

Financial Technology Monitor

April / May 2003

Online Banking & EBPP: 2003 Will be the Inflection Point in the Adoption Curve

“Telephone Bill....Telephone Bill.....Telephone Bill”, that is what I hear almost every day on my radio as I drive to work. What could it possibly mean? Is it an ad for AT&T? Verizon? A Financial Planner? No, it is the beginning of a carefully crafted ad campaign aimed at getting retail banking customers to utilize online bill payment. More importantly, this ad is not from a national financial behemoth, but instead is promoting the EBPP service at a local regional banking institution. We use this example to illustrate a key point: EBPP and online banking are finally becoming mass marketed to the average consumer. In addition to the daily radio barrage, Bank of America is offering its online banking customers entries into a drawing for a \$19,000 cash prize. The number of entries you receive are determined by how many bills you pay during the month using their EBPP service. While these are two anecdotal examples of EBPP promotions, the fact is they are two of several available promotions in the market today. More importantly, the data being reported by both online banking and bill pay technology providers as well as financial institutions supports the conclusion that the long anticipated EBPP “hockey stick” curve is actually starting to materialize.

In 1999, when online/internet banking was capturing the hearts and minds of investors and bankers alike, banks were rapidly rolling out Internet banking solutions. Early adopter customers were signing up for the service and treating it as a novelty as they tried many new Internet services at the time.

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Financial Technology Industry News Briefs

- **Program trading defies bear markets:**
Investment professionals are rapidly embracing program trading (computerized trading of big baskets of stocks). For example, program trading on the NYSE has doubled in the last two years and now accounts for 40% of the exchange’s daily volume. The efficacies of the system, lowered trading costs, anonymity of trades and possible arbitrage opportunities have been the main culprits fueling this growth. Nearly 60% of all program trading took place recently on NYSE, and around 30% in other US markets, including Nasdaq, with just 12% in non-US markets.
- **Credit card chargebacks:**
According to Edgar, Dunn & Company, processing chargebacks costs credit card businesses nearly \$8 billion a year in the U.S. alone, and up to \$12 billion globally. The Company estimates that the cost of chargeback processing, chargeback losses, and the call center costs represent about 15% of overall card issuing operational costs and 25-30% of card acquiring operational costs.
- **IT spending numbers revised down, again:**
As a result of continued economic weakness coupled with geopolitical uncertainties, IDC lowered its IT spending guidance to 2.3% (in line with projected 2003 GDP growth) from 3.7%. It expects growth in the U.S. to be just 1.5 percent this year, with Europe showing a slightly more robust increase of 2 percent. “The outlook for the next six months continues to be extremely volatile and a double-dip IT recession can’t be ruled out,” said Stephen Minton, director of IDC’s Worldwide IT Markets group.
- **Debit vs. Credit:**
Merchants are increasingly encouraging PIN-based transactions as opposed to signature-based payments due to the cost advantage inherent in the former. On the contrary Visa and MasterCard favor signature-based payments as the interchange fees are up to four times higher than that for PIN-based debit transactions. PIN-based transactions generate less than 50 cents per transaction, while signature-based transactions run at 2.5 per cent plus 10 cents.

Online Banking & EBPP: 2003 Will be the Inflection Point in the Adoption Curve (Cont'd.) →

The ability to lower branch delivery costs, reduce churn and ultimately create a more efficient electronic payments capability were major drivers in the rapid adoption by bankers. Then, the internet bubble burst in mid-2000 and all things internet rapidly began to lose favor. No longer were people buying their dogs a sock puppet online. While bankers once again began to focus on the branch as they realized that an internet only delivery strategy was not viable for the vast majority of their customers and "branch renewal" programs blossomed, an interesting phenomenon continued among retail banking clients...the online banking utilization rates continued to escalate.

Close to 2/3 of US Households now have internet access and last year over 25% of those 75+ million households banked online. Jupiter Media Metrix expects that number to increase to 59% of internet accessible US Households banking online by 2005. This continued adoption amongst retail bank customers has not been lost on the nation's bankers. Moreover, the early predictions that online accounts would be "stickier" and reduce bank customer churn rates have actually been borne out. In 1999, bank retail account churn rates were approximately 12%. Online banking has helped to dramatically reduce that churn by close to 30% with 2002 churn rates at 8.4%. That is real value being created for the banks.

Evidenced by the advertising examples above, bankers are working diligently to convert customers to online banking. In addition, retail bank marketing executives are trying to deepen the customer experience and relationship and are pushing value added services like EBPP to create a more powerful online relationship with their customers. The result...It's working! In 2000, Pew, a national research firm, polled over 80 million Americans in an effort to rank their behavior and use of 50-60 on-line activities. At the height of the Internet boom, 17% of those surveyed were using online banking. Today, in an updated Pew poll, over 32% of Americans are banking on-line, more than are doing any other on-line activity. "It's outpaced everything, including travel, e-commerce and downloading music," said Susannah Fox, Director of Research at Pew.

Bank of America now has over 5.2 million active Internet banking customers with approximately 7.2 million registered to use the service. Over half of BofA's retail customers are now registered to use Internet Banking, compared to rates of between 20-39% for the other top 10 banks in the U.S. Why the difference? BofA's head of e-commerce, Sanjay Gupta, is convinced it's due to their heavy marketing of the service. Once customers see the site, they can't understand why anyone would want to conduct banking transactions in any other fashion. Given the real benefits of converting customers to Internet banking, including reduced churn and higher average balances, today's bankers are focused on creating a stronger link than simply online account access. The adoption is now spreading, due to utility, convenience and an aggressive marketing push, to EBPP.

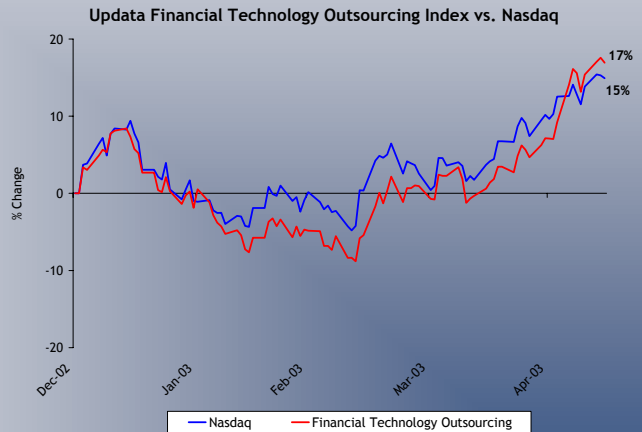
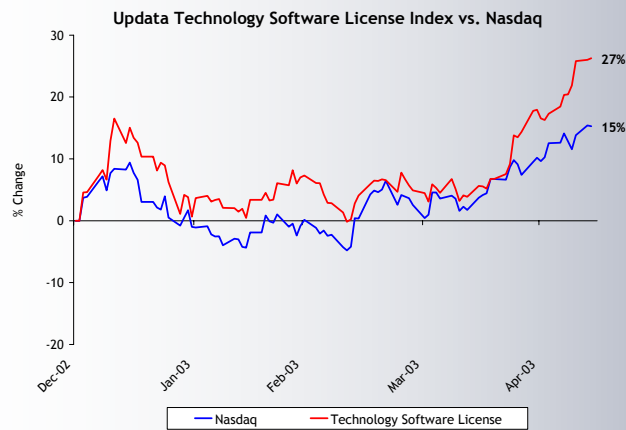
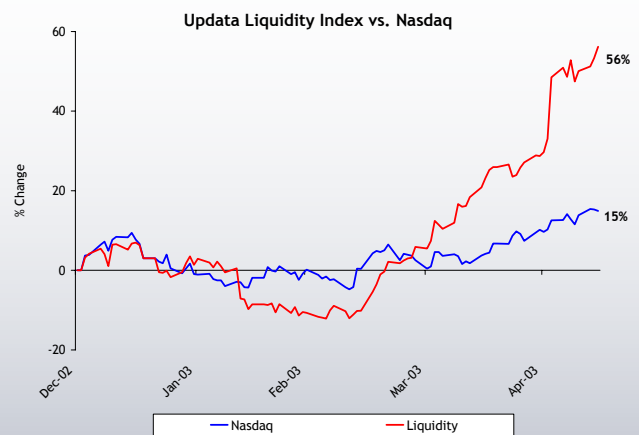
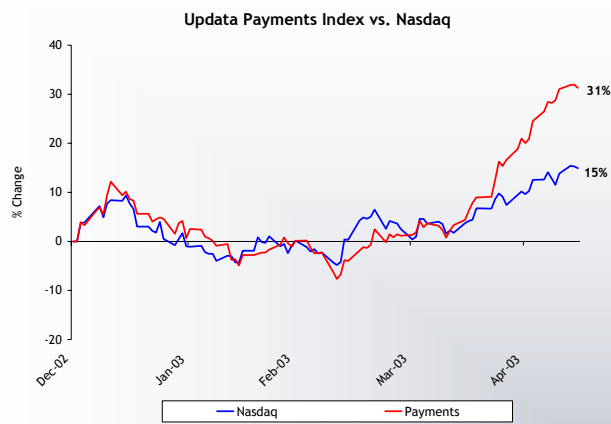
The promise of EBPP adoption and the business opportunity created by its anticipated adoption has left a path of failed companies in its wake. Many investors and entrepreneurs have attempted to cash in on the coming wave of EBPP adoption in the past. The problem has been that consumer adoption of the service has been far slower to materialize than any of the pundits had predicted. Our contention is that 2003 will be remembered as the inflection point in the numerous hockey stick curves that have been developed over the years promising the EBPP explosion. Checkfree, the dominant provider of electronic payment solutions, recently surprised Wall Street with its dramatic increase in transactions and registered customers in the first quarter. Transaction volumes were up 36% year-over-year and resulted in over 111 million transactions during the quarter. Checkfree's active subscribers now approach 4 million customers. Most importantly, pricing, which had been consistently deteriorating, held steady for the quarter. While Checkfree is public and the largest EBPP provider, our conversations with the other market participants confirms that they are all experiencing similar trends and perceive the opportunities for continued adoption to be exceptional. Given the current economic and business climate for most technology providers, we see this as a clear sign that the momentum behind EBPP has accelerated and the growth curve looks very robust.

The value to the banks and other financial institutions is becoming evident as the population sample and experience base has grown. A BofA study determined that active bill pay users make 30% fewer calls to call centers, their deposit balances are 38% higher than before they used bill pay, and they carry 45% higher loan balances than before they used bill pay. This data has not been lost on other banks and brokerages. Many of the recent bill pay announcements have come from the likes of Charles Schwab and E*Trade as they look to capture this phenomenon in their own client base.

What does hitting the inflection point mean to the participants in this market? First, we believe that the organic business opportunities for providers of EBPP and online banking services remains enticing. Second, scale, customer service, cost structure and product features and functionality are critical success factors to gaining market share going forward. Third, there are still too many providers of online banking solutions in the marketplace. Fourth, large technology providers and outsourcers not currently involved in EBPP or online banking are beginning to see this trend line and are now convinced that the market opportunity is finally here. These factors, taken together, portend for an interesting period over the next eighteen months during which we believe there will be continued consolidation amongst players already participating in this sector. Moreover, we see many larger players, who do not currently have an offering available, looking for a platform acquisition.

Given the criteria for success identified above, we believe that larger players, who are at scale and wish to remain independent, need to focus on further consolidation within the sector to add customers, additional scale and new and/or better technology features. For those companies that are not at scale or that are interested in identifying the right partner with which to grow their business should seek to move rapidly to engage in a dialogue with both industry leaders as well as other large technology vendors and outsourcers that are now focused on the sector. History has demonstrated that in these environments when strategic positioning and consolidation are pushed into high gear, those companies that effect transactions early in the process are typically rewarded with premium values.

Udata Various Financial Technology Composites: 2002 Price Performance



Technology Outsourcing index includes BSG, DGIN, DST, FISV, TREE, SEIC, STT, SDS, ADP, FIC, JH
 Technology Software License index includes S/NX, ADVS, BARZ, CORI, JKHY, INTD, INTU, JH, SONE, SCAI
 Liquidity index includes ESPD, ITG, INET, NITE, NYFX, TRAD
 Payments index includes ADS, ACRT, EPAY, CEY, CKFR, CEFT, EFDS, FDC, GPN, NAP, TSS, TSAI, TTPA, FNDD, ORCC, INTD

Financial Technology Company News Briefs

PLANTATION, FL, May 12 (PRNewswire-FirstCall) -- **TradeStation Group, Inc.** (Nasdaq: TRAD) today announced the release of TradeStation 7.1, the first quarterly update to its next-generation TradeStation 7 trading platform launched earlier this year. The company believes TradeStation 7.1's new features and enhancements increase the company's potential for growth of revenues and market share, and soon expects to see results. For example, with TradeStation 7.1, several premium features that have been widely requested by TradeStation's brokerage clients and subscribers may now be individually selected and paid for on a monthly basis. These premium features include TradeStation's award-winning RadarScreen and OptionStation services, and integrated ECN book market depth. RadarScreen enables traders to scan up to 1,000 symbols in real-time to identify potential buy and sell opportunities based on the traders' custom trading criteria. OptionStation lets futures and index options traders explore options trading strategies by enabling them to sort through hundreds of possible positions to identify the most favorable risk-reward profile based upon the traders' custom trading criteria.

DALLAS, TX, April 24 (PRNewswire-FirstCall) -- **Alliance Data Systems Corp.** (NYSE: ADS), a leading provider of transaction services, marketing services and credit services, today announced the pricing of a public offering at \$19.65 per share, of 9,000,000 shares of its common stock, 7,000,000 of which are being sold by one of its stockholders, Limited Commerce Corp., an affiliate of Limited Brands, Inc., and the remaining 2,000,000 of which are being sold by Alliance Data Systems. In addition, Alliance Data Systems has

granted the underwriters an option to purchase up to 1,350,000 shares from Alliance Data Systems at the offering price. The net proceeds to Alliance Data, estimated at \$36.8 million, together with other available funds will be used to repay in full a subordinated note in the original principal amount of \$52 million to an affiliate of Welsh, Carson, Anderson & Stowe, Alliance Data's largest stockholder.

ATLANTA, GA and CHICAGO, IL, May 5 (PRNewswire-FirstCall) -- **CheckFree Corporation** (Nasdaq: CKFR) and **ABN AMRO** today announced a partnership which will allow ABN AMRO to deliver Web Automated Clearing House (ACH) services to the bank's corporate cash management clients using CheckFree's next-generation PEP+ Exchange platform. ABN AMRO is the sixteenth largest originator of ACH transactions, according to the new NACHA Top 50 List for 2002 published in American Banker April 28, 2003. For over a decade, ABN AMRO has utilized CheckFree's PEP+ ACH software, and the financial services company has recently purchased the PEP+ Exchange Internet module and upgraded to CheckFree's latest system, PEP+ Platinum. PEP+ Platinum will provide ABN AMRO with greatly increased ACH volume, operational efficiency and enhanced user functionality for the bank's customers. PEP+ Exchange, named ACH Control by ABN AMRO, will now enable the bank to provide its corporate customers with direct Internet access to a complete suite of ACH information and new self-service capabilities. With 24x7 online access to the bank's cash management system, ABN AMRO's corporate customers will have access to ACH information to view transaction detail, generate and receive control total information, and monitor file status via the web. Customers will also be able to schedule their respective ACH processing calendars via the bank's Web interface.

NASHVILLE, TN, May 12 (BUSINESS WIRE) -- **iPayment, Inc.** (Nasdaq: IPMT) today announced the pricing of a public offering of its common stock at \$16.00 per share, before underwriting discounts and commissions. All 5.0 million shares being offered are being offered by the Company. The shares will be listed on the Nasdaq National Market under the symbol IPMT and will begin trading on May 12, 2003. The Company intends to use \$46.1 million of the net proceeds from the offering for the repayment of outstanding indebtedness, \$5.0 million for working capital and the remainder for general corporate purposes, including potential acquisitions.

LOUISVILLE, KY, May 1 (PRNewswire-FirstCall) -- **National Processing Company, LLC.**, a leading provider of payment settlement services and a wholly owned subsidiary of National Processing, Inc. (NYSE: NAP), announced the signing of a multi-year, strategic co-marketing agreement with **Payerpath, Inc.**, a leading provider of Internet-based financial transaction solutions for healthcare providers and payers. Under the terms of the agreement, Payerpath will market NPC's HealthPay(SM) service to its payer partners, allowing the payers and their providers, to receive the benefit of enhanced electronic commerce solutions.

COLUMBUS, GA, April 28 (Dow Jones) -- **Total System Services Inc.** acquired **Enhancement Services Corp.**, a provider of loyalty marketing services for the credit-card industry, for \$36 million in cash. Enhancement's Chief Executive and President Steven Wilson will continue to manage day-to-day operations of the unit, based in Roswell, Ga. In a press release Monday, Total System Services, an electronic-payment processor for credit cards, said the acquisition will allow it to offer loyalty services to its existing clients. Currently, clients outsource loyalty marketing to other vendors.

NEW YORK, NY, May 6 (Reuters) -- **Automatic Data Processing Inc.** (NYSE:ADP) on Tuesday said it signed an agreement with **E*Trade Inc.** (NYSE:ET) to convert the online brokerage's back office books and records system to ADP. ADP, the largest U.S. payroll company, said the contract with E*Trade is for 10 years. It did not disclose details on the value of the pact. ADP's brokerage services business has been a drag on its earnings for several quarters as weak markets have caused customers in the financial services industry to shed staff.

KANSAS CITY, MO, April 29 (Dow Jones) -- **DST Systems Inc.** and **Janus Capital Group Inc.** (NYSE:JNS) said the two companies are in talks that could result in DST buying out Janus' equity stake in the technology company. In a press release Tuesday, the companies said they're discussing potential transaction options, including a tax-free reorganization under which DST would acquire all or part of the 39.7 million shares of DST common stock currently owned by Janus. The stake amounts to 33% of DST shares. The discussions are preliminary and no agreement has been reached, they said.

SAN RAFAEL, CA, May 4 (BUSINESS WIRE) -- **Fair Isaac Corporation** (NYSE:FIC), the leading provider of analytics and decision technology, today announced the release and immediate availability of Fair Isaac Blaze Advisor 5.0. The new release of Fair Isaac's business rules management software allows greater control and security for team-based development and maintenance of business rule applications, new options for building decision trees as part of a decision process, and the first in a series of planned integrations with Fair Isaac's leading analytic modeling tools.

BROOKFIELD, WI, May 6 (BUSINESS WIRE) -- **Fiserv, Inc.** (Nasdaq:FISV) has launched the FraudGuard(TM) check fraud detection suite, a family of integrated applications designed to automate the fraud detection process and more effectively combat potential check fraud. FraudGuard is an integrated suite of individual applications used for specific check fraud detection processes, such as positive pay, signature verification and exceptions processing. Using a common platform, the system automates check fraud detection by using digital interrogation technology to verify the authenticity of all fields on captured check images, ensuring that no alterations, counterfeits or signature forgeries go unnoticed.

LONDON, UK & BERKELEY, CA, May 12 (BUSINESS WIRE) -- **Reuters** (LSE:RTR), the global information company, and **Barra Inc.** (NASDAQ:BARZ) a global leader in risk management technology for investment professionals, have formed an exclusive alliance to integrate Barra's market leading buy-side risk analytics with Reuters products for the buy-side. The deal reflects Reuters strategy to increase the competitiveness of its core information business by providing financial professionals with indispensable content and analytical tools. Under the deal, institutional and private wealth managers will be offered Reuters market leading information and Barra risk analytics all within the same system.

ATLANTA, GA, May 5 (BUSINESS WIRE) -- **S1 Corporation** (Nasdaq: SONE), a leading global provider of Enterprise solutions for the financial services industry, today announced S1 Trade Finance 2.1, the latest version of the Company's Internet-based offering for managing international trade finance operations. Strategically developed to meet the growing demand for open account processing functionality, this release combines open account processing with enhanced capabilities for creating and reporting on trade documents from purchase order and letter of credit, to direct collections in one, integrated system. S1 Trade Finance 2.1 enables banks to reduce processing costs, increase the speed and accuracy of information exchange and improve overall trade cycle time.

OAKS, PA, April 30 (PRNewswire-FirstCall) -- **SEI Investments** (Nasdaq: SEIC), a leading provider of asset management and investment technology solutions, announced today new donor-advised fund services for nonprofit clients. The new features allow donors secure, online access to their donor-advised or philanthropic fund accounts through the charity's website. Donors may review the value of their accounts, view recent activity and statements and recommend grants. This solution allows donors to interact with a charity at their convenience and enables them to receive additional information from the charities which they support.

SAN FRANCISCO, CA, May 6 (PRNewswire-FirstCall) -- **Advent Software, Inc.** (Nasdaq: ADVS), the leading provider of software to the financial services industry, today announced the launch of "Advent for Hedge Fund Managers," a comprehensive front-to-back solution that provides hedge fund managers with the reliable decision support needed to succeed in today's split-second investing environment. Comprised of five modules -- Fund Accounting & Reporting, Partnership Accounting, Investor Relationship Management, Trading, and Prime Broker Reconciliation -- Advent for Hedge Fund Managers is an expansion of Advent's current hedge fund offerings and addresses the mission critical requirements that today's hedge fund managers face, including the need to deliver accurate decision support information to the front and middle-offices as well as the need to minimize operating risk.

Upcoming Financial Technology Events



May 18 - 20, 2003:	15 th Annual Card Forum & Expo, New Orleans, LA
May 18 - 20, 2003:	Branch Banking Symposium, Chicago, IL
May 21, 2003:	Successful CRM Strategies for Wealth Management, New York, NY
June 5 - 6, 2003:	The Bond Buyer's Midwest Public Finance Conference, Chicago, IL
June 8 - 10, 2003:	5 th Annual EBPP/EIPP Conference, San Francisco, CA
June 9 - 10, 2003:	Networked Financial Services Forum, New York, NY
June 17 - 19, 2003:	SIA Technology Management Conference, New York, NY
September 14 - 16, 2003:	9 th Annual Financial Services Technology Forum: Online 2003, Phoenix, AZ
September 21 - 23, 2003:	16 th Annual Benefits Management Forum & Expo, San Diego, CA
October 13, 2003:	4 th Annual Wealth Management Forum, Chicago, IL
October 16, 2003:	Wealth Management Technology Conference, New York, NY

Recent Financial Technology Private/Venture Capital Financing

Date	Company	Description	Amount Raised (Mil.)	Investors
May-03	Upstream Technologies	Developer of asset-management technology used by managers of separate accounts	ND	Lava Trading
May-03	Sabrix	Transaction tax management software and tax research	\$10.5	Trinity Ventures, Mohr, Davidow Ventures, Venture Strategy Partners
May-03	Mantas	Behavior detection technology for the financial services industry	\$4.0	Comerica
Apr-03	Netupdate	Mortgage software services	\$2.6	Alexander Hutton Venture Partners
Apr-03	Mavent	Provider of mortgage lending compliance services	\$6.0	Financial Technology Ventures
Apr-03	eCredit	Credit and collections automation software	\$9.0	Apex Capital Management, Internet Capital Group, Sterling Venture Partners
Apr-03	CardSystems	Electronic payment processing services	\$23.6	Camden Partners, Equity Dynamics, Principal Financial Group, Edgewater Private Equity Funds
Mar-03	I4 Commerce	Merchant payment technologies for multi-channel retailers	\$23.0	GRP Partners, Crosspoint, Venture Partners, Azure Capital Partners, First Data Corp., Paymentech
Mar-03	Covarity	Credit risk management software	\$2.0	Tech Capital Partners
Mar-03	Closedloop Solutions	Real-time enterprise financial planning and forecasting software	\$5.0	Draper Fisher Jurvetson, Sutter Hill Ventures
Mar-03	Raedel Financial Solutions	Analytical software tools	\$0.5	Washington Capital Partners
Mar-03	LiveCapital	Enterprise credit management software	\$7.4	Selby Ventures, Cardinal Venture Capital, Kingston Creek Ventures, PacRim Venture Partners, Irwin Ventures, Kleiner Perkins Caufield & Byers, Red Rock Ventures
Mar-03	Bullrun Financial	Web-based portfolio management software	\$3.0	Mission Ventures

Financial Technology M&A Activity

(\$ in Millions)

Date Closed	Seller	Buyer	Deal Value	Revenue	Mult of Revenue
Pending	London Pacific Advisory Services	SunGard	ND	NA	NA
Pending	LendingTree	USA Interactive	\$716.1	\$129.3	5.5x
Pending	Billserv	CyberStarts	\$4.8	\$4.2	1.1x
Pending	Concord EFS	First Data Corp.	\$6,748.3	\$2,174.4	3.1x
Pending	Telecash Kommunikatons	First Data	ND	NA	NA
Pending	ProBusiness Services Inc	ADP	\$500.0	\$168.6	3.0x
Pending	AVT Technologies	Reuters	ND	NA	NA
May-03	Wausau Benefits	Fiserv	ND	NA	NA
May-03	Hamilton & Sullivan	Fidelity National Financial	ND	NA	NA
May-03	Computer Consultants Corporation	Aurum Technology	ND	NA	NA
Apr-03	Mydiscountbroker.com	Ameritrade	\$5.0	NA	NA
Apr-03	Core3	Ephinay	ND	NA	NA
Apr-03	Caminus Corp	SunGard Data Systems	\$159.3	\$89.2	1.8x
Apr-03	Arrakis	RiskMetrics Group	ND	NA	NA
Mar-03	Brand and Trade Processing Technology of Proponix	American Management Systems	ND	NA	NA
Mar-03	Precision Computer Systems	Fiserv	ND	\$25.0	NA
Mar-03	Multex.com	Reuters	\$238.2	\$92.4	2.6x
Mar-03	ORFI Business Editors	McCracken Financial Software	ND	NA	NA
Mar-03	Tri-City	Bisys Group	ND	NA	NA
Mar-03	Capital Synergies	Bisys Group	ND	NA	NA
Mar-03	Hoover's Online	Dun & Bradstreet	\$117.0	\$32.0	3.7x
Mar-03	S&P ComStock	IDC	\$115.0	\$52.5	2.2x

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