

As Seen On:



Operating Systems, Apple Computer Style

By Khan Klatt

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If price were the only factor that establishes a sustainable operating system, then Apple would not exist.

When it comes to discussions about Apple (Nasdaq: AAPL) and its future, invariably the discussion turns to Windows and Linux. With Windows enjoying a commanding lead in the OS market, and Linux gaining community and corporate support, where does that leave Apple?

Let's face it. Windows has had its "commanding lead" ever since Windows 3.1. Windows 95 did not seal Apple's fate, nor did NT, ME or 2000. And if history is any indication, neither will XP.

As for Linux, an operating system is simply a core set of software that enables a computer to perform basic functions. Anything you're looking to accomplish with Linux, you can accomplish, with no significant penalty, on any other Unix-based operating system such as IBM's AIX or Sun's Solaris, or even Apple's Mac OS X. While there are some distinct differences in cost, licensing, scalability, and hardware options, they're all generally equally capable.

If that's the case, then why was there ever a market for Linux to begin with? Why is Linux taking off so rapidly? The answer? Price, price, price. And I'm not talking about how much it costs to buy a Linux distribution.

Back in the Day

To truly get an understanding of why Linux is so popular, it helps to know why it was created. When Linux was first announced on August 25th, 1991, Linus Torvalds wrote: "I'm doing a (free) operating system ... for 386(486) AT clones."

Why did Linus mention x86 AT clones instead of Macs or Suns? The answer is that x86 AT clones were cheap. After IBM lost its ability to prevent its PC from being copied and cloned, the IBM PC market became "commoditized." Fierce competition resulted in thin margins, and low computer prices, which Finnish college students could appreciate.

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Costs savings are so great when you buy a PC, you can afford to buy an overpriced operating system from Microsoft, and still pay less than you would for a Mac. Microsoft charges what the market will bear because Apple and Unix system vendors bear the R&D and support costs of its hardware.

Copying the Clone Makers

Enter Linux, which now brings the same razor-thin margins to the OS that the x86 hardware market has endured. What the clone-makers did to the PC hardware market, Linux does to the OS market.

If it were not for the inexpensive, cutthroat PC market, Microsoft wouldn't have a perch on which to base its monopoly, and Linux might not have been written, had Linus been unable to afford a computer required to write it.

Yet if price is the only factor that establishes a sustainable market, then Apple shouldn't exist. So why is Apple still around?

Hawking a Lifestyle

Sports utility vehicles, on average, cost much more than a sedan, a station wagon, or even a pickup truck. They also make car companies much bigger profits than their smaller cousins. So how can you convince people who, as recently as 15 years ago, predominantly drove sedans and station wagons, to begin buying SUVs that are substantially more expensive?

The answer isn't to push a product, but to promote a lifestyle. Encourage people to use boats, haul sporting goods, and drive off-road, or to be romantically attached to the idea or image of doing so. Establish a need for a product, and be the best at providing the answer to fill that need.

It's no coincidence that SUV commercials show people doing all exciting, outdoorsy things, because it creates a demand for the high-margin products, that are essentially souped-up pickups.

One needs look no farther than recent Apple commercials to see a similar strategy in action.

Can't Touch This

Microsoft has to put its operating system -- on a hardware platform Microsoft doesn't control, at that -- up against the likes of solution-focused integrated system vendors who can differentiate their products by bundling them with compelling hardware and software solutions.

Simultaneously, it has to compete against Linux at the low end, where the hardware costs the same, but the operating system is free, and does certain things better than Windows.

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The Linux community can simply keep doing what it has been doing, improving its operating system, making it better, more secure, and more usable, giving consumers a low-cost solution if they can't afford the alternatives.

Meanwhile, all Apple has to do is distinguish its products from the competition by illustrating what consumers can do quicker, easier and with more style on a Macintosh than on a PC, regardless of the operating system.

Khan Klatt is an IT executive in the Pacific Northwest with a background in physics and computer science. Khan has served as a Web developer, sysadmin, network engineer, information architect, and project manager. He is notorious for his encyclopedic responses to simple e-mail questions. Khan maintains a list of his editorials and other IT exploits at <http://www.khan.org> and can be reached at khan@khan.org.