leadership, Apple has become more like archival Microsoft, but Apple remains a far more innovative and pioneering product company as Steve Jobs and his team have successfully blended computers with consumer electronics

and telephony. The latest transformation began during 2001–2003 with the iPod and iTunes music service. Apple then gained speed from 2007 with the iPhone and App Store. In 2010, the innovations continued with the iPad, which can run existing iPhone ap-

Microsoft and Apple financial comparison, 2000–2009. Units: \$million, %

| | Microsoft | | | Apple | | |
|------|-----------|-----------------------|-----------------------|----------|-----------------------|-----------------------|
| | Revenues | Operating Profits (%) | Year-End Market Value | Revenues | Operating Profits (%) | Year-End Market Value |
| 2009 | \$58,437 | 34.8% | \$267,323 | \$36,537 | 21.0% | \$190,980 |
| 2008 | 60,420 | 37.2 | 149,769 | 32,479 | 19.3 | 118,441 |
| 2007 | 51,122 | 36.2 | 287,617 | 24,006 | 18.4 | 74,499 |
| 2006 | 44,282 | 37.2 | 251,464 | 19,315 | 12.7 | 45,717 |
| 2005 | 39,788 | 36.6 | 233,927 | 13,931 | 11.8 | 29,435 |
| 2004 | 36,835 | 24.5 | 256,094 | 8,279 | 3.9 | 8,336 |
| 2003 | 32,187 | 29.7 | 252,132 | 6,207 | (loss) | 4,480 |
| 2002 | 28,365 | 29.2 | 215,553* | 5,742 | 0.3 | 4,926 |
| 2001 | 25,296 | 46.3 | 258,033* | 5,363 | (loss) | 7,924 |
| 2000 | 22,956 | 47.9 | 302,326* | 7,983 | 6.5 | 5,384 |
| 1995 | 5,937 | 35.3 | 34,330* | 11,062 | 6.2 | 4,481 |

Notes: Fiscal year data. Market value is for calendar year, except when marked with asterisk, then fiscal year, and except for 2009, when market value is as of February 12, 2010.

Source: M. Cusumano, *Staying Power: Six Enduring Principles for Managing Strategy and Innovation in an Unpredictable World* (Oxford University Press, 2010), p. 38. Derived from company Form 10-K annual reports.

a M. Helft and A. Vance, "Apple is No. 1 in Tech, Overtaking Microsoft," *New York Times*, May 27, 2010, p. B1.



plications as well as elegantly display digital content, including books, magazines, and video.^b

Access, Control, and the User Experience

We have seen Apple rise even though its products and services remain under tight corporate control compared to more “open” platforms championed by Microsoft and Intel (the Win-Tel OS and PC device), the Linux community (Linux OS), Nokia and the Symbian alliance (mobile OS and cellphones), and Google (Android, Chrome, and the Open Handset Alliance for mobile applications as well as the Google OpenSocial APIs for social networking applications). For example, Apple has barred some applications from running on the iPhone, including Google Voice. It does not permit its devices to run the most common technology for handling video on the Internet—Adobe Flash. Legal use of the iPhone remains limited to official Apple partners such as AT&T in the U.S. Google

also has criticized Apple’s programming rules for the iPhone and iPad that prohibit application developers from using Google’s advertising technology.^c In my terminology, these kinds of restrictions make Apple’s platforms neither fully open (such as Linux) nor fully closed (such as a proprietary system owned and dominated by one company), but rather “closed, but not closed,” or perhaps “open, but not open.” That is, the platforms are based on proprietary technology, and Apple controls the user experience as well as what applications or content or service contracts can operate on its devices. At the same time, though, Apple has been gradually loosening up access for outside application developers and content providers, especially during 2009–2010.

In an earlier column (“The Puzzle of Apple,” September 2008), I admitted to being frustrated by Apple’s historical reluctance to open up the programming interfaces to its new products and provide easier access to its services or to license its superior software operating system. It pursued this “closed” approach most

famously with the Macintosh, introduced in 1984, but continued this strategy with the initial versions of the iPod, iTunes, the iPhone, and the App Store. Nevertheless, the Apple ecosystems are now as vibrant as any in high technology. Not only are there thousands of applications and accessories available for the iPod made by a wide variety of companies. There were also some 225,000 applications for the iPhone as of mid-2010, many of which work on the iPod and iPad as well as the Macintosh. Apple also was receiving some 15,000 submissions for iPhone applications each week in 30 languages and approving about 95% within seven days.^d By contrast, Google’s Android community had only built approximately 50,000 applications as of mid-2010. To be sure, Apple and Google both trail by far the millions of applications built for Microsoft Windows since the early 1990s. But most computing devices are now mobile phones, and that is where the action lies in software applications development.

^b This article is based on Chapter 1 of M. Cusumano, *Staying Power: Six Enduring Principles for Managing Strategy and Innovation in an Uncertain World* (Oxford University Press, 2010), 30–31, 34–44.

^c S. Morrison and I. Sherr, “Google Blasts Apple over iPhone Ad Changes,” *Wall Street Journal*, June 9, 2010; <http://online.wsj.com/>

^d G. Hora, “95% iPhone Apps Approved in 7 Days,” *Cooltechzone.com*, June 7, 2010; <http://www.cooltechzone.com/2010/06/07/95-iphone-apps-approved-in-7-days/>

Synergies and Network Effects

It is possible that Steve Jobs planned all along to open up the iPod and iPhone programming interfaces and allow more open use of the iPhone beyond a few select partners. The reality is that Apple finally seems to have figured out how to create synergies and powerful network effects across its products and complementary services (see my earlier column “The Evolution of Platform Thinking,” January 2010). The iPod, iPhone, and iPad devices, as well as the iTunes service, all work particularly well with the Macintosh computer, and have some interoperability with Windows. And providing its own essential complements—like Microsoft has always done for DOS and Windows—has become critical to Apple’s success. Apple’s products, despite their elegant designs and unique user interfaces, are not very valuable without external digital content such as music and video files and a variety of applications and accessories. Apple cleverly found a way to provide the key complementary platforms itself—the iTunes Store and the Apple App Store, and now an iBooks store. Moreover, these are *automated* services, with low costs and high potential profit margins. Apple is being smart and encouraging the ecosystem development by sharing most (about 70%) of these revenues with the content owners and application developers.

Apple’s financial break with its past is truly astounding (see the table on the preceding page of this column). In 1995, Apple was nearly *twice* the size of Microsoft in annual revenues (approximately \$11 billion to \$6 billion) but its market valuation was only about *40%* of revenues. By contrast Microsoft’s value was nearly *six times* revenues—reflecting Microsoft’s greater growth prospects as well as operating profit margins that were also about six times Apple’s (35% versus 6%). Indeed, Apple shrunk in subsequent years whereas Microsoft’s sales exploded as Windows 95 became the basis for a new generation of desktop PCs as well as Internet-enabled consumer and enterprise products.

When iPod sales began to surge in 2005, Apple’s revenues, profits, and valuation also began to surge. In fact, by moving beyond the computer business and into consumer electronics

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and then mobile phones, Apple’s revenues have risen several times faster than the overall PC industry. Its sales jumped from \$6.2 billion in 2003, with an operating loss, to over \$36 billion in 2009, with a 21% operating profit margin. In addition, Macintosh computers in 2009 made up only 38% of Apple’s revenues, down from 72% in 2003. The iPod accounted for 22% of 2009 revenues, music products 11%, and the iPhone approximately 18%. Software and services as well as hardware peripherals generated the other 12% of sales. It is striking how Apple’s market value remained less than its annual revenues for so many years while Microsoft’s market value was 8 to 13 times revenues. But here too, by 2005, the tide had turned. Apple’s value has continued to rise, reaching five times revenues by the end of 2009 and then finally surpassing Microsoft, whose value has been flat or dropping for a decade due to commoditization of PC hardware and software and its inability to move much beyond the PC. In particular, Microsoft’s attempts to emphasize tablet computers as well as copy the iPod with the Zune digital media player and compete in smartphones with Windows devices have failed miserably.

Current Situation

Not everything is completely smooth for Apple, however. The company has been clashing with Google and its rival mobile OS (Android). Google is the champion of open systems and always tries

to force semi-open or semi-closed platforms to “open up” so that it can get unrestricted access to information on user behavior through searches and thereby sell more and better targeted ads. Apple is also clashing with Adobe, refusing to support the Flash technology on the iPhone or the iPad, even though Flash is used for the vast majority of videos and advertisements on the Web. The U.S. Department of Justice and the Federal Trade Commission are reportedly reviewing Apple’s restrictive policies to see if they violate antitrust laws.^e Apple has near-monopoly shares (approximately 70% or so of the market) for both digital devices (iPod) and digital content services (iTunes). But, for the moment, users continue flocking to Apple products because of their elegance and the superior user experience.

Apple is still less profitable than Microsoft because hardware devices are more expensive to replicate than software products. Apple also has dropped its prices to counter copycat smartphone products from Nokia, Samsung, HTC, and other firms. In the long run, the most valuable part of the Apple franchise might end up being its online services and content platforms (iTunes and App Store). The hardware products may simply become platforms to drive revenue from selling or aggregating high-margin automated digital products. Apple’s acquisition in December 2009 of Lala, the streaming Web music service, also provides “cloud-like” technology that could enable Apple customers to store their music, photos, or videos and listen to or view their content from different devices, anywhere and anytime. In short, rather than in a Microsoft world, we are clearly now living much more in a world defined by Apple as well as Google, Facebook, and other firms that have successfully married new consumer devices and Internet platforms with a variety of online services and content. ■

^e J. Kosman, “An antitrust app: Apple may be in the eye of a regulatory storm,” *New York Post*, May 3, 2010; <http://www.nypost.com/>

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