

# **Interval Research – Tyzx Prospective Partner/Investor Findings**

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## Methodology & preliminary notes

## Review of a number of secondary sources and two informal interviews formed the basis of the findings in this report

- Vendors' retail-specific web resources reviewed included:
  - [http://www.andersen.com/services/retail/reta\\_home.html](http://www.andersen.com/services/retail/reta_home.html)
  - <http://www.symbol.com/>
  - <http://www.cisco.com/warp/public/779/ibs/retail/overview.htm>
  - <http://houns54.clearlake.ibm.com/solutions/retail/>
  - <http://www.sap.com/solutions/industry/retail/index.htm>
  - <http://retail.3com.com/>
  - <http://www.ncr.com/>
  - <http://www.hp.com/retail/>
- Media/analyst sources reviewed included:
  - [www.retailsystems.com](http://www.retailsystems.com)
  - [www.retailtech.com](http://www.retailtech.com)
  - [www.risnews.com](http://www.risnews.com)
  - [www.cnn.com](http://www.cnn.com)
  - [www.corporate-ir.net](http://www.corporate-ir.net)
  - [www.cnet.com](http://www.cnet.com)
  - [www.chainstoreage.com](http://www.chainstoreage.com)
  - [www.barpoint.com](http://www.barpoint.com)
  - [www.financialweb.com](http://www.financialweb.com)
  - [www.intermec.com](http://www.intermec.com)
  - [www.news.com](http://www.news.com)
  - [www.unova.com](http://www.unova.com)
  - [www.zdnet.com](http://www.zdnet.com)
  - [www.cgi-cnn.com](http://www.cgi-cnn.com)
  - [www.retailindustry.about.com](http://www.retailindustry.about.com)
- Conversations included:
  - Huy Le, Pre-sales, Cisco Systems
  - Mark Burden, Business Intelligence team, IBM

## Findings regarding Tyzx's top potential investors/partners should be bolstered by primary interviews where possible

- While this validation of Interval/Tyzx's initial partner/investor assumptions was beneficial, significant inferences have been made in findings here due to the nature of the research
  - The majority of this research is based on secondary information sources; the understanding of each company detailed here would benefit from input from primary sources such as in-depth conversations with company representatives or analyst perspective
- The hypothetical Tyzx propositions sections of this report should be considered draft propositions; the wide-ranging nature of this exercise did not allow deep analysis of any one company, which made it difficult to create unique, compelling propositions for each firm
  - Partnership/investment opportunities Tyzx considers most appealing should be investigated at a deeper level of detail to fully uncover best messages to use for each

## Research Findings

## Andersen Consulting

<p><b>Company overview</b></p>	<ul style="list-style-type: none"> <li>• Andersen's retail consulting group includes over 2,000 staff and provides a number of professional services to retailers             <ul style="list-style-type: none"> <li>- Merchandising</li> <li>- Marketing/advertising</li> <li>- Procurement</li> <li>- Store operations</li> <li>- Real estate</li> <li>- Human resources</li> <li>- Electronic commerce</li> </ul> </li> <li>• Retail is not a core business vertical for Andersen; the company serves a broad range of other clients and industries, including but not limited to:             <ul style="list-style-type: none"> <li>- Automotive &amp; industrial products</li> <li>- Banking</li> <li>- Chemicals</li> <li>- Communications</li> <li>- Electronics &amp; high tech</li> </ul> </li> <li>• Andersen Consulting is one of the world's largest business consulting firms; the company has more than 53,000 employees worldwide and had \$6B in revenues in 1997</li> <li>• A company (and general business consulting industry) trend is moving away from large, back-end integration projects and towards shorter, e-commerce-based projects</li> </ul>
<p><b>Apparent customer needs being addressed?</b></p>	<ul style="list-style-type: none"> <li>• Among its other retail services, Andersen offers specific programs to help clients better understand how to use retail spaces to maximize revenue and efficiency, the very customer want/need that Tyzx's intends to address</li> </ul>
<p><b>What does the company appear to be looking for?</b></p>	<ul style="list-style-type: none"> <li>• Andersen and the other "big 5" consulting firms appear more anxious to expand clients' presences in the virtual retail space than in their brick and mortar businesses; Andersen in particular is actively positioning itself as the best partner for dot-com commerce startups (seemingly to the exclusion of positioning itself as an appropriate partner for traditional physical retailers)             <ul style="list-style-type: none"> <li>- Andersen has made a number of public statement about its strategic focus on e-commerce</li> <li>- Andersen and the other consulting firms are investing heavily in small, often cash-strapped Internet start-ups, including "stock for services" deals which could be lucrative if the start-up's stock soars</li> <li>- Is willing to provide its industry expertise and stability to help Internet start-ups in an effort to build brand in the online space</li> </ul> </li> </ul>
<p><b>How much could it invest?</b></p>	<ul style="list-style-type: none"> <li>• Andersen and all the "big 5" shops have shown substantial evidence in being interested in and willing to invest in all manner of technology start-ups             <ul style="list-style-type: none"> <li>- Reuters reports that Andersen has \$100M earmarked for investment in e-commerce projects</li> </ul> </li> </ul>
<p><b>Beyond investment, what else could the company offer Tyzx?</b></p>	<ul style="list-style-type: none"> <li>• Andersen touches almost every industry in a broad variety of services, potentially allowing introduction and cross selling of Tyzx technologies into virtually every business sector in for a seemingly endless number of applications             <ul style="list-style-type: none"> <li>- Anderson is currently keen to assist high tech start ups with knowledge transfer of industry and technology expertise</li> </ul> </li> </ul>

## Andersen Consulting (cont'd)

<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx's technology and service could be positioned as a way for Andersen to augment its existing deep data-mining services for retail customers</li> <li>• Tyzx's solution could also be described as a way for Andersen to link its retail excellence and customer relationship management services, providing the "glue" for a more comprehensive, end-to-end retail service solution</li> <li>• Andersen would possibly respond best to some sort of e-commerce angle if Tyzx could develop one and articulate it credibly             <ul style="list-style-type: none"> <li>– Andersen's current investment focus seems to be solely on e-business firms</li> <li>– It's unclear whether there is a credible e-commerce angle in Tyzx's current planned service offering</li> </ul> </li> </ul>
<p><b>Tyxx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx could help Andersen offer a more comprehensive means for retail clients to deepen their understandings of their customers' habits             <ul style="list-style-type: none"> <li>– Optimizing brick &amp; mortar retail effectiveness could be more important than ever in today's climate of hyper-competition and margin erosion from Internet discounters</li> </ul> </li> <li>• Tyzx could help Andersen bolster its service offerings in two currently separate practices             <ul style="list-style-type: none"> <li>– Customer relationship management</li> <li>– General retail consulting</li> </ul> </li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• Andersen seems enthralled with e-commerce, is focusing substantial energy on this space and may not be interested in or have the mandate to expand its traditional retail practice at this time unless there is some obvious e-commerce tie-in</li> <li>• Andersen's overall size implies it may exhibit "Goliath" characteristics in a partnership             <ul style="list-style-type: none"> <li>– May be slow or difficult to work with</li> <li>– Could quickly fund competitive technology if deal sours</li> <li>– May want to purchase technology outright</li> </ul> </li> <li>• If a close, strategic partnership is possible, Tyzx runs the risk of getting swallowed up, bought and dismantled before the company's vision for its core technology is fully realized</li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• Mary Puskar is a possible entry-level contact, and can be reached at the company's offices in Chicago at 312-693-4335 or as mary.m.puskar@ac.com</li> <li>• Mary A. Tolan is the managing partner of Andersen's retail practice</li> </ul>

## Symbol Technology

<p><b>Company overview</b></p>	<ul style="list-style-type: none"> <li>• Symbol is a leader in hand held scanners and barcode readers, as well as wireless LAN technology and associated services             <ul style="list-style-type: none"> <li>– Symbol's Portable Sales System (PSS) allows shoppers to scan items themselves using a store-issued handheld scanner to speed checkout</li> <li>– Symbol's Spectrum 24 wireless LAN offers substantial bandwidth for voice, data, and bar code data capture</li> </ul> </li> <li>• The company has installed wireless LANs at 45,000 customer locations, and has seven million scanners and scanner hand-helds in use worldwide</li> <li>• Symbol initially focused on retail but in recent years has developed domestic and international presences in a number of industries</li> <li>• Retail was 80%, but is now 50% of Symbol's business; other verticals served include:             <ul style="list-style-type: none"> <li>– Transportation and distribution logistics</li> <li>– Parcel and postal delivery</li> <li>– Healthcare</li> <li>– Education</li> <li>– Manufacturing</li> </ul> </li> <li>• 55% of the company's gross sales are outside of North America</li> <li>• Symbol had \$775M in sales in 1997</li> </ul>
<p><b>Apparent customer needs being addressed?</b></p>	<ul style="list-style-type: none"> <li>• In retail, Symbol's main proposition for PSS is speeding checkout times             <ul style="list-style-type: none"> <li>– A U.K. study suggests consumers would rather visit a dentist than wait in a retail checkout line</li> </ul> </li> <li>• The company also perceives a customer need for a communications platform for current and future applications, given its Spectrum 24 wireless network</li> </ul>
<p><b>What does the company appear to be looking for?</b></p>	<ul style="list-style-type: none"> <li>• While diversified into a number of industries, Symbol's actions imply a current strategy may be to expand its retail operations             <ul style="list-style-type: none"> <li>– Recently signed and is promoting its largest contract to-date with Kmart, with which it has a 10-year relationship</li> <li>– Tried to purchase rival retail scanner manufacturer Telxon, based in part on Telxon's strong retail penetration with companies such as Wal-Mart</li> </ul> </li> </ul>
<p><b>How much could it invest?</b></p>	<ul style="list-style-type: none"> <li>• Symbol attempted to purchase Telxon in June '98 for \$612M (the \$38/share price was substantially higher than the \$5/share it was trading at)             <ul style="list-style-type: none"> <li>– At the time of the attempted acquisition, Symbol wrote Telxon that its financial mechanisms were in place and that the price was "negotiable", suggesting the availability of substantial funding at the time, but the offer was spurned</li> </ul> </li> <li>• This August, Symbol invested \$6.3M in web-based comparison shopping startup Barpoint.com</li> <li>• The Barpoint deal occurred <i>after</i> the Telxon purchase attempt, which suggests Symbol may have revised its tactics from acquisition to investment, which could be good news for Tyzx</li> </ul>
<p><b>Beyond investment, what else could the company offer Tyzx?</b></p>	<ul style="list-style-type: none"> <li>• Symbol has strategic partnerships with industry leaders such as IBM and Compaq that Tyzx may be able to piggyback on by working with Symbol</li> <li>• Symbol has relationships with many large retailers, has been a trusted partner for a number of years and would be able to make C-level introductions</li> <li>• The company has substantial networking expertise, primarily in wireless</li> <li>• Tyzx could gain retail market credibility by an association with Symbol</li> </ul>

## Symbol Technology (cont'd)

<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx would need to build the case that customer tracking is more important than currently reflected in Symbol's product portfolio and propositions</li> <li>• Symbol would need to perceive ways for it to make money with Tyzx, whether by driving sales of its existing products or possibly by taking commissions from new business it facilitates</li> <li>• As a startup, Tyzx would also need to impart its understanding of the wants and needs of retailers and evidence its technology's satisfaction of those needs             <ul style="list-style-type: none"> <li>– Leading retailers that have already signed up with Tyzx should be identified</li> </ul> </li> </ul>
<p><b>Tyzx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx could approach Symbol about being able to offer its retail customers a deeper understanding of customer behavior than they have today             <ul style="list-style-type: none"> <li>– Tyzx could augment the rudimentary understanding made possible with PSS by adding a spatial dimension to customer tracking data – the ability to track where and how within the store items are bought – through some sort of OEM/licensing arrangement                 <ul style="list-style-type: none"> <li>• Tyzx technology could give Symbol a logical “next step” evolution for existing PSS customers</li> </ul> </li> <li>– Tyzx could partner with Symbol to offer its data collection/mining service as an alternative for retailers who can't/won't use PSS – which requires trusting shoppers with handheld electronics                 <ul style="list-style-type: none"> <li>• Symbol could function as a channel partner for Tyzx, reselling the Tyzx service to its customers for a percentage of revenue</li> </ul> </li> </ul> </li> <li>• Tyzx could approach Symbol about using its Spectrum 24 wireless LAN as the retail network infrastructure for Tyzx device communication             <ul style="list-style-type: none"> <li>– Tyzx has a compelling application that could drive sales of Spectrum 24 equipment in sites where it is not currently deployed</li> </ul> </li> <li>• Tyzx's financial projections and early tester enthusiasm suggest it could be quite profitable and offer substantial return on investment</li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• Symbol's own PSS system – while positioned primarily as a retail checkout speed-through solution – appears to indeed have customer tracking abilities, although these abilities are subordinated in the company's marketing             <ul style="list-style-type: none"> <li>– PSS is described only cursorily as allowing retail chains to analyze customer habits based on data output from shoppers' PSS handsets</li> <li>– Tyzx's propositions above may be less compelling to Symbol if the company believes it already has good customer tracking features in PSS, or if the company suffers from “not invented here syndrome” (the company has invested in Barpoint.com, so there seems little chance of this)</li> </ul> </li> <li>• Any discussions with Symbol should be sensitive to the company's bad experience with its Telxon acquisition attempt; expect Symbol to insist on full disclosure and a rigorous due diligence process in any investment discussions             <ul style="list-style-type: none"> <li>– Questionable accounting practices that overstated Telxon's value and stability were named in a flurry of lawsuits and counter-suits regarding the failed deal</li> </ul> </li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• Tomo Razmilovic, President and Chief Operating Officer, Symbol Technologies</li> <li>• Bob Sanders, Senior Director of Product Marketing, Symbol Technologies</li> <li>• Richard Yost [ identified by Tyzx in original document; no further validation ]</li> <li>• Members of Symbol's customer advisory board may be good initial contacts to explore partnership or investment ideas             <ul style="list-style-type: none"> <li>– <a href="http://www.symbol.com/about/cab/cab_members.html">http://www.symbol.com/about/cab/cab_members.html</a></li> </ul> </li> </ul>
<p><b>Related opportunities?</b></p>	<ul style="list-style-type: none"> <li>• Consider approaching Symbol's competitor Telxon or Intermec; the \$2B parent company of Intermec (Unova) may see this as a valuable strategic play, as it is not strong in retail</li> </ul>

## Cisco Systems

<b>Company overview</b>	<ul style="list-style-type: none"> <li>• Retail is one of several enterprise markets Cisco has identified for specific vertical marketing efforts (others include health care, finance, education, government, manufacturing and airlines)</li> </ul>
<b>Apparent customer needs being addressed?</b>	<ul style="list-style-type: none"> <li>• Cisco believes its retail customers want to get their shops on the Internet <ul style="list-style-type: none"> <li>– Believes retailers want to develop new business and sell more</li> <li>– Believes retailers want to use the Internet to increase customer satisfaction (order tracking, ordering convenience)</li> </ul> </li> <li>• Cisco also believes retailers fundamentally want to increase their internal efficiencies and lower their costs of doing business, which the company says its networking hardware delivers on <ul style="list-style-type: none"> <li>– Access to employee telephone directories and other intranet applications (including inventory management and other kinds of cost control)</li> <li>– Extranets with vendors for just-in-time stock replenishment and streamlining the supply chain</li> <li>– Voice over IP for cost savings</li> <li>– Using the Internet to get information about new products and price changes from head office</li> <li>– Understanding what to order on the basis of what's being sold over the Internet (not necessarily what's being sold in stores)</li> </ul> </li> </ul>
<b>What does the company appear to be looking for?</b>	<ul style="list-style-type: none"> <li>• The company's present strategy appears to be simply selling Cisco network components as its solution for the retail industry, with very little other retail industry value-add; Cisco may not actually be looking for much in retail <ul style="list-style-type: none"> <li>– There is no evidence that Cisco is attempting to assemble a "whole product" for retail customers; a Cisco representative confirmed the company has no end-to-end solutions for the retail market</li> <li>– Network design advice and support appear to be the only non-hardware components Cisco offers retail customers</li> </ul> </li> </ul>
<b>How much could it invest?</b>	<ul style="list-style-type: none"> <li>• Investment opportunities may exist with Cisco Systems Capital Corporation (CSC), the financing arm of the company that primarily leases Cisco hardware to customers; CSC has invested in technology companies, however <ul style="list-style-type: none"> <li>– CSC and HP recently financed a \$50M investment in Korean telecommunication provider Dacom</li> </ul> </li> <li>• If a deal or relationship with Tyzx is to be the responsibility of the company's retail marketing group, there is no indication this division has yet spent any money building out its product line for retail <ul style="list-style-type: none"> <li>– Cisco's retail marketing efforts appear to include running multi-page advertorial in retail magazines and sponsoring retail industry technology conferences; there is no evidence of investment in companies to augment its retail product line</li> </ul> </li> </ul>
<b>Beyond investment, what else could the company offer Tyzx?</b>	<ul style="list-style-type: none"> <li>• Networking expertise and the ability to outsource actual retail store networking to local Cisco representatives or partners</li> <li>• Promotional value and credibility by association for Tyzx</li> <li>• Introductions at KPMG (this August Cisco committed \$1B to start a network consulting company with KPMG)</li> </ul>
<b>How could Tyzx convince this company it's a good partner?</b>	<ul style="list-style-type: none"> <li>• Tyzx would need to convince Cisco that building a more compelling offering for its retail customers would have value</li> <li>• Tyzx should disclose and leverage the names of its alpha tester/customers, given the substantial value they perceive in Tyzx's solution</li> <li>• Tyzx would appear more credible if other investors were on board</li> </ul>

## Cisco Systems (cont'd)

<p><b>Tyxx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyxx could drive demand for Cisco's network hardware in the retail market             <ul style="list-style-type: none"> <li>– The Tyxx service will create the need for networks in retail outlets</li> <li>– Would be expected to drive relatively high-bandwidth traffic</li> <li>– Tyxx will use the hardware of whichever vendor it allies with (if not Cisco, then 3Com or Bay)</li> </ul> </li> <li>• Reselling Tyxx's service to retail customers, new and existing, could be an additional high-margin revenue source for Cisco in retail</li> <li>• Partnering with Tyxx would illustrate Cisco's interest in the business of its retail customers and interest in solving customers' problems – something ineffectively communicated today             <ul style="list-style-type: none"> <li>– Allying with Tyxx would allow Cisco to prove dramatic statements to retailers about how networking technology can have fundamental, dramatic effects on a retailer's bottom line</li> </ul> </li> <li>• Tyxx's solution could help make one of Cisco's main retail marketing messages even more compelling             <ul style="list-style-type: none"> <li>– Cisco currently suggests its products can help retailers forecast product demand on the basis of what's being sold over the Internet; with Tyxx, Cisco can help retailers understand what's selling, where it's selling and why</li> </ul> </li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• Lack of evidence that Cisco is assembling a whole product for retail implies the company's retail group may not understand the benefits of whole product, or that it may not perceive benefit in applications – which would make it hard for the division to understand the value in working with Tyxx</li> <li>• There is no evidence that Cisco's retail group is substantial, which implies it likely has other issues to worry about             <ul style="list-style-type: none"> <li>– Cisco's retail market web resources are limited and amateurish</li> <li>– Minimal mention of Cisco or its retail activity in relevant trades</li> <li>– Calls to Cisco's retail group were not returned</li> </ul> </li> <li>• Because Tyxx itself has little retail experience, Cisco may question whether Tyxx is credible in advocating "whole retail products" and value-added solutions, and could dismiss the company out-of-hand</li> </ul>
<p><b>Who should Tyxx contact?</b></p>	<ul style="list-style-type: none"> <li>• The executive in charge of Cisco's retail vertical market business appears to be Amir Hartman, Managing Director of Retail Internet Business Solutions, Cisco Systems</li> <li>• Cisco System Capital Corporation is headed by Mike Hampton, worldwide general manager</li> </ul>
<p><b>Related opportunities?</b></p>	<ul style="list-style-type: none"> <li>• Cisco doesn't appear to construct full retail solutions itself, but vendors providing full solutions to retail use elements of Cisco's product lines for THEIR whole products; Tyxx should consider partnering with these vendors and adding value to their products             <ul style="list-style-type: none"> <li>– Symbol uses Cisco equipment in its Spectrum 24 wireless LAN solution</li> </ul> </li> </ul>

# IBM

<p><b>Company overview</b></p>	<ul style="list-style-type: none"> <li>• IBM has comprehensive offerings for the retail industry             <ul style="list-style-type: none"> <li>– IBM Retail Store Solutions                 <ul style="list-style-type: none"> <li>• Hardware division focusing on point-of-sale equipment</li> <li>• 25-year leader in retail POS solutions</li> <li>• Nearly 1.5 million shipped to more than 100,000 stores in 100 countries</li> </ul> </li> <li>– Distribution industry marketing group within IBM                 <ul style="list-style-type: none"> <li>• The group apparently responsible for marketing IBM products and services to the retail sector</li> </ul> </li> <li>– Global Services                 <ul style="list-style-type: none"> <li>• Integrated services, support and consulting</li> </ul> </li> <li>– Global Financing                 <ul style="list-style-type: none"> <li>• Leasing and financing options</li> </ul> </li> </ul> </li> <li>• IBM is careful to position itself as a provider of solutions for both “walk-in” or “click-through” customers – the company says it helps retailers improve speed to market, sales and customer service wherever their customers choose to shop</li> <li>• IBM's innovations cover the widest range of store hardware, including one of the leading checkout operating systems in retail, latest touch technology solutions and industry-leading printers</li> </ul>
<p><b>Apparent customer needs being addressed?</b></p>	<ul style="list-style-type: none"> <li>• IBM offers solutions (hardware and professional services) addressing three broad areas of retail customer needs that appear relevant to Tyzx             <ul style="list-style-type: none"> <li>– Business Intelligence solutions help turn retail stores’ data collected every day into knowledge, helping customers build better customer relationships, spot trends faster, cut management costs and develop more effective marketing strategies</li> <li>– Enterprise Resource Planning/Business Management Systems (ERP/BMS) solutions help cut management costs, improve return on investment and integrate and control virtually part of the retail environment, including merchandise management, point-of-sale, distribution, financial management, human resources and supply chain management</li> <li>– Retail Customer Relationship Management solutions help customers build stronger relationships with their best customers by understanding what they want and discovering which promotions work most effectively</li> </ul> </li> <li>• The actual implementation of solutions for these three areas of customer need is performed by IBM's Global Services group (distributed worldwide) after leads are qualified by a main call center</li> <li>• The importance of gathering and analyzing data is a fundamental marketing message of IBM to retail customers</li> </ul>
<p><b>What does the company appear to be looking for?</b></p>	<ul style="list-style-type: none"> <li>• Data mining computing solutions emerged repeatedly as important to IBM             <ul style="list-style-type: none"> <li>– It is unclear whether the company feels its own data mining and business intelligence software, hardware and services are adequate – but this represents a possible opportunity around which Tyzx can build propositions</li> </ul> </li> <li>• IBM does not appear to be actively soliciting retail industry partners through a formal partnership program such as those offered by HP and others in the retail industry trying help assemble whole products for customers</li> </ul>
<p><b>How much could it invest?</b></p>	<ul style="list-style-type: none"> <li>• Research uncovered no evidence of IBM investments in or purchases of retail industry companies (IBM's involvement with JD Edwards, Baan, PeopleSoft and others are potentially useful for retailers, but not clearly relevant to Tyzx's interest in investment)</li> </ul>

## IBM (cont'd)

<p><b>Beyond investment, what else could the company offer Tyzx?</b></p>	<ul style="list-style-type: none"> <li>• IBM could serve as a channel to the broad retail market for Tyzx <ul style="list-style-type: none"> <li>– Tyzx could also benefit from IBM's massive, effective prospecting funnel (impressive outbound sales calls, web and direct marketing efforts)</li> </ul> </li> <li>• IBM offers world-class integration expertise and complementary technologies</li> <li>• Tyzx would receive substantial promotional value and credibility by association with IBM</li> <li>• IBM could be an ideal partner to help Tyzx leverage its technology into other non-retail segments in the future</li> </ul>
<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx should learn more about how comprehensive IBM's retail solutions are in areas of data mining and business intelligence to learn to what extent it should promote its solution as rounding out IBM's whole product <ul style="list-style-type: none"> <li>– Tyzx's technology and service could be positioned as a way for IBM to augment its existing data-mining services for retail customers, but this message may go unheard if IBM believes it already has adequate solutions</li> </ul> </li> <li>• Tyzx's solution could also be described as a way for IBM to link its business intelligence, ERP/BMS and retail customer relationship management services, providing the "glue" for a more comprehensive, end-to-end retail service solution</li> </ul>
<p><b>Tyzx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx can help IBM offer physical retail customers more comprehensive data mining services <ul style="list-style-type: none"> <li>– Tyzx's service complements existing POS data mining software and services, and represents a valuable new data source for retail customers</li> <li>– Tyzx's service offering would assert IBM's retail technology leadership and help ensure retail market leadership</li> <li>– The Tyzx service would be powerful differentiation of IBM from HP, NCR and others</li> <li>– Would illustrate IBM's commitment to existing physical retailers, helping them hone their efficiencies and stay competitive vs. Internet retailers</li> </ul> </li> <li>• The Tyzx technology and service are relevant and versatile enough to be used by IBM professionals offering business intelligence, ERP/BMS and retail customer relationship management services</li> <li>• Aside from the strategic benefits of partnering with Tyzx, reselling the company's service to new and existing retail customers could be an additional high-margin revenue source for IBM in retail</li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx may encounter "not-invented-here" resistance in approaching IBM <ul style="list-style-type: none"> <li>– There is little retail partner news on IBM's web site, and little promotion of third party products</li> <li>– While an IBM telephone representative claimed the company routinely recommends and installs third party products for retail customers, there is little other evidence</li> <li>– IBM's acquisition of network management vendor Tivoli was referenced in some materials as being significant for the retail market, however Tivoli is a broad network management vendor and was acquired by IBM for more strategic reasons</li> </ul> </li> <li>• This research did not uncover any obvious point of entry for Tyzx to IBM; the company discloses little about how its retail operations actually work or who is in charge <ul style="list-style-type: none"> <li>– It is unclear whether Tyzx should approach the Global Services, Retail Store Solutions or Distribution Industry organizations within IBM</li> <li>– The size of IBM and interworking between groups could prove a drawback</li> </ul> </li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• Dr. Daniel Sweeney is distribution industry vice president for IBM <ul style="list-style-type: none"> <li>– Major themes of Sweeney's speech at a retail technology conference in Toronto last summer included how retailers are now forced to look for new sources of sales growth, new ways to gain competitive advantage and new sources of efficiency</li> </ul> </li> <li>• Ronald W. Hovsepian is director of distribution industry solutions unit, based in Waltham, Mass</li> </ul>

## SAP

<b>Company overview</b>	<ul style="list-style-type: none"> <li>• SAP Retail, the retail-specific version of SAP's R/3 enterprise wide software product, was introduced to the market with fanfare in 1997             <ul style="list-style-type: none"> <li>– SAP purchased retail enterprise software developer Dacos and incorporated its concepts and features into R/3 to form the basis of SAP Retail</li> <li>– SAP Retail offers 300 retail-specific processes above and beyond the standard 800 R/3 processes</li> </ul> </li> <li>• SAP Retail was subsequently criticized as not ready for wide implementation             <ul style="list-style-type: none"> <li>– The first U.S. customer cancelled its implementation after two years and \$50M, criticizing the software for its missing functionality, complexity and not supporting a high enough volume of transactions</li> </ul> </li> <li>• SAP Accelerated Retail, released in the summer of 1999, is a new out-of-the box quick-implementation version for fashion and supermarket-discount stores (hard goods and wholesale versions expected in first quarter 2000)             <ul style="list-style-type: none"> <li>– Based on SAP Retail 4.5 (which is, in turn, based on R/3)</li> </ul> </li> <li>• SAP's stated goal is to build a best-of-breed collection of software solutions (in all of its markets, not just retail), and not necessarily develop everything itself             <ul style="list-style-type: none"> <li>– SAP acquired Campbell Software in October, 1998 to bolster SAP Retail with its retail work force management software line StaffWorks</li> </ul> </li> <li>• SAP claims there are more than 1,250 SAP Retail customers worldwide</li> </ul>
<b>Apparent customer needs being addressed?</b>	<ul style="list-style-type: none"> <li>• Profitability concerns from the squeezing of retail margins is the high-level problem SAP attempts to address in its marketing of SAP Retail             <ul style="list-style-type: none"> <li>– SAP says retailers and wholesalers need to know what is bought when, where and, if possible, by whom and why – and understand the impact of promotions and markdowns, the influence of trends and events and even the role played by changing demographics and lifestyles so as to act on this information</li> </ul> </li> <li>• SAP offers the retail sector retail-specific reporting in the SAP Business Information Warehouse (SAP BW). This reporting is based on key labor and sales data from Campbell solutions StaffWorks and Time and Attendance</li> </ul>
<b>What does the company appear to be looking for?</b>	<ul style="list-style-type: none"> <li>• Complete market domination is an element of SAP's culture – the company is not content to share vertical segments, but seeks the dominant market share in every industry it targets with an industry-specific version of R/3             <ul style="list-style-type: none"> <li>– Extensive spending in marketing and sales</li> <li>– SAP is actively soliciting partnerships with software vendors through SAP's Complementary Software Program (CSP) in an effort to build what the company wants to emerge as "the most open software architecture in the software industry"</li> </ul> </li> </ul>
<b>How much could it invest?</b>	<ul style="list-style-type: none"> <li>• SAP Venture Fund invested regularly in 1999 in technology companies that it says it believes will further the state of the art in enterprise computing             <ul style="list-style-type: none"> <li>– Undisclosed sum March, 1999 in Red Hat Software, the leading LINUX distributor</li> <li>– Undisclosed sum June, 1999 in MarketFirst Software, a one-to-one marketing company</li> <li>– Undisclosed sum August, 1999 in Helier Software, a Internet-enabled electronic commerce vendor</li> </ul> </li> <li>• The quantity and variety of investments made by SAP Venture Fund this year worldwide imply the company's decision process for venture investment may be relatively quick</li> </ul>
<b>Beyond investment, what else could the company offer Tyzx?</b>	<ul style="list-style-type: none"> <li>• SAP could serve as a channel to the broad retail market for Tyzx</li> <li>• SAP and its 35,000 SAP integrators/developers worldwide offer integration expertise and complementary technologies for retail customers</li> <li>• If it understood and saw value in the applications for Tyzx's technology outside of retail, SAP could facilitate introductions at the largest companies in the world</li> <li>• Tyzx would receive substantial promotional value and credibility by association with SAP</li> </ul>

## SAP (cont'd)

<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx should emphasize its ability to augment SAP's existing merchandising abilities; in-store traffic analysis may not have been previously considered by the company</li> <li>• An understanding of ERP and ability to discuss its overall high level value-add would be important in any discussions with SAP</li> <li>• Tyzx should anticipate and prepare to fend off possible suggestions that Tyzx simply join SAP's CSP program, and impart to SAP the strategic nature of its technology</li> </ul>
<p><b>Tyzx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx can help SAP offer its customers a way to directly boost profitability by offering store traffic analysis metrics             <ul style="list-style-type: none"> <li>– Tyzx's service offering would be powerful differentiation for SAP</li> <li>– Could potentially create retail opportunities for SAP Retail that might not otherwise be available to the company</li> <li>– Would immediately help bolster ROI figures for SAP Retail</li> </ul> </li> <li>• Aside from the strategic benefits of partnering with Tyzx, reselling the company's service to new and existing retail customers could be an additional high-margin revenue source for SAP in retail</li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• SAP shares a similar focus on e-commerce to that of Andersen Consulting; both companies are allying themselves with e-commerce as an overall corporate positioning strategy, which is counter-productive to Tyzx</li> <li>• There may be considerable effort required to develop to SAP's APIs and data repository... effort which may not be otherwise leveragable to Tyzx</li> <li>• While SAP should easily understand the benefit of Tyzx's traffic analysis service in retail, and has relationships with the top businesses in the world, it may not be quick to understand or be able to leverage Tyzx's technology in sectors outside of retail             <ul style="list-style-type: none"> <li>– The merchandising application of Tyzx's technology could be an obvious benefit to SAP, but SAP may not see other applications for 3D vision outside the framework of its own value-add and may not be the most effective partner in this respect</li> </ul> </li> <li>• SAP may be interested in investing in Tyzx, but would not be expected to be interested in acquiring the company if Tyzx grew to become a large services firm             <ul style="list-style-type: none"> <li>– Even if the company perceived strategic value in Tyzx's technology, SAP's culture keeps service firms at arms-length, so as to not bulk up on services staff internally</li> </ul> </li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• Howard Lau is executive vice president of SAP Venture Fund</li> <li>• Joseph Kozak is retail business unit director of SAP America, based in Wayne, PA</li> <li>• Tyzx identified Mike Campbell, (former CEO of Campbell Software, acquired by SAP in October, 1998) as an appropriate contact, but he is no longer involved with SAP's retail operations – he is now vice president and general manager, SAP Human Resources business sector, Americas</li> </ul>
<p><b>Related opportunities?</b></p>	<ul style="list-style-type: none"> <li>• SAP competes with PeopleSoft/Intrepid, Richter, Retek and JDA for retail market enterprise software ... all of whom may also make potential partners/investors given their interest in unseating SAP</li> </ul>

## 3Com

<p><b>Company overview</b></p>	<ul style="list-style-type: none"> <li>• Retail is one of several enterprise markets 3Com has identified for specific vertical marketing efforts (others include education, government and health care)</li> <li>• 3Com appears to invest substantially in marketing and selling to retail customers             <ul style="list-style-type: none"> <li>– President and CEO Eric Benhamou appears at 3Com-sponsored retail market events</li> <li>– A 3Com POS Partners Program delivers networked POS solutions from NCR, ICL, Siemens Nixdorf, Harmonic Systems, Gateway Data Sciences and SHL Systemhouse</li> <li>– Over 175 retailers attended 3Com's first Retail Network Innovation Awards held in Chicago in conjunction with the Retail Systems 1999 conference</li> </ul> </li> <li>• 3Com appears to be trying to build leadership in retail by marketing more aggressively than Cisco             <ul style="list-style-type: none"> <li>– 3Com is playing more attention to whole product                 <ul style="list-style-type: none"> <li>• Has knowledge of impact of retail market applications like SAP, thin POS clients</li> <li>• Offers client/server migration services</li> <li>• Offers network design services</li> <li>• Offers installation services, cooperating with local phone companies and ISPs</li> </ul> </li> <li>– Much more comprehensive attendance at industry events than Cisco</li> <li>– More, and better, case studies of success in retail segment than Cisco</li> </ul> </li> <li>• 3Com claims to have installed networks at more than 700,000 retailers worldwide</li> </ul>
<p><b>Apparent customer needs being addressed?</b></p>	<ul style="list-style-type: none"> <li>• Currently, 3Com characterizes cost savings as its customers' top networking driver             <ul style="list-style-type: none"> <li>– New, more efficient applications</li> <li>– Network efficiency via thin computing, multiservice networks (voice, data &amp; video)</li> <li>– Want cost-effective end-to-end solutions (routers, switches, cards, etc.)</li> </ul> </li> <li>• Retailers want to use technology to differentiate themselves from competitors             <ul style="list-style-type: none"> <li>– Next-generation applications, POS (point of sale), multimedia kiosks</li> </ul> </li> <li>• A desire for next-generation POS appears to be giving retailers incentive to look at networking solutions now             <ul style="list-style-type: none"> <li>– There is an industry-wide move to open standard Ethernet over IBM Token Ring and NCR StarLAN legacy systems</li> </ul> </li> </ul>
<p><b>What does the company appear to be looking for?</b></p>	<ul style="list-style-type: none"> <li>• 3Com appears to understand retailers need more than just network hardware for their networks to have true value (i.e. whole product), but does not appear to be assembling third party solutions itself             <ul style="list-style-type: none"> <li>– 3Com appears content to talk about applications their networks enable, but has not yet seen it necessary to ally with application vendors</li> </ul> </li> <li>• Given 3Com's success in retail, it may be receptive to overtures from vendors like Tyzx that could help the company continue to win against Cisco             <ul style="list-style-type: none"> <li>– Retail appears to be one of the few enterprise verticals where 3Com has a dominant market position over Cisco; allying with or investing in Tyzx or similar retail application vendors could reinforce 3Com's leadership position</li> </ul> </li> </ul>
<p><b>How much could it invest?</b></p>	<ul style="list-style-type: none"> <li>• 3Com Ventures, the business development group within 3Com that invests in emerging technology companies, has made recent investments and acquisitions             <ul style="list-style-type: none"> <li>– Undisclosed investment in ASIC maker Silicon Value in November, 1999</li> <li>– \$17.5M acquisition of SmartCode Technologie, a French developer of wireless data communications and Internet access software technology in February, 1999</li> <li>– \$5M investment in Orion Fund, an Israeli-based technology fund in December, 1998</li> </ul> </li> </ul>
<p><b>Beyond investment, what else could the company offer Tyzx?</b></p>	<ul style="list-style-type: none"> <li>• Networking expertise and the ability to outsource actual retail store networking to local 3Com representatives or partners</li> <li>• Tyzx would enjoy promotional value and credibility in the retail marketplace by associating with 3Com             <ul style="list-style-type: none"> <li>– While Cisco is clearly the leading datacom brand, <i>3Com appears to be the dominant retail networking brand</i>, which would be expected to have good promotional value</li> </ul> </li> </ul>

## 3Com (cont'd)

<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx would need to convince 3Com that building and selling a more compelling offering for its retail customers, and not just talking about applications and services, would be valuable</li> <li>• Tyzx should disclose and leverage the names of its alpha tester/customers, given the substantial value they perceive in Tyzx's solution – put Gap, Staples, etc. in front of HP to talk about how compelling Tyzx's solution is</li> <li>• Tyzx would appear more credible if other investors were on board</li> </ul>
<p><b>Tyzx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx could drive demand for 3Com's network hardware in retail <ul style="list-style-type: none"> <li>– The Tyzx service will create the need for networks in retail outlets</li> <li>– Would be expected to drive relatively high-bandwidth traffic</li> <li>– Tyzx will use the hardware of whichever vendor it allies with (if not 3Com, then Cisco or Bay)</li> </ul> </li> <li>• Partnering with Tyzx would illustrate 3Com's interest in the business of its retail customers and interest in solving customers' problems – something not evidenced today <ul style="list-style-type: none"> <li>– Allying with Tyzx would allow 3Com to prove dramatic statements to retailers about how networking technology can have fundamental, dramatic effects on a retailer's bottom line</li> </ul> </li> <li>• Reselling Tyzx's service to retail customers, new and existing, could be an additional high-margin revenue source for 3Com in retail</li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• While apparently the leader in retail, 3Com is perceived as a struggling company in the broader marketplace (is not as sexy a partner as Cisco)</li> <li>• While understanding the value of applications driving customers' adoption and use of networks, 3Com – like Cisco – doesn't seem to have moved to invest in, acquire, resell or strategically ally with software application vendors <ul style="list-style-type: none"> <li>– The company understands SAP is a driver for networking technologies, but does not have a formal partnership with SAP for the retail market <ul style="list-style-type: none"> <li>• A 3Com and SAP strategic partnership announced in September, 1998 is Palm Pilot-specific</li> </ul> </li> </ul> </li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• The director of 3Com's retail industry group is Jeff Siegel <ul style="list-style-type: none"> <li>– Siegel is quoted widely in 3Com's marketing and seems to know landscape well</li> <li>– David Katz of 3Com is apparently Siegel's boss</li> </ul> </li> <li>• The director of business development at 3Com is Bob Roman</li> <li>• Janice Roberts is SVP, Business Development &amp; President of 3Com Ventures, the company's venture arm</li> <li>• 3Com board member Jean-Louis Gassée has apparently already been contacted by Tyzx</li> </ul>

## NCR

<p><b>Company overview</b></p>	<ul style="list-style-type: none"> <li>• The one-time leading cash register manufacturer, NCR is now reinventing itself as a designer of solutions built around high-availability transaction processors and data warehouse technologies, and has sold off most of its hardware manufacturing business</li> <li>• NCR saw dramatic changes in its business in recent years             <ul style="list-style-type: none"> <li>– In 1991, AT&amp;T purchased the century-old company for \$7.48 billion and later renamed it AT&amp;T Global Solutions, but, by 1995, AT&amp;T spun out NCR at a loss of several billion dollars</li> <li>– Newly independent in 1996, NCR regained its former name and created a Retail Systems Group headquartered in Atlanta as part of an effort to place renewed emphasis on its traditional strengths in the retail and financial industries</li> </ul> </li> <li>• NCR organizes its retail offerings into two main categories             <ul style="list-style-type: none"> <li>– High performance merchandising and marketing                 <ul style="list-style-type: none"> <li>• Data warehousing: NCR's data warehouse and multimedia Teradata database solutions help retailers use detailed data to create insight, which is used to take effective and timely actions, optimize local assortments, design effective targeted promotions, and attract and retain loyal and profitable customers</li> </ul> </li> <li>– Store automation                 <ul style="list-style-type: none"> <li>• Claims to have the most comprehensive end-to-end POS systems</li> <li>• Other solutions such as labor scheduling and disaster recovery expertise</li> </ul> </li> </ul> </li> <li>• Consulting services are part of NCR's offering to retail customers</li> <li>• NCR sold \$1.449B to the retail sector and \$2.886 billion to the financial sector in 1998</li> </ul>
<p><b>Apparent customer needs being addressed?</b></p>	<ul style="list-style-type: none"> <li>• NCR believes its customers' biggest concern is making intelligent use of their data to boost sales by enable closer customer relationships and loyalty</li> <li>• NCR claims to help retailers use business and technology solutions to improve customer service, grow revenue, increase margins and reduce operational costs</li> <li>• NCR appears more focused on traditional physical retailers and their needs today – and appears less distracted by provide e-commerce offerings <i>than any other company profiled in this report</i> – which may represent an opportunity for Tyzx</li> </ul>
<p><b>What does the company appear to be looking for?</b></p>	<ul style="list-style-type: none"> <li>• To evidence its claims of comprehensive offerings for the retail market, NCR is actively building relationships with complementary technology and service vendors             <ul style="list-style-type: none"> <li>– NCR offers customers wide-ranging hardware and software solutions through its Fusion+ partners program, which identifies and promotes dozens of partner technologies/services</li> </ul> </li> </ul>
<p><b>How much could it invest?</b></p>	<ul style="list-style-type: none"> <li>• In 1998 NCR purchased 50 percent of Stirling Douglas Group of Toronto, a privately-held software firm and leading provider of merchandise management applications for an undisclosed amount</li> <li>• Also in 1998, NCR acquired the Decision Support Services Group, an Atlanta-based software and services group for communications and energy utilities industries, for an undisclosed sum</li> <li>• No evidence of NCR investments in retail partners was found, nor was any evidence of a formal NCR venture or investment group</li> </ul>
<p><b>Beyond investment, what else could the company offer Tyzx?</b></p>	<ul style="list-style-type: none"> <li>• NCR could serve as a channel to the broad retail market for Tyzx             <ul style="list-style-type: none"> <li>– Extensive existing customer base</li> <li>– Could piggyback on sales to new prospects</li> </ul> </li> <li>• NCR offers integration expertise and complementary technologies for retail customers             <ul style="list-style-type: none"> <li>– Potential database &amp; storage synergies with Teradata DB</li> </ul> </li> <li>• Tyzx would receive substantial promotional value and credibility by association with NCR</li> </ul>

## NCR (cont'd)

<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx should emphasize that its service and core technology are completely consistent with NCR's retail strategy, i.e. domination of traditional physical retail equipment and services</li> <li>• Tyzx should demonstrate to NCR that its understanding of customers' wants and needs is as well-developed as NCR's             <ul style="list-style-type: none"> <li>– Of all the companies profiled in this report, NCR's language is most consistent with Tyzx's when discussing the bottom-line benefits of data mining/intelligent analysis</li> </ul> </li> <li>• Tyzx should anticipate and prepare to fend off possible suggestions that Tyzx simply join NCR's Fusion+ program, and impart to NCR the strategic nature of its technology</li> </ul>
<p><b>Tyzx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx can help NCR offer its customers a way to boost sales by offering store traffic analysis metrics – a whole new data stream for analysis and NCR warehousing             <ul style="list-style-type: none"> <li>– Tyzx's service complements NCR's existing POS data mining software and services, and represents a valuable new data source for retail customers</li> <li>– Tyzx's service offering would assert NCR's retail technology leadership and be powerful differentiation</li> </ul> </li> <li>• The Tyzx technology helps NCR offer high performance merchandising and marketing</li> <li>• Aside from the strategic benefits of partnering with Tyzx, reselling the company's service to new and existing retail customers could be an additional high-margin revenue source for NCR in retail</li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• While a partnership with NCR would be expected to help Tyzx do substantial business in retail, it may not necessarily be as leveragable as other partners/investors for making inroads into other market segments</li> <li>• NCR could be reluctant to get involved with Tyzx without a Fusion+ partnership</li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx has already started discussions with NCR CTO James Clark</li> <li>• Tony Fano, Senior Vice President, Retail Solutions Group is another relevant executive</li> </ul>

## Hewlett Packard

<p><b>Company overview</b></p>	<ul style="list-style-type: none"> <li>• Hewlett Packard has a broad presence in retail industry computing solutions, with market-leading technology, services and industry participation             <ul style="list-style-type: none"> <li>– Extensive server, workstation, networking hardware and software portfolios</li> <li>– Extensive POS equipment portfolio (acquisitions of VeriFone and others)</li> <li>– Leadership in setting standards (established the Global eCommerce Forum standards body in e-commerce)</li> </ul> </li> <li>• HP understands “whole product”, and has positioned itself as the fullest-service computing integrator for the retail industry with a group of solutions it calls “ActiveStore”             <ul style="list-style-type: none"> <li>– High-end HP computing solutions</li> <li>– 205 partner products and services for retail customers                 <ul style="list-style-type: none"> <li>• Not afraid to work with partner companies for co-promotion, product resale arrangements or close strategic alliances</li> </ul> </li> <li>– Extensive support/services and professional consulting services division</li> </ul> </li> </ul>
<p><b>Apparent customer needs being addressed?</b></p>	<ul style="list-style-type: none"> <li>• Hewlett Packard offers solutions for retail customers in four main functional areas             <ul style="list-style-type: none"> <li>– Merchandising</li> <li>– Distribution/logistics</li> <li>– Store automation</li> <li>– Corporate services (such as financials and human resources)</li> </ul> </li> <li>• HP appears to have a well-developed understanding of the needs of retail customers; case studies profile HP and partner solutions solving problems for customers in areas such as customer satisfaction, supply chain management, electronic commerce, inventory management, category management and decision support</li> </ul>
<p><b>What does the company appear to be looking for?</b></p>	<ul style="list-style-type: none"> <li>• Hewlett Packard very clearly wants to be considered the trusted authority for all the computing needs of its retail industry customers</li> <li>• The company pursues partnership arrangements at a number of levels             <ul style="list-style-type: none"> <li>– Far-reaching alliances with established brands (Microsoft, Yahoo, Netscape) for strategic positioning and/or product bundling, resale and mutual sales calls</li> <li>– Relatively limited co-marketing arrangements with retail industry software/hardware providers (mutual press releases, direct marketing database access, etc.)</li> </ul> </li> <li>• HP appears to want to cultivate a position of leadership in e-commerce, but not at the exclusion of being known of as the leading vendor to traditional physical retailers             <ul style="list-style-type: none"> <li>– HP is still actively promoting its work in supply-chain optimization, for instance, and recently showcased solutions for companies with over 1 million SKUs</li> </ul> </li> </ul>
<p><b>How much could it invest?</b></p>	<ul style="list-style-type: none"> <li>• Hewlett Packard purchased POS vendor VeriFone in June, 1997 for \$1.29B</li> <li>• HP Technology Finance provides financing for companies in return for warrants with debt, convertible debentures or a combination of debt and equity             <ul style="list-style-type: none"> <li>– “Netsourcing” (outsourcing over the Internet) vendor DBN received \$17 million in venture financing in September, 1999 from HP under this program</li> <li>– E-mail outsourcer USA.NET received \$15 in venture financing from HP Technology Finance in September, 1999</li> <li>– HP Technology Finance’s stated mandate is to fund Internet and e-service companies (Tyzx would likely qualify as the latter)</li> </ul> </li> </ul>
<p><b>Beyond investment, what else could the company offer Tyzx?</b></p>	<ul style="list-style-type: none"> <li>• Hewlett Packard could serve as a channel to the broad retail market for Tyzx</li> <li>• Tyzx would receive promotional value and credibility by association with HP</li> <li>• HP could be an ideal partner to help Tyzx leverage its technology into other non-retail segments in the future</li> </ul>

## Hewlett Packard (cont'd)

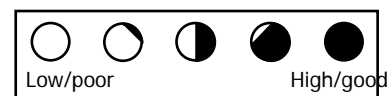
<p><b>How could Tyzx convince this company it's a good partner?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx will need to impart to Hewlett Packard the strategic nature of its technology, and describe the benefits of a special relationship to HP             <ul style="list-style-type: none"> <li>– HP's reaction to Tyzx's service may initially be to suggest Tyzx become an ActiveStore program partner; Tyzx should resist this and aim for a higher-level relationship</li> </ul> </li> <li>• Tyzx should disclose and leverage the names of its alpha tester/customers, given the substantial value they perceive in Tyzx's solution – put Gap, Staples, etc. in front of HP to talk about how compelling Tyzx's solution is</li> <li>• Tyzx would appear more credible if other investors were on board</li> </ul>
<p><b>Tyzx's apparent propositions?</b></p>	<ul style="list-style-type: none"> <li>• Tyzx could represent an innovative, new billable service offering for Hewlett Packard's merchandising and logistics services for retail customers             <ul style="list-style-type: none"> <li>– Tyzx's service offering would assert HP's retail technology leadership and help ensure retail market leadership</li> <li>– The Tyzx service would be powerful differentiation of HP from IBM and others</li> <li>– Would illustrate HP's commitment to existing physical retailers, helping them hone their efficiencies and stay competitive vs. Internet retailers</li> </ul> </li> <li>• Aside from the strategic benefits of partnering with Tyzx, reselling the company's service to new and existing retail customers could be an additional high-margin revenue source for HP in retail</li> </ul>
<p><b>Potential roadblocks/difficulties?</b></p>	<ul style="list-style-type: none"> <li>• Hewlett Packard's retail product and consulting organizations appear large and may be slow to deal with</li> <li>• HP could be reluctant to get closely involved with Tyzx – an unknown company – without an initial ActiveStore partner program relationship</li> </ul>
<p><b>Who should Tyzx contact?</b></p>	<ul style="list-style-type: none"> <li>• Stan Fields is HP's global ActiveStore program manager (third party partner program coordinator)</li> <li>• Craig White is senior vice president and general manager of HP Technology Finance</li> </ul>

## Partner/investor comparison

## Evaluated against a uniform set of criteria, 3Com, NCR and Hewlett Packard emerge as attractive potential partners/investors

	Andersen	Symbol	Cisco	IBM	SAP	3Com	NCR	HP
Retail market focus								
Retail market presence								
Evidence of funding availability for partners like Tyzx								
Evidence of understanding of benefits of partnership								
Hypothetical leveragability for other Tyzx's tech. applications								
Few apparent roadblocks/difficulties?								
<b>Overall perceived attractiveness</b>								

(Qualitative analysis, not quantitative)



- Hewlett Packard appears one of the better partnership/investment fits for Tyzx in research to-date
  - Strong retail market presence
  - Hypothetically leveragable to other market segments (3D vision breakthrough is consistent with HP's history and renewed spirit of technology innovation)
  - High emphasis on the benefits of whole products and its ability to forge relationships to enable them
- NCR's clear focus on physical retailers also helps makes it a possible good overall choice for potential partnership/investment, but a relationship with NCR wouldn't be expected to be overly leveragable to other markets as Tyzx and its technology mature
- 3Com also appears a good candidate given its enthusiasm for the retail market, aggressiveness versus Cisco and apparent understanding of the power of partnerships

## Appendix

## Appendix

- There is a tier of software developers that help retailers understand merchandising and/or and shopper traffic patterns that may make good strategic partners or simple channels for Tyzx; none of these were examined in any detail in this project, but may be useful for Tyzx to investigate in the future
  - MarketMAX, for instance, measures the productivity of selling space, as well as develops space plans and planograms
    - Used in large retail chains
    - Would have inroads into existing clients
    - No technology integration services expected
- There were a host of smaller POS equipment manufacturers discovered in this research that may or may not interest Tyzx
  - PSC/Spectra-Physics
  - IVI Checkmate
  - Mettler Toledo
  - Welch Allyn
  - Metrologic
  - Compesee
  - Magtek
  - Unitech
  - DL
  - Zebra
- If Tyzx's solution is meant to assist in physical merchandising, a partnership/investment strategy may be to not look from the *technology-out* approach, but from the *merchandiser-in*
  - Which vertical retail industries have the most trouble merchandising? Why? Are they most desperately in need of Tyzx's solution, and if so, what channel and/or partnership would action them best?
- Several sources, such as Retailtech.com, suggest data mining of customer shopping habits will increase in importance as price and location advantages are negated or removed as differentiators between retailers; this implies that even if Internet e-retailer pressures subsided (unlikely!), there would be continued reason to suspect data mining will continue to be more important to retailers
- The term "video ethnography" appears used at least by some in the retail industry to describe the type of intelligence that video equipment can bring to understanding customer patterns and habits in retail locations; ethnography is therefore a term Tyzx may want to monitor and possibly appropriate in its own marketing; Chain Store Age says video ethnography "provides priceless (and sometimes startling) insight ... it is a no-nonsense, truthful approach to chronicling the minute details of consumer behavior and retailers can use it to their advantage"
  - [http://www.chainstoreage.com/news\\_desk/design\\_forum/](http://www.chainstoreage.com/news_desk/design_forum/)
- A good roundup of information and resources relevant to the retail industry can be found in a special retail business section of About.com
  - [www.retailindustry.about.com/business/retailindustry/msub\\_pos.htm](http://www.retailindustry.about.com/business/retailindustry/msub_pos.htm)
- The National Retail Foundation's annual convention and expo takes place January 16-19<sup>th</sup> in New York; Tyzx may want to consider attending to better understand the industry and potentially meet key potential partners and influencers
  - <http://www.nrf.com/events/an2000/>