## Can Palm Pilot Overcome Its Success?

## The New Market for PDAs Feels Like Macintosh vs. Windows All Over Again



Palm Pilot has single-handedly reinvigorated the market for PDAs. With more than two million units sold, it's far and away the most popular product in this turbulent category. But Pilot's success has attracted Microsoft's attention. Even now, "palm-sized PCs" from legions of Micro-

soft licensees have begun to wage cruel war on Pilot. The battle smacks of one from recent history: Macintosh versus Windows. Will the pint-size battle play out the same way?

The parallels are eerily familiar. On one side, we have a startup company driven by a dedicated leader with a singular vision. From Palm Computing (now part of 3Com) Jeff Hawkins takes the role of Steve Jobs. His product is similar to, but significantly different from, others in its category. It emphasizes ease of use. Its hardware and software were developed together. It even uses a Motorola 68K chip. The product develops a grass-roots following of happy, satisfied (not to say fanatical) users. Possession becomes a lifestyle statement, its use a passive-aggressive jab at the presumptive market leader.

On the other side, we have the acknowledged irresistible force in the industry. Its product is later to market. The user interface adopts many of the innovator's features, layered on top of a general-purpose kernel. Hardware design is left to low-margin vendors. Sales channels are wide open. Name recognition attracts the business community. Camp followers on both sides gird for battle.

There's talk and speculation about Pilot's future now that Windows CE has entered the PDA market. Some see Microsoft's entry as the death knell for Pilot, Psion, TI's Avigo, and other "nonstandard" platforms. Much of the debate has taken on the missionary accent of zealotry, with partisans on a sacred quest to defend their chosen technology.

Pilot has advantages both for independent software developers and for users. Any Pilot program runs on almost any Pilot. It is a single, software-compatible system. Unsophisticated users can buy or download Pilot applications and use them right away.

This is not true for the palm-sized WinCE units. NEC's MobilePro runs different software than Philips's Velo, which runs different software than Casio's E-10, and so on. These units have different hardware designs that are not always hidden under the API, not to mention different microprocessors. With Windows CE, the API might be the same, but the binaries are different for each system. This fragments the market for independent software and confuses consumers.

If 3Com is careful, Pilot can avoid this problem for years. Palm started at the very bottom of the 68K food chain (a 68EC000 core at 16 MHz), so there's plenty of headroom for binary-compatible growth. Motorola could upgrade the part with an '040 core or some flavor of ColdFire (provided certain 68000 instructions were reinstated) and remain totally binary-compatible with the first Pilot.

It's clear that Windows CE can expand into very different kinds of applications and thus become the single operating system around which an OEM standardizes. It may not be as ideal as Pilot for this category, but it clearly has broader uses. And, hey, it's from Microsoft. For companies with their eye on more than just PDAs, Windows CE is the safer choice.

In the Mac/Windows battle, it was the cheap hardware and copious third-party software that carried the day, not the user interface. Users may have preferred the Mac's design, but they chose a PC because of its cheaper price, faster rate of product evolution, and greater selection of products.

Palm could repeat this example or learn from it. The company can pursue either margins or market share, but not both. Keeping its own prices down and licensing PalmOS would likely fill the market with cost-competitive spinoffs. The increased market share could overwhelm Windows CE almost before it gets started. Squeezing the maximum profit from each unit, as Apple did, would leave the back door open for Microsoft's minions to overtake Pilot's lead.

As long as PDAs remain simple items—and Pilot has proved the wisdom of this attitude—user interface will prevail over software availability. A PDA is frequently a personal choice, not a company dictate. If the initial "out of the box experience" isn't a happy one, users won't care about the choice of third-party applications. Consumers will judge on usability, where the Pilot excels.

I think Pilot and its successors will be the most popular PDA for some years to come. Palm-sized PCs will retain a smaller portion of the PDA market: more successful than the dreadful HPCs but not as popular as Pilot. 3Com can drive the final nail in the coffin by licensing Pilot hardware and software designs to third-party OEMs.

Pilot appeals to users, while Windows CE (if not the palm-sized PCs themselves) appeals to developers. In its niche, Pilot will reign supreme.

Just L. Tule