## Why Newton Beats WinCE

By Don Davis, Apple Computer

It remains to be seen whether Windows CE will *displace* or *validate* Newton appliances. Our view is that the vertical business needs bursts of infrastructure and the horizontal business needs definition and focus. We welcome the stimulation and energy that only someone like Microsoft can provide to these areas. As a result of their entrance to the marketplace, we see new opportunities for hand-helds in retail, corporate horizontal and vertical markets.

Our expectation is that all of these market slices will pick up and that CE will serve as a stimulus for all devices across several hand-held categories. We also believe that if we include the MessagePad 2000 and CE devices in a unified category (HPC, for lack of a better term), we may all stand to make it onto some corporate buying lists in the sub-laptop space, providing basic functionality at a much lower price point.

We have the strongest device. The industry media want to populate the HPC (handheld personal computers) category with only CE devices - seemingly because any machine made by Apple cannot be a "PC". But is a Windows CE device, really a PC? We think not. The MessagePad 2000 is at least an HPC in functionality and is only distantly related to the PDA category populated by PIM devices such as the US Robotics Pilot device. At a certain point these categories lose all meaning and something different like a "laptop replacement" or "companion device" delineation will likely evolve. But, with dual com slots, 162 MHz processing power, 24 hour battery life, 16 gray scale screen, TCP/IP, speaker and microphone, 8MB of ROM and 5MB of RAM, it doesn't matter what hand-held category we are in - we rule it.

So is CE better than Newton in other ways? Well, they do have better connectivity to the Windows desktop and they do have a shorter learning curve for Windows users. But what else? Easier to write drivers and software to Windows APIs? Yes, and we agree, so we are working toward that in Newton. But better back office connectivity? Don't jump to Microsoft Back Office yet, we think they will have trouble powering up LAN cards. Better Web browsing? How fast can it be? Black and white screens, little keyboard, one com slot . . . different vendors, different problems. Do they print yet? With the MessagePad 2000 you can store and communicate at the same time. You can have a peripheral piece of hardware - like a laser scanner - in while you are sending data back to a wireless access point. You can receive pages and respond right back to them...on and on. We are giving you opportunities to truly enhance the capabilities of your applications not just offer them "in Windows". And they will be faster. Way.

Microsoft needs your help now, but when they get horizontal, that means bundled applications - Microsoft ones. They do like their licensing money. That is their thing you know. The vertical dollars are not big enough for them in the long run.

Microsoft is betting that people need a scaled back version of Word, Excel, Schedule Plus and Explorer for the road. If they can get the power management issue licked, they will probably do ethernet to push their network advantages. They want to stretch the desktop. That is where they have market share. If they placed the right bet they can sell large quantities into the channels of the hardware vendors and get on some of those corporate buy lists through resellers and major accounts managers with vendors like Compaq. This will lead, they believe, to a game that they know very well stimulating market demand to expand the OS in order to drive hardware manufacturers to upgrades. Resell the market over and over again with expanded product offerings.

But does this model work for hand-helds? We wonder. Aren't people used to more from Windows than less? How much can you deliver to seasoned Win 95 laptop users with 25 - 40MHz and 2/4MB of RAM? That's a pretty little 4 gray scale screen and keyboard they have there. And there is another problem. The CE OS is already ahead of the hardware. This is the tradeoff for that magic \$500 price point and it means there already needs to be a rev of the hardware just to get it up to the current CE capabilities.

We believe the early sales numbers from CE will dictate which hardware vendors stay in the game. If the horizontal market doesn't show up, hardware vendors will be far less inclined to reinvest in further hardware changes. To add more com slots, handwriting recognition, better power management, better screens and higher processing speeds will cost a lot of money. Some have probably not yet recovered their startup costs let alone one or two more revs of the hardware. Will the market run rate be high enough to get them all into the game? If it isn't where does that leave you?

To bridge the gap and provide interim wins, Microsoft will be encouraging you to partner with them on vertical CE activity. They know, after trying this with Windows for Pen Computing, that the market can fragment into vertical market niches with the lack of large corporate or consumer buys. Example, Pen Tablets.

Maybe you think this is a little of the pot calling the kettle black. After all we partner with you on vertical opportunities and are trying to bridge the gap to horizontal ourselves. And hey, we did some bundling of our own on the MP2000 and there is a price list we put together for the eMate release into education. So what gives?

Just one thing: those bundled applications and co-marketed solutions on Newton appliances are yours, not ours. And if you weren't one of the bundled applications for the MessagePad 2000 release or the eMate 300 price list, chances are we are trying to find you other opportunities to take advantage of. When horizontal takes off, you are part of the solution - - not just a means to an end. All of our future plans depend on you.

It is a hard time and simultaneously a great time for Newton development. This article was written to those of you who feel you must decide on supporting either Newton or Windows CE. If you are making that decision, we understand, but want to leave you with one final thought:

We don't see you as our bridge over troubled waters. We see you as the land on either side.

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