# Apple Stronger, Not Out of the Woods

# Profits, iMac Are Good News, But Not Good Enough To Stop Mac Decline



In the fifteen months since I last wrote about Apple (see MPR 12/29/97, p. 25), I've received a steady stream of messages from Apple fans asking if I've changed my opinion. Look at the wonderful reception the iMac is getting, they say. Look at the way the PowerPC 750 blows away

Pentium II. Look at the profits. Look at IBM's superior copper process.

Unfortunately, I still don't find the picture so rosy. Steve Jobs deserves a lot of credit for pulling Apple out of a tailspin that could have sunk the company. Now that Apple is making money, it has some breathing room. Apple has a good chance to prosper by building on its extraordinary consumer brand and diversifying beyond the Mac, but the Mac itself seems to me to be a platform with a limited future.

#### Profitable, But Market Share Still Small

Apple has returned to profitability largely by slashing expenses; its unit volumes are still well below its past high. According to ZD Market Intelligence, Apple shipments peaked at 4.6 million units in 1995 before plummeting to 2.6 million in 1997. In 1998, Apple rebounded to a little more than 3 million units, still only 65% of its 1995 shipments. Meanwhile, the total PC market grew more than 60%, so Apple's share fell by more than half from 1995 to 1998, even with the iMac's success.

In the U.S. dealer, retail, and mail-order channels, where Apple is strongest, Apple's share doubled over the course of 1998, hitting 6.8% in the fourth quarter. When looking at all channels worldwide, however, we see that it only briefly exceeded 3%. Apple's share did grow, but it is still awfully small. Although Apple's unit shipments continue to increase, the company is struggling to grow as fast as the overall market, now that the step-function increase from iMac is past, leading to a stagnant market-share position.

### Toasting Pentium II?

So what about processor leadership? To read Apple's ads, you'd think this was a great strength. The PowerPC 750 is an outstanding chip; it delivers very good performance from a small die. The 750 is not, however, the dramatic performance leader Apple makes it out to be. Apple persists in using Bytemarks as the centerpiece of its performance positioning, despite the fact that this benchmark has been thoroughly discredited as a measure of Macintosh application performance. Application performance is what matters, and it is no

coincidence that there are very few application-based benchmark results in Apple's literature or on its Web site. Apple's persistence in relying on this benchmark is little short of outright deception. If the Mac really is twice as fast as Pentium II systems, why isn't Apple's Web site full of examples that show this?

Then there is the issue of IBM's copper process. There is no doubt that copper metallization is a significant advance in semiconductor technology, but it is only one factor. Copper captured the popular imagination, but to hear people talk about it, you'd think IBM had replaced the silicon itself with copper, and that no one else had a clue. IBM chose to implement copper in its 0.25-micron process; Intel is waiting until the 0.13-micron generation. Copper metallization presumably delivers some speed advantage to the IBM process, but it is not overwhelming.

Intel is shipping 500-MHz Pentium III processors today. Even AMD is shipping 450-MHz processors. Yet the fastest PowerPC processor IBM ships runs at 466 MHz, and the highest speed available in an Apple system is 400 MHz. In the much-praised iMac, the clock speed is only 266 MHz. The 750 delivers slightly higher performance than Pentium II at the same clock speed (according to SPECint95), so it is roughly keeping pace, but a two-to-one lead is fantasy.

Apple's processor position should improve when it ships systems based on the G4 processor this summer, but the gains may not be long-lasting. The G4 isn't really a new core; it is a 750 (G3) with the AltiVec instruction-set extensions, a faster FPU, and a bigger L2 cache (see MPR 11/16/98, p. 17). On multimedia applications, the G4 has great potential—assuming there is enough software that supports the extensions. AltiVec appears superior to Pentium III's Streaming-SIMD Extensions, but, like SSE, it is of no benefit to software not written to support it.

Apple, presumably, will use AltiVec in its system software, and that should give Apple's graphics and video performance a nice boost. But Apple isn't able to launch a software-developer-support program for AltiVec that comes close to the magnitude of Intel's Pentium III program; it has to carry the costs of any such program over a much smaller revenue base.

The longer-term picture remains troubling. IBM is developing a high-end PowerPC chip, code-named GigaProcessor, but it is designed for servers and will be too expensive for a Macintosh (and IBM isn't expected to offer the chip to other manufacturers, in any case). IBM's chip division has focused its PowerPC efforts on the embedded market, which will yield

chips of no value for Macs. Motorola, too, is focused on embedded applications. Although Motorola will continue to develop chips for Apple, how much money can it justify spending to serve a market for a few million chips per year? Far, far less than Intel invests in its x86 chips, not to mention what AMD and others are spending.

Thus, Apple can't distinguish itself today on the basis of processor performance, and, in the long run, this situation is more likely to get worse than to improve. The best that can be said is that, at least for now, processor performance is not a hindrance to Apple's success.

#### The Incredible iMac

Much of the public perception of Apple's recovery comes from the iMac. Apple deserves credit for breaking the mold of boring desktop computers, but pretty plastic goes only so far. The iMac is colorful and rounded, but it is still clunky. The new mouse is pretty but a usability disaster; Apple seems to have put a higher priority on an eye-catching design than on ergonomics. The amount of attention Apple got for the amazing innovation of offering five colors of plastic shows how horribly dull personal-computer designs have become; all the attention gained by the iMac is more an indictment of the rest of the PC industry than evidence of great innovation at Apple.

The iMac did achieve two very important goals: it rekindled the public's love for Apple, and it delivered the most approachable, friendly personal computer yet. As a result, the iMac brought new users into the Apple fold, something the company badly needed. Apple may find continued growth through this strategy. But the PC industry will catch on; all the packaging and aesthetic advances of the iMac can be replicated—and improved upon—by PC makers, and at lower prices. Properly preconfigured, there is no reason a PC cannot deliver the same quick and easy "box-to-Internet" experience that the iMac offers.

Apple now has a very nice G3 notebook, but it is also symptomatic of the limited range of a single modest-volume manufacturer's designs. Users can't choose a lightweight notebook instead of full-featured notebook, for example. Even a single leading vendor, such as Compaq, IBM, or Toshiba, offers a far wider range of notebooks than does Apple—and there are, of course, many vendors. The range of Apple desktops isn't much greater, other than color choice: one consumer system and one business (or high-end consumer) system. The limited product line helps Apple achieve profitability, but it leaves Mac buyers with few choices.

Apple's future operating-system strategy, now based on Mac OS X, is more rational than the Rhapsody strategy the company had adopted when I last wrote about the Mac. (It is ironic that one of Jobs's most applauded changes was to squash the OS strategy that was based on the technology he sold to Gil Amelio.) Developers will now find it much easier to move applications to the new OS, but it will still take some work to "Carbonize" applications, which is needed to gain the benefits of the new OS.

The biggest software concern remains the limited amount of new software supporting the Mac. Although Apple managed to stop some important software companies from abandoning the Mac, many applications still don't support the Mac or have a Mac version that is a year or more behind the PC version.

## Where's the Compelling Value?

I still maintain a Mac and a PC on my desk, as I have for years, but their roles have been reversed. Whereas I once did most of my work on the Mac and used the PC only occasionally, I now do nearly all my work on the PC. My Mac notebook has been retired in favor of an IBM 560—something for which there is no equivalent in today's Mac world.

Once I got over the transitional hassles, I found the PC no harder to use (though it is unquestionably harder to set up and to add certain peripherals to). I continue to use my Mac, only because we have some companywide legacy applications that depend on it. Soon those will become crossplatform, and at that point I doubt I will find many reasons to give the Mac its desk space. I spend the vast majority of my time running applications, not in the OS, and for the most part it just doesn't matter which machine I'm using.

The Macintosh may well hang on for many years, in large part because of the intense devotion of many of its users (including some of our own analysts). In many cases, however, I believe it is inertia and emotion, rather than real benefits, that keep users in the Mac camp. Mac users often feel that PCs are harder to use, simply because they are comfortable with the Mac and have learned its ways; the things they criticize about the PC often come from not knowing the PC well. Of course, it is a valid criticism that it is unnecessarily painful to become comfortable with a PC, but once you are there, the Mac's advantages are few.

Apple may be able to maintain a healthy business by serving entry-level consumers, education, and publishing and design users. This does not make the Mac a mainstream, general-purpose alternative to Windows PCs, however, and I'm concerned that these niches may not be sustainable.

Simple machines that bring new users to computing are Apple's best growth opportunity. In this sense, Apple is better positioned to deliver great information appliances than systems that compete directly with traditional PCs.

I would love to see some real competition for Microsoft and for x86-based platforms, but nothing has changed my reluctant conclusion that the Mac will forever be limited to small niches; that the range of hardware and software available will continue to be a fraction of that found in the PC world; and that, for most computer users, having access to the broader range of PC hardware and software is of more value than the advantages of the Mac platform. With adroit management and new products that leverage its brand, however, Apple could prosper nevertheless.

See www.MDRonline.com/slater/macagain for more on this subject. I welcome feedback at mslater@mdr.zd.com.