



## Power Macs tip the risk/benefit scale toward Apple

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**Y**ou couldn't have missed all the PowerPC vs. Pentium hype and debate unless you're from another planet. It's been raging in the press for months. If your company primarily uses Intel PCs with DOS and Windows the time may be right for you to consider switching to Apple Computer Inc.'s Power Macintosh line using the Power PC chip. You may face resistance and even be a little uncertain and skeptical yourself, but the rewards might outweigh the risks. Why would you want to upset the status quo when things seem to be going so smoothly?

Or is it going so smoothly? IS people these days are considered to be expendable ground troops unless they prove to senior management that they're willing to take personal and professional risks for the good of the organization. Good leaders aren't afraid of changing their course if a better strategy comes along. You can't rest easy unless you seriously evaluate a breakthrough technology such as the PowerPC.

So why is everyone so excited? What makes the PowerPC a breakthrough? It isn't that much faster than Pentium, is it? Well no, it isn't, but that's not the real point, either.

The point is that the direction of the computer industry is changing and that change favors the RISC-based PowerPC more than CISC-based x86 architecture. The Intel architecture's advantage is also its Achilles heel. There are thousands of applica-

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tions written for DOS and Windows. But most of them do not unleash the power of the Pentium. DOS and Windows hold you back when trying to develop applications that take advantage of new technologies.

Intel Corp. and Microsoft Corp. can't move their architectures to

RISC and object technologies fast enough without losing their installed bases. Because both dominate their markets like monopolies, their focus is on maximizing profit rather than introducing competitive innovations.

Statistics show that the installed base of Intel machines is aging; half are primarily low end 486, 386, even 286 or 8088-based. Some people will be considering upgrades or replacements to run Windows 4.0 when it arrives. Conversion from older generation DOS/Windows software will also require new investment and training. PowerPC-based Macs are a more cost-effective alternative to purchasing 486- or Pentium-based Windows machines and the applications that will take advantage of their power.

Competition from PowerPC clones — some even licensing the Mac's OS and built with PowerPC Reference Platform (PREP) and Peripheral Component Interconnect (PCI) buses — will keep PowerPC machines competitive, as well as make it an open standard. Apple has been talking with Acer America Corp. and Dell Computer Corp. about just that.

Ignore the myths and cut to the

heart — price/performance, asset life, and return on investment should be your key factors, not political expediency. The x86 architecture is an aging one, deriving its one real advantage from its legacy back to the 8086 chip of the late 70's. The fact that each new processor is upward-compatible with older processors has become a crutch and a trap.

The role of the IS manager is to determine when the rewards and promises of a new architecture, in this case RISC, outweigh the need to preserve ties with the old architecture. The x86 stranglehold has kept fine IS people from fitting the tool to the problem rather than the other way around. New applications such as integrated telephony, video, graphics, multimedia, and voice recognition call for a dramatic lifting of the power/price curve only achievable with RISC technology.

The PowerMacs have many features built-in that are currently add-ons in the x86 world. Sound input and output, fast SCSI-2 disk interface, fax/data modem, Ethernet, and video support are all on the motherboard. This preserves your investment better than attempting to migrate old ISA, EISA, MCA, or VL bus cards forward (to PCI and Prep). For example, at first glance having just one slot on the PowerMac 6100 seems inadequate. When you really consider the reason you need those slots (in the x86 world), having a machine with many features built-in eliminates the need to install and integrate cards. At the same time, this prevents most of the potential trouble IS support staff have with desktop machines. Most will be greatly relieved that address space and Interrupt

Request (IRQ) and Interrupt conflicts don't exist in the Macintosh environment.

Networking is much easier because it's built into the OS. The Mac also has built-in peer-to-peer networking. Setting this up is trivial compared to Windows because it's all point and click.

It's a tougher call if you have proprietary or otherwise mission-critical Windows applications. Insignia Solutions Inc.'s SoftWindows emulation runs only in 286 mode (a version that emulates a 486 and runs enhanced mode applications is due by the end of the year). The performance is acceptable but slower than a comparably priced x86 system, because it is emulating rather than executing x86 instructions directly.

not identical operation of obsolete applications. All Macs can now exchange disks with Windows machines, but compatibility would get even better if Apple bundled PC Exchange and document translators with the operating system (rumor has it they will be shortly).

A computer industry monopoly with only one desktop architecture is like a one horse race: uneventful, boring and slow. PowerPC RISC technology introduces a real choice for the first time in years. The PowerMacs are clearly a viable platform for those upgrading to or buying new machines in a Windows environment. You just need the guts to understand and recommend a change that could make a big difference to your organization's future.

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Migrating to Macintosh applications from mainstream Windows ones such as Word, Excel, or Wordperfect is only an issue of cost, and not functionality. This might even be a good time to move away from monolithic applications toward document-oriented ones like ClarisWorks from Claris Corp., which are cheaper and easier to use, train on, and support. Compatibility of data is the issue,

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