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VOLUME 2 - ISSUE 18 - MAY 7, 2001

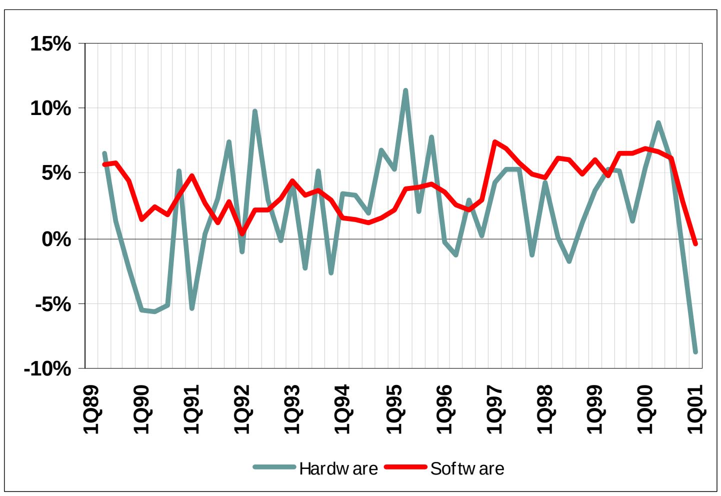
EPOCH DIRECT

A Software Slowdown?

By Mark Verbeck, Managing Director, Senior Analyst

New numbers from the Bureau of Economic Analysis suggest that the software industry might be entering its first recession (defined by two consecutive quarters of negative sales growth) since the current category was constituted in 1989. Business software spending has increased in each of the 49 quarters tracked by the survey, until the 0.4 percent drop in the first quarter of 2001.

AGGREGATE CHANGE IN HARDWARE & SOFTWARE SPENDING



SOURCE: EPOCH PARTNERS AND BUREAU OF ECONOMIC ANALYSIS

This is in stark contrast with the business hardware category, which contracted in 15 of those same quarters -- almost one of every four quarters. What is behind this change in the software industry, and what can it tell us about what we can expect in the future?

There are two main reasons for software spending's resiliency to date. The first is the **perpetual project backlog**. Many corporate IT departments have years of backlog for new systems. In this environment, it is difficult to cut out projects. Second, **IT professionals are fairly immune to cutbacks** because they know so much about the existing systems, and they are difficult to replace. Because these resources are available -- and drawing salaries -- it makes sense to ensure they are productive in good times and in bad.

[more]

Research

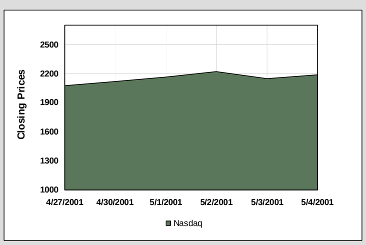
Matthew Adams, CFA
Mark Langley
Mark Langner
Seth Spalding
Mark Verbeck

Epoch Indices for the Week

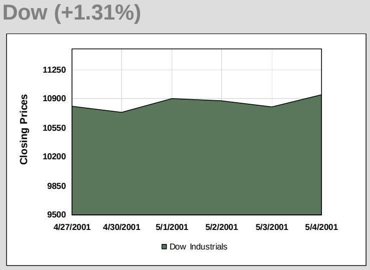
Broadband & IP Svcs:	+16.55%
Comm Equipment:	+8.27%
Internet:	+3.40%
Software:	+1.61%

Market Statistics (5-Day)

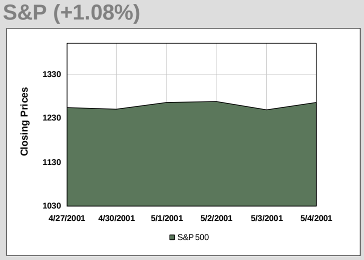
Nasdaq (+5.59%)



Dow (+1.31%)



S&P (+1.08%)



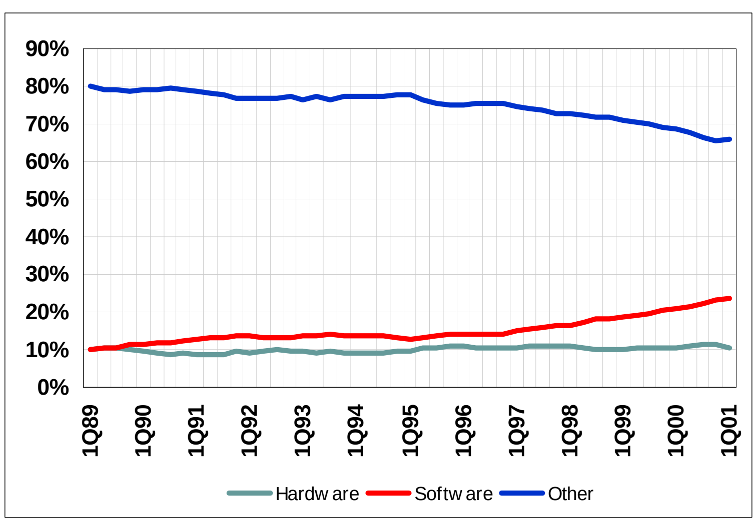
Although it is true that the software industry lacked the downside volatility of its hardware counterpart, it also lacked the upside. The best quarter for software spending in the last 12 years was a 7.4 percent increase, whereas hardware spending cleared this hurdle four times, with a top growth rate of 11.4 percent in the second quarter of 1995. Clearly, software spending is not limited by budgets. Our analysis and research suggest two other factors. The first is IT resources: even with consultants and vendor support, any software implementation requires a significant commitment of internal resources -- a demand that commonly triggers internal battles for the precious technology resources needed to make a project happen. The overall shortage of skilled technology workers only exacerbates this problem.

The second factor limiting software spending is how well an organization is able to adopt change. Internal limitations on changes in process, functions, or compatibility with existing systems often limit large-scale software projects. Indeed, it is the software's inherent ability to make business processes more efficient that produces significant change -- otherwise companies wouldn't purchase the software. Many of the notable software project disasters have involved the simultaneous adoption of many new systems.

Three long-term trends have altered the landscape to create an environment where software spending could actually be reduced. The first is the tremendous growth of the consulting industry. In 1989, the IT consulting market was nascent. By 1999, it had grown to a $34.6 billion business.

The second trend is the growing portion of companies' capital budgets that software consumes. In 1989, software represented 10 percent of total equipment spending -- equal in size to hardware spending. Today, software represents nearly 24 percent of the total -- double that of hardware spending. The final trend is the backlog of maintenance and upgrade projects that accumulated during the e-business rush. This development queue provided a ready technology to-do list for IT professionals without necessitating the purchase of any new software. As a result, beneficiaries of the e-business rush like business-to-business (B2B) companies Ariba[4] and Commerce One, as well as eCRM (e-customer relationship management) companies Kana Communications and Blue Martini Software, have been particularly hard hit in the pullback.

HARDWARE & SOFTWARE SPENDING AS % OF PRIVATE FIXED INVESTMENT



SOURCE: EPOCH PARTNERS AND BUREAU OF ECONOMIC ANALYSIS

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We expect IT departments to work through their maintenance backlogs quickly, and they will likely begin looking for the next projects to implement. This doesn't mean that spending growth will return immediately, but demand for supply-chain improvement, collaboration, improved customer relations, and new Internet-enabled processes will eventually fuel the industry's rebound.

For this reason, we expect companies like i2 Technologies,[4] Manugistics, MatrixOne, Agile Software, Siebel Systems, Pivotal, and some emerging private firms to lead the way out. We do not expect, however, that software spending will return to the steady uptrend of the past. As enterprises devote larger and larger shares of their capital budgets to increasingly sophisticated software, we expect software spending to become less predictable and more volatile.

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Top 10 Stocks Bought*

PurchasePro (PPRO)	+20.71%
Metromedia Fiber (MFNX)	+7.24%
Akamai (AKAM)	+5.41%
Aether Systems (AETH)	+5.33%
i2 Technologies (ITWO)	+5.10%
Interwoven (IWOV)	+5.08%
Sycamore (SCMR)	+4.04%
WebMethods (WEBM)	+4.00%
Ciena (CIEN)	+3.74%
FreeMarkets (FMKT)	+3.65%

Top 10 Stocks Sold*

UTStarcom (UTSI)	-5.20%
Digital Lightwave (DIGL)	-5.20%
RF Micro Devices (RFMD)	-3.61%
Brocade Comm. (BRCD)	-3.27%
Niku (NIKU)	-2.38%
Extreme Networks (EXTR)	-2.38%
Broadbase Software (BBSW)	-2.05%
Terayon Comm. (TERN)	-2.03%
Network Appliance (NTAP)	-1.89%
PMC-Sierra (PMCS)	-1.76%

*Notes

Percent change from the prior week in the number of technology-related shares held by customers of our brokerage partners.

This Past Week at Epoch

5/1/01 Floware Reports 1Q01 Results -- Weathering the Storm

5/1/01 Comments on Digital Island's 2Q

5/1/01 Update from Ariba Live

5/1/01 Reducing the Risk -- LDCL Reduces Costs While Maintaining Guidance

5/2/01 i2's Changing of the Guard

5/2/01 Vicinity: Rebuilding the Engine

5/3/01 Epoch Initiates Coverage of Palm

5/3/01 Epoch Carrier Capital Expenditure Survey and Outlook

Heard on the Desk

Selling Trend Continues in One Sector

Retail investors continued to broadly sell communications equipment stocks over the week ended April 27. Even though the percentage moves are not drastic, the trend must be noted. Seven of the 10 stocks that saw decreases in holdings over the week were networking shares.

The only stock with a double-digit percentage move was PurchasePro (Nasdaq: PPRO; $2.98). The provider of B2B e-commerce software solutions led the list of weekly increases, gaining 21%. On Wednesday, PPRO fell 35% after the company announced that first-quarter profits missed forecasts due to unrecorded sales. This announcement caught the market off-guard; just last month the company announced it would exceed estimates. While the overall market sold the shares, retail investors remain buyers on any steep price decline.

PurchasePro has been diversifying and broadening its investor base. Existing shareholders have not been the only ones buying PPRO (unlike other stocks). As the price of PPRO has dropped 90% over the last six months, holdings have grown by 184% and the number of retail shareholders has grown by 61%.

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Company Highlight: Palm (Nasdaq: PALM)

Investment Thesis

Palm, the Big Kahuna of mobile computing, has been thrown off its surfboard and tossed in the choppy surf of a choked retail channel and fickle demand for handheld devices. The question now is: Can the big guy swim to safe harbor, and if so how soon? Competitors such as Handspring and manufacturers of Windows CE are nipping at Palm's heels. Still, we think that the handheld market has enormous promise and Palm's dominant market share, along with upcoming new products, gives it a leading edge. However, market uncertainty, problems in the retail channel, and limited visibility raise the risk in PALM and cloud the near-term horizon. We see long-term upside for PALM, but suggest investors avoid the stock for now and revisit this story once the roiled sediment has settled later in calendar 2001.

Company Description

Palm sells electronic handheld devices that provide features such as task management, contact information, and calendaring. The company also licenses its Palm OS operating system to other handheld makers and operates the Palm.Net service providing Palm users with wireless Internet access.

Key Investment Points

- **Undisputed Champ.** Annual PDA revenue is expected to grow by 27.8% per year reaching $11.9 billion in 2004. Palm's 59% market share makes it the dominant player in the U.S. Even if that is halved by 2005, revenue from device sales should increase at a 16% CAGR for the next five years.

- **Stuffed Retail Channel.** A confluence of events has packed Palm's retail channel. We estimate that May inventory turnover will slow to 1.1x and take at least two quarters to clear. Palm just announced price cuts on several devices and proposed an inventory write-down as remedies to rationalize inventories.

- **Building the Palm Economy.** Palm's efforts to make Palm OS the Microsoft Windows of the mobile world face competition from Microsoft Pocket PC devices in the PDA market and Symbian's EPOC system in the smart-phone market. However, accessory sales should remain strong and benefit from new Secure Digital (SD) expansion technology included in the new m500 devices.

- **Valuation.** Our DCF delivers a forward value of $10.67 per share, leaving 9% upside from current levels. However, we expect that PALM shares will not reach these levels until later this year. On a comparable multiple basis, PALM is trading at a discount to other device companies, which we think is appropriate given its slower revenue growth and declining gross margins.

Read our full company report on Palm.

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4) The analyst(s) involved in the preparation of this report has an investment position in the subject security.