■ THE PUBLISHER'S VIEW

The Industry Needs Strong Number Twos

Without Strong Competition, Intel and Microsoft Won't Move as Fast

It is a fact of life that Intel and Microsoft dominate today's computer industry. One can debate whether this is good or bad—indeed, it is both—but the fact is unavoidable.

Windows advocates often argue that this dominance makes it foolish to use anything else. Driven in part by this logic, the press has indulged in unrelenting attacks on Apple, some even going so far as to question whether the company will survive. This made for some sensational stories that ultimately can only damage the industry. We too have been critical of Apple—but with the goal of prodding the company to improve, not pushing it out of existence.

Apple's fate is dependent, in part, on whether members of the industry are willing to give the company some slack and show some commitment to supporting the only viable alternative to Windows. If software developers and computer users accept the argument that the dominance of Windows makes it the only reasonable choice, this will become a self-fulfilling prophecy—and the result will be a significant slowing of progress in personal computers.

There can be little question that, without the Macintosh, Microsoft would not enhance Windows as quickly or as effectively. As many have pointed out, Windows 95 is a lot like the Macintosh, and this is no coincidence—Microsoft has learned from what Apple has done, and it has been motivated to improve Windows by the competition from Apple.

Competition from the Macintosh has affected PC hardware development as well. The plug-and-play initiative, a joint effort of Intel and Microsoft to improve the PC's miserable ease-of-use when adding peripherals, was fueled by Apple's aggressive promotion of its ease-of-use advantages. The Mac's superior software environment for multimedia and communications has also been a strong driver of Intel's and Microsoft's efforts to improve the support for these functions in Windows.

Intel and Microsoft eventually might have created plug-and-play anyway—and eventually, Microsoft would have done something like Windows 95 and DirectX. But there is little doubt that these developments would have taken longer if Macintosh had not been a strong competitor.

The lack of strong competition has already taken a toll on Microsoft's applications. The dominance of the Office suite has made it tough for any competitors to prosper in any of the included applications, and this takes the pressure off Microsoft to enhance them aggressively. Microsoft apparently puts little effort into performance-tuning its applications—after all, performance doesn't matter when you have no strong competitors, and tuning takes time and effort.

Competition is equally important when it comes to microprocessors. In the past few years, Intel has dramatically picked up the pace of advances in microarchitecture and process technology, and it has driven major advancements in the PC system architecture. In the absence of strong competition (real or potential), Intel would not have moved as quickly. Sources at Intel confirm that it was the threat of PowerPC that lit a fire under Intel's Pentium and Pentium Pro efforts. The threat of x86-compatible processors from AMD, Cyrix, and others no doubt provided additional incentive. In addition, the x86 competition put pressure on Intel to cut prices aggressively.

The choices made by computer makers and buyers can have a significant effect on whether the Intel/Microsoft duopoly becomes even more powerful, or whether stronger competition emerges. Making good decisions requires a delicate balance of short-term and long-term thinking. Making bold philosophical choices in support of the best long-term shape of the industry won't do a lot of good for companies whose decisions don't serve their short-term interests well enough to keep them in business.

Compaq provides an interesting case study. Of all the PC vendors, Compaq is the one that has most visibly pursued a strategy of supporting Intel alternatives to create a more competitive microprocessor market. As Cyrix's 6x86 schedule slipped a bit, AMD's K5 schedule slipped a lot, and Intel's Pentium Pro became an essential element of Compaq's continued success in servers, the company has made peace with Intel and has become quiet about its support for alternatives. This is simply pragmatism; sources suggest that Compaq executives are no happier with Intel than they were 18 months ago, but they have had to protect their business.

No company can afford to make bad near-term choices in pursuit of a philosophy of promoting industry competition. But a significant number of decisions are based solely on dominance, without any consideration of the larger issues or even a full evaluation of the technical and business merits—whether it is to buy a Windows system instead of Macintosh, or to develop software only for Windows, or to buy (or build) PCs only with Intel microprocessors. These are the easy, path-of-least-resistance decisions, but before making such choices, one should think twice about where this will lead the industry.