

Apple in IT

Great engineering, glowing reviews, active community.
How could the Mac *not* win over IT?

Never underestimate Apple.

Tom Yager, InfoWorld

“We didn’t mean to”

Apple has never designed a product for enterprise customers.

But if the enterprise likes a product, we won’t refuse to sell it to them.

Is IT a market that Apple really wants?

Marketing costs, competitive pressures

IT money without IT hassles?

Redesign for IT

- Two generations of Xserve (G4)
2nd gen redesigned for IT needs
- Two generations of Xserve RAID
Stated competition was desktop array,
redesign addressed IT competitors
- Power Mac G5
Sucked into race for GHz, 1st 64-bit

Whatever the course

Apple ended up with

- Only Unix notebook line
- Only finished Unix-based desktop/workstation under \$5K
- Only first-tier IU rack server running commercial Unix for under \$5K
- Plug-and-play 3.5 TB fiber array

IT differentiators: G5 hardware

PowerPC CPUs

HyperTransport bus

Apple custom chipset

Cooling and acoustics

Power control

Yes, but...

PowerPC CPUs: Average performance on int, 64-bitness unrealized

HyperTransport bus: Not at CPU level

Apple custom chipset: Northbridge/southbridge design vulnerable to Intel

Cooling and acoustics: Typical for HPC class, but still not what Mac users want

Power control: Good start but needs a lot of work

And manageability

IT differentiators: Software

OS X

Quartz/Aqua

Cocoa

Scripting and events

And yet...

OS X: Mach-imposed quirks make porting difficult, doesn't bode well for ISVs, drivers; HFS+

Quartz/Aqua: Not part of Darwin, no efficient remoting, OS dependence=tough headless op

Cocoa: Heaven for Obj C developers, hell for everybody else; still have to flip to POSIX

Scripting and events: AppleScript; poor OSA support for other languages

True differentiators

- Scalability of G5 architecture: “Tons of headroom”
- Apple’s in-house ASIC engineering
- Small, focused product line
- Earned reputation for high quality
- Ability to redefine features, price for segments

True differentiators

- OS X's ease of use is what Microsoft was striving for; not achievable by Unix/Linux
- ADC, Xcode causing Linux defections
- Best out-of-box Java client and servers
- Zero config networking, services (role-based); interoperability;
- Open source engagement; Darwin

Pushovers

- Xeon's out of steam, 64-bit train has left the station
- Linux: The world's most expensive free OS
- Hardware SANs
- Proprietary baseline dev tools; even Microsoft is watching

Rough times ahead

Opteron

True mixed mode; x86 IS; DirectConnect; 8-way glueless; NUMA; dual core race is on

Opteron and Solaris 10

Pedigree precedes OS X's; true 64-bit on Opteron; recompile and go from SPARC; Sun-tuned JVM; SysV/ Linux zones; sweet FS and NFS

Opteron and Windows: Any minute now...

The channel

I'm of two minds about this

How Apple should respond

- Bring C/C++ libs into parity with Cocoa
 - BSD feel down to kernel level
- OSA plug-ins for other langs
 - Make JavaScript first-class
- More tunability

How Apple should respond

- Better power management
 - “Cool and Quiet”
- Lights out, out-of-band
- Remotable GUI, Web-based admin tools
- Make Safari fast again
 - Presentation engines will be OS differentiators

Apple will respond

- Redesign for IT
- Rapidly evolve OS X, tools
 - Docs, knowledge base improving
- IBM's a good friend to have
- No community like Apple's
- Academia, creative are ideal proving grounds for enterprises, IT power users

Tiger

(you didn't think you'd get this slide in the handouts, did you?)

In a nutshell

- Loyalty and expansion are no-brainers for current Mac users
- Apple is the only place that small to medium businesses can one-stop shop
- IBM will answer Opteron performance challenge
- Rabid developers grew Linux; Linux community is cuddly next to Mac's

In closing

Fun is a differentiator!

Thank you

Tom Yager, technical director, InfoWorld Test Center;
author of “Ahead of the Curve” column

tom_yager@infoworld.com; tyager@maxx.net

<http://weblog.infoworld.com/yager>

[http://www.infoworld.com/columnists/
tom_curve.html](http://www.infoworld.com/columnists/tom_curve.html)