Mac on the Desktop: A Slow Fade

For PowerPC, It Isn't Yet "Game Over," But Future Looks Bleak

In a recent column (see MPR 11/17/97, p. 28), I explained my reasons for concluding that Intel's IA-64 processors have a good chance of displacing RISC processors in many, if not most, workstations and servers. As countless readers have pointed out, I neglected to address the Macintosh in that column; because my intent was to focus on workstations and servers, I simply pointed out that IBM will add IA-64 systems to its lineup. There is, of course, much more to the PowerPC story.

The situation with Apple, the Macintosh, and PowerPC is worth addressing, to be sure, and I am devoting this column—a special triple-length edition—to that subject. Mac devotees aren't likely to be any happier with me, but such are the hazards of stating one's opinions publicly.

I'm writing this column on a Macintosh. I switched from a PC to a Mac about seven years ago, and since then my company has bought a few dozen Macs. I still find the Mac environment to be superior to Windows in some ways, and in general, I think Apple builds fine machines. The advantages of being the only company developing PC hardware and software together are considerable, and they have enabled Apple to produce more refined systems than the Windows PC industry has been able to deliver.

I was, for years, enthusiastic about PowerPC, and I continue to believe in the fundamental technical superiority of RISC architectures over the x86. And I think the PowerPC 750 is easily the best microprocessor used in general-purpose computers today.

That said, I have to say I have lost faith in the future of the Macintosh. Looking back on the changes in the PC industry during 1997, I think the most significant event was the Macintosh's decline past the point of no return.

I have a PC on my desk next to my Macintosh, and I am gradually using it more and more. Our company has a mix of Macs and PCs; today, the Macs dominate and the PCs are the oddity. Within two years, I expect this situation will be reversed. There is no single reason why I have largely given up on the Mac, but there are many, many smaller reasons—and none on the other side that are compelling enough to get me to stick with it.

Some people view faith in the Macintosh as a religious issue, but the Mac is a tool, not a deity. My allegiance to tools lasts only as long as they serve me better than other tools. I would much rather be able to confidently stick with the Mac—it would save a lot of trouble—but it seems foolish.

Decline of a Once-Great Company

The history of Apple is truly a sad story. Apple's management has made an astounding number of blunders during the past decade. An awesome amount of research has been poured down the drain, and countless opportunities have been missed. Apple has been such a frustrating place to work that hundreds of top-notch people have left, greatly diminishing the company's human capital. That Apple has survived as well as it has, in spite of its management, is a testament to the intrinsic quality of the 13-year-old platform.

The story of how Apple could have dominated the OS market has been told often enough, and I won't repeat it here. Skeptics dismissed Apple's licensing program (see MPR 12/5/94, p. 8) as being too little too late, but I remained optimistic about it for a long time. Power Computing showed that a non-Apple Mac maker could be successful by increasing the diversity of machines available—even though it had to depend on Apple's chip sets and system designs. I had high hopes that the CHRP platform would enable third-party chip sets and independent hardware innovation.

I was already very concerned about the Mac's fate, however, when Steve Jobs terminated the licensing program and killed the CHRP platform during the summer (see MPR 9/15/97, p. 5). This was the turning point in my ability to sustain any optimism—and the end of my already waning willingness to base our company's infrastructure on the Mac. With this action, Jobs ended any real chance of increasing the Mac's market share significantly. We are back to a situation where all Mac hardware innovation depends on Apple. Where the only system configurations are the ones Apple chooses to offer. Where all Macs are priced the way Apple wants to price them. (Yes, I know that there are a couple of licensees still in business, but the writing is on the wall.)

By making the Mac proprietary again, Apple might be able to build a profitable niche business—but it has seriously undermined the viability of the platform as a mainstream solution. Building a profitable business as a niche supplier is fundamentally in conflict with creating a widespread platform, and Jobs has made it clear which path he has chosen. The inevitable result, I believe, will be a downward spiral of diminishing software support and shrinking market share.

I don't think adopting a direct, Web-based sales and distribution model is going to help Apple gain market share. It may be a necessary defensive move, and a nice way of optimizing a niche business—but no one is going to buy a Mac instead of a PC because they can buy it over the Web. Jobs makes a big show of targeting Michael Dell—but direct sales

of Macs target only Apple's dealers. To "protect the dealers," Apple's direct sales will be at list price—which doesn't fully placate the dealers but does eliminate one of the major reasons that people buy PCs from vendors such as Dell.

I guess I shouldn't be surprised at what Jobs has done. His eccentric style has earned him a high profile, but it has also led to flawed products—despite his zeal for perfection. Remember, this is the same man who refused to allow any slots in the original Macintosh and wouldn't include a floppy disk drive in the original NeXT machine. And after what he did to the Mac licensees, will future partners be willing to trust him?

Apple needs vision and strong leadership, and in that sense, Jobs' return helps. But it is also troubling that he isn't willing to take the permanent CEO job, and his presence on the board—along with the abrasive Larry Ellison—is making it tough to get any top-notch executive to take it.

The Elusive OS Strategy

Apple's operating-system strategy is as much of a mess as its hardware strategy. It has been many years since Apple has made meaningful improvements to its operating system. It has developed one technology after another—OpenDoc, QuickDraw GX, etc.—that has gone nowhere. It has started one project after another—Pink, which became Taligent, and then Copland—in an attempt to replace the aging Mac OS. None has seen the light of day. The recent System 8 release is a true yawner that fixes none of the Mac's deep-seated problems (such as the sluggishness of the user interface, the lack of memory protection, the weak memory-management system, and the lack of pre-emptive multitasking).

The future hope is now Rhapsody. Indeed, Apple has just shipped the alpha release of this new OS. Rhapsody just might turn out to be a great OS—but then again, it might turn out to be no more significant than Taligent's or NeXT's operating systems. Even Jobs has shifted the company's emphasis back to Mac OS, positioning Rhapsody as a solution only for publishing and other high-end applications. I find the lack of a credible plan to make fundamental improvements in Mac OS very troubling.

Even if Rhapsody turns out to be a fine OS, it is likely to have very little application support, and it will take quite a while to mature. I don't see a strong reason to continue with the Mac platform and gamble that Rhapsody will turn out to be of high quality and well supported by applications. Basing future plans on it just doesn't seem like a risk worth taking.

If Rhapsody does turn out to be wonderful, I can always run it on my x86-based PCs. In the meantime, there are many applications that aren't available on the Mac, but very few that are aren't available under Windows. Already, the multiyear lag between the release of key new versions of top applications—notably Microsoft Office—on the PC and on the Mac is creating big problems. Microsoft says this will change, but I am skeptical; Microsoft focuses ruthlessly on its self-interest, and to serve this master it must put priority on the Windows versions. And as we build new Web-based business systems, limiting ourselves to software that is available on the Mac just doesn't seem to be a smart choice.

Collapse of the Infrastructure

There are disturbing signs that the Mac infrastructure is weakening. Sources inside Apple's developer-support organization reveal that there is very little in the pipeline as far as compelling future applications. The chance that there will be any important applications not available for Windows, on the other hand, is vanishingly small.

The fate of the Mac publications is a telltale sign of the ill health of the Mac market. These publications became such weak businesses that arch-enemies Ziff-Davis and IDG formed a partnership, combining *MacUser* and *MacWorld* into a single publication, to keep at least one magazine viable for a while longer. Even the combined publication is quite thin—as is *MacWeek*, also published by the partnership—because there are few advertisers to buy pages. Makers of Mac compatibles had been the biggest purchasers of advertising in these publications, and that source is drying up.

Thriving in Niches?

In recent years, as Apple executives have recognized the impossibility of competing against Microsoft as a broad, general-purpose platform, the company has tried to shift its focus to continuing its strength in markets where its share is much higher: home, education, and publishing. Many Mac users don't fall into these categories, and they have been slow to realize that no matter how loyal they may feel, Apple itself no longer expects them to be a significant part of its long-term business.

Apple's ease-of-use advantages have been a key factor in its success in the home market. Indeed, looked at in isolation, one could still argue today that a Mac is a better choice for a neophyte computer buyer. But taking things in context, I am no longer able to make this recommendation. The Mac itself is a better machine, but it has two big problems: the available software is much more limited, and the chance that many of one's friends (who form an essential support group for a new computer user) have Macs is small. Furthermore, there is an enormous pull for home users to go with the mainstream standard, so the home computer is compatible with the one at work and at school.

For the same reasons that I don't believe Apple can retain a strong position in the home, I think its position in education will decline. Institutions move slowly, so Apple may be able to hold on here for longer. An additional problem for Apple, though, is the relatively high prices of its machines; Apple has no counter today for the very effective low-cost PCs that are now widespread.

Publishing is the one market where Apple might be able to maintain its strength. Rhapsody, aimed at high-end systems, does nothing for the home or education markets, but it could be a great solution for publishing. The Windows

platform remains weak in this market, and there is a substantial installed base of Macintosh systems that graphic arts professionals aren't eager to replace. Even in PC-centric environments like our parent company Ziff-Davis, most of the publishing work is done on Macs.

The publishing niche is too small, however, to sustain Apple. It is also doubtful that vertical-market solutions based on nonstandard platforms will survive in the long run. Microsoft recognizes the weaknesses of the Windows platform in the publishing environment and is fixing them. It may take years, and it may take years more for the installed base to migrate, but I have a hard time seeing a long-term future for Macintosh even in this strongest of niches.

Beyond Macintosh: NCs?

What about Apple beyond Macintosh? At one point, there were high hopes that Newton would be the engine behind the company's next stage of growth, but that now seems most unlikely. A streamlined version of Newton could have had the market success of the Palm Pilot, but following an all-too-familiar pattern, Apple had good technology but failed to create the right products with it. Pippin could have been WebTV—indeed, some of the same people are behind both products—but once again, Apple didn't get the product right or put adequate resources behind it.

Network computing is rumored to be Apple's next great hope. It is possible that NCs will be a significant force in the evolution of computing, and if Apple gets everything right, it could play a role here. Whether it has real potential to take off quickly enough to save Apple, however, is questionable—and it isn't likely to do anything for the Mac platform.

PowerPC's Future Is Embedded—And IBM

PowerPC has played a key role at Apple. Apple deserves credit for making a successful transition from CISC to RISC; although there were some blunders along the way, overall this transition went remarkably smoothly.

Unfortunately, having made the transition, Apple was never able to get as much benefit from PowerPC as it hoped. In response to the PowerPC threat, Intel turned up the heat on its design and manufacturing organizations, and the gap between Pentium and PowerPC has been modest—especially on the integer applications that dominate most users' workloads. The promised 2:1 performance advantage never materialized. The joint IBM/Motorola design facility, Somerset, was hamstrung by its dual-headed management structure and failed to produce follow-on designs as quickly as it should have or with the performance it had expected. As a result, the benefits of the PowerPC processors weren't nearly great enough to cause many people to switch platforms.

Today, the PowerPC 750 is an extremely cost-effective chip, delivering impressive performance from a small die size with modest power consumption. It is especially effective in notebooks. But because Apple is the only manufacturer of such systems, the range of Mac notebooks remains vastly inferior to that of PC notebooks when features other than raw processor performance are taken into account. This has been the curse of Apple's strategy: even when the technology is superior, operating within a proprietary environment so reduces choice and support compared with the thriving PC industry that the net result is often a lower-value solution.

The 750 is a nice processor, but it also illustrates a huge problem with the current chips: they are too small. Small chips are great for low cost—but where are the larger, higher-performance ones? The PowerPC team has delivered great price/performance, but not the great absolute performance that had been promised (and should have been possible).

PowerPC has a good chance to thrive as an embedded architecture, and IBM will continue to develop high-end implementations for its own workstations and servers. But with Windows NT support abandoned and Apple in deep trouble, its chance for a growing role on the desktop appears to be over. It isn't IA-64 that is PowerPC's problem; it is having a hard enough time competing against x86.

PowerPC has been essentially irrelevant to Intel; all it accomplished, from a microprocessor perspective, was to replace a Motorola processor with one from IBM and Motorola. The Mac's market share has declined since the PowerPC transition, so PowerPC does not hold even as much of the market as the 68000 did. This is particularly ugly for Motorola, which now must fight IBM in this shrinking market.

Apple Needs a Partner

I hate the thought that we're going to end up with no significant competition for Microsoft. It seems inevitable that this will result in slower improvements in system software and fewer innovations reaching the market. It is almost enough to make me stick with the Mac platform. But I can't compromise my personal productivity, and my business's effectiveness, in the hope that the Mac will flourish, because it just doesn't seem likely.

I have no love for Microsoft or Intel, and I am very concerned that diminishing competition will hamper the industry's growth—but there is an undeniable benefit to pervasive standards. In some sense, Apple's most fundamental problem, perhaps, is that a modestly superior technology is still an inferior solution if it lacks synergy with the mainstream. The Mac just isn't enough better to justify its isolation.

In the end, I don't think Apple will survive as an independent company. It has been down the aisle more than once, only to get cold feet at the last minute or be jilted by its fiancee. Many Apple executives have believed for years that a merger was the only viable strategy. The question now is whether Apple has enough charm left, or any suitors that haven't already been alienated by past discussions, for such a marriage to occur. M

See www.MDRonline.com/slater/mac *for more on this subject. Macintosh fans who need to vent their anger should send mail to Apple, not to me. I welcome cogent feedback at* mslater@mdr.zd.com.