

Computing Hardware Predictions, 2003

Against a backdrop of economic uncertainty, users and vendors will take a pragmatic approach to computer hardware technology in 2003.

The economic environment dictates that IT decision makers must attain greater business value from their IT infrastructure and make technology purchasing decisions that show a short-term identifiable return on investment. With no economic upturn expected until at least mid-2003 and with IT budgets for 2003 being set in the middle of this downturn, Gartner Dataquest expects companies' approach to spending to remain focused on these themes for at least the first half of 2003.

Against this background, this Spotlight provides Gartner Dataquest's key predictions for the worldwide computing hardware market in 2003. Gartner Dataquest does not expect 2003 to be a significant year of innovation and technology adoption. We advise that a pragmatic approach will be needed to deliver the greatest payback for technology buyers and providers. Our predictions, impact and reaction statements in each piece reflect this view. A buyers' market in 2003 will lead to further vendor consolidation as users mitigate risk by selective spending and by choosing trusted suppliers.

Key Predictions

PDAs, Smart Phones

- Dell Computer will reset market expectations on pricing of personal digital assistants (PDAs) and be the catalyst for a 15 percent reduction in the Pocket PC average selling price in 2003.

Notebooks

- The year 2003 will be a year of frustration and confusion regarding mobile processor choices.

Desktops

- End-of-life issues rather than technology innovation will be the major PC growth driver in 2003.

Servers

- Linux-based server shipments will double in 2003.
- Standards for software that drives modular computing capabilities for servers will emerge in 2003.

Storage

Gartner

- Leading portfolio vendors will gain external redundant array of independent disks (RAID) controller-based storage system market share in 2003.

Office Document Output

- In 2003, over 35 percent of office multifunction products will operate with server-based document management software

PDAs and Smart Phones

A proliferation of increasingly powerful small-format devices will compete for the limelight, but we expect limited uptake in 2003. For the IT community, this is good news. The number of possible devices is already unwieldy, and portable devices of any kind bring inherent risks that must be assessed so the right trade-offs can be made between risk, cost and the business benefit of mobility. The industry in 2003 will sort through some of these issues as users become more critical judges of the business value suppliers provide. Price pressure will also be a feature. In the PDA market, expect average unit prices to fall by 15 percent following Dell's entry. Mobile phones with integrated digital cameras will also sell in large numbers. Leisure applications rather than business applications are the primary driver here. Media-rich files may clog the network, and it may be necessary to adopt policies and strategies to deal with the issue as adoption rates increase.

Notebooks

The notebook PC market continues to do well relative to the desktop PC market as users discover the benefits of mobility and wireless connectivity. In 2003, the challenge for users and vendors is how to minimize risk and maximize business while navigating Intel processor choices — Banias (Intel's new mobile chip slated for introduction in January 2003), Pentium 4 mobile, Pentium III mobile, Pentium 4 desktop and Celeron. Vendors will be forced to gamble in their 2003 product road maps. Large enterprises will be at risk for buying notebooks with processors that either don't meet their needs or that will not survive beyond 2003. Banias will appeal to large enterprises at which "thin and light" systems are mainstream. Banias' power management will allow longer battery life in systems with wireless radios as well as smaller, lighter form factors. Consumers and small businesses, especially in emerging markets, will continue the 2002 trend of choosing the low-price/high-performance features of notebooks with desktop processors. Pen tablet PCs that enable users to input data through technology that resembles old-fashioned pen and ink may be hot news but not hot sales items in the coming year. The technology is still limited and likely to be a niche item.

Desktops

Budget-constrained organizations are holding on to their PCs longer. With cost reduction the priority and desktop performance still adequate on machines bought more than three years ago, deciding to delay replacing PCs is easy. Extending desktop PC life cycles will mean lower demand than previously assumed and a less pronounced replacement cycle. Improvements to underlying technologies will continue but none are likely to stimulate demand in 2003. The most noticeable changes are likely to be the move to flat-panel monitors as prices decline and more attention on small form factor PCs.

Servers

The focus on cost reduction and the business benefit of IT continues to drive large organizations to examine how to get better value from their current and future server infrastructure. Technologies that

drive optimum use of hardware will be in greater demand. Throughout 2003, Gartner Dataquest sees the development of standards that will enable software to manage modular, incremental increases (and decreases) in server capacity. Large organizations need to push for the development of such standards, which will enable them to move to a modular environment, a further step on the way toward the policy-based computing services environment outlined by Gartner Dataquest. Linux will be taken more seriously in the enterprise market and, in particular, in the telecommunications and Web application server markets. Expect shipments to double in 2003 compared with 2002,

Storage

The trend toward mitigating risk by buying from portfolio vendors rather than specialists is visible in the storage market. Portfolio vendors such as IBM, Hewlett-Packard, Sun Microsystems and Dell, which sell a diverse range of IT equipment, are expected to continue to take an increasing share of external RAID controller-based storage at the expense of storage specialists. This will undoubtedly appeal to organizations looking for simplicity through one-stop shopping, but each must consider the value-added services that can be provided by the specialists compared with the skills and expertise of the portfolio vendors and assess the value of those services to their own organization. This trend is another factor adding to the high level of competition within the storage market that is likely to lead to a significant merger, alliance or even departure from the market. As a result, considering the viability of the suppliers is essential where long-term relationships are required.

Office Document Output

The need for businesses to derive greater value from office output devices is chronic, but businesses need to redirect, not reduce, spending in this segment. Most companies are still using office output devices in traditional ways and failing to capitalize on the opportunities that integrated document management systems provide. Of those U.S. businesses that have carried out an office document assessment project, only 2 percent (with 500-plus employees) will complete and effectively execute on the recommendations. Savings made can be funneled toward revenue enhancement activities such as color printing and digitizing workflows via multifunction products (MFPs). However, in 2003 the majority of IT organizations will continue to purchase color printers and MFPs but will not unlock the true value that an integrated approach could bring to their organization.

Features

“Notebook Market Predictions, 2003” — Frustration and confusion regarding mobile processor choices will mark the year. **By Leslie Fiering, Andy Woo, Lillian Tay, Robin Simpson, Ian Keene and Kiyomi Yamada**

“Desktop PC Market Predictions, 2003” — End-of-life issues rather than technology innovation will be the major PC growth driver. **By Charles Smulders, Brian Gammage, Mark Margevicius, Leslie Fiering and Kiyomi Yamada**

“Server Market Predictions, 2003” — Standards for software that drives modular computing capabilities for servers will emerge. **By Jeffery Hewitt**

“U.S.-Based Mainframe Vendor Prediction for 2003” — Vendors will enhance their products. **By Carl Claunch and Josh Krischer**

“European-Based Mainframe Vendor Predictions for 2003” — Vendors will make important product announcements. **By Josh Krischer and Carl Claunch**

“Storage Market Predictions, 2003” — Leading portfolio vendors will gain external RAID controller-based storage systems market share. **By John Monroe, Roger W. Cox, Carolyn DiCenzo, James Opfer and Pushan Rinnen**

“Office Document Output Devices and Services: Predictions, 2003” — More than 35 percent of office multifunction products will operate with server-based document management software, **By Andrew Johnson and Peter Grant**

Recommended Reading and Related Research

“EMEA PC Market Predictions, 2003” — Local vendors will gain market share. **By Annette Jump, Roberta Cozza, Brian Gammage and Meike Escherich**