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Valhalla Partners Due Diligence

It was March 2002, and Art Marks was sitting around a campfire in the Blue Ridge Mountains with two friends from the venture capital world, Gene Riechers and Hooks Johnston. They'd had a few drinks. They'd told some jokes. But, like retired athletes who can't help rehashing old games, the campfire conversation kept circling back to the same place, back to the same topic, and each time they returned to it, their enthusiasm grew. The topic was: due diligence.

While the campfire appeal of a smore or a rendition of "Kumbaya" is short-lived, the due diligence process hatched by the three partners that night in March became the foundation of a \$177 million venture capital fund called Valhalla. The partners believed that they'd figured out a better way to do due diligence, one that would give them a competitive advantage in the crowded world of venture capital.

A year and a half later, in August 2003, Art Marks was sipping coffee in his office, flipping through an investment memo concerning a company called Telco Exchange (later renamed Rivermine Software). (See **Exhibit 1** for excerpts from the Telco Exchange investment memo.) Telco Exchange was the first deal that Valhalla had run through its new due diligence process.

Telco Exchange (TX) was a company that developed software to help companies strategically manage their telecom assets and reduce the cost of managing their voice and data networks. TX was seeking a \$5 million Series A investment, and Valhalla was deciding whether to lead the round.

Gene Riechers, now a General Partner at Valhalla, and Scott Frederick, Partner at Valhalla, had prepared the investment memo. The memo was unusual by venture capital standards. The most obvious point of departure was the length: a hefty 22 pages, plus many extra pages of summaries from reference checks on the management team.

As Marks pored over the document, he was able to get a clear picture of the company and the challenges it faced. TX had great strengths: an innovative product in a market that was expected to grow, as well as a set of customers who had used the product and achieved impressive ROI. The company also had big challenges, including an unproven management team and a fragmented competitive environment.

As always, learning more about the company had made things clearer and more complex at the same time. At the partner's meeting the next day, Marks would have to vote up or down on the TX deal. Valhalla only made investments with unanimous consent among the general partners, so

Professor William A. Sahlman and Research Associate Dan Heath prepared this case. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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Marks knew his vote was critical. At this point, Marks was leaning moderately toward approving the investment, but the investment memo had raised some important concerns. He wanted to find a way to address these concerns in the structure of the deal that was proposed. Finally, in the back of his mind, he wondered whether the new due diligence process was yielding dividends for Valhalla. It had taken a lot of partner time to create the memo in front of him. There was no question it was useful—but was it worth the resources expended? How much due diligence was enough? Why not half as much? Or twice as much? There were no easy answers to these questions, but then, he didn't really expect any.

Background on Valhalla Partners

Art Marks graduated from Harvard Business School in 1971 as a Baker Scholar. He worked at Baxter Laboratories for four years, then began to work for General Electric, where he would spend almost ten years. From 1975 to 1979, Marks served as the General Manager of X-Ray products in GE's Medical Systems division. From 1979 to 1984, Marks worked in the Software Products division (GE Information Services), first as Senior Vice President and subsequently as President. Marks considers his biggest career accomplishment to be a GE joint venture in Japan that he set up. The joint venture was the market leader in 2004, with \$2 billion in sales.

Marks became a venture capitalist in 1984, joining New Enterprise Associates (NEA) as a General Partner. Marks had a 17-year run at NEA. Highlights of his investment record included Progress Software, Clarify, InSoft, IndusRiver Networks, and Call Technologies. He also admits to making some bad calls. "Passing on Ciena wasn't such a good idea," Marks said with a chuckle. In June 2001, Marks retired from the venture capital world, intending to fly-fish, garden, and spend more time with his family.

His retirement lasted about nine months.

In April 2002, a month after the camping excursion to the Blue Ridge Mountains, Marks and his partners—Riechers and Johnston—announced the formation of Valhalla Partners. Riechers had been, most recently, the founder and Managing Director of FBR Technology Venture Partners (FBRTVP). Johnston had also been a Managing Director at FBRTVP. The three partners had worked together on deals before and traveled in the same circles in the mid-Atlantic venture community.

Of his decision to come out of retirement, Marks said, "I thought about doing nothing, to be honest. Or not doing anything in the venture business, anyway. But my personal jollies come from working with entrepreneurs and being able to look around corners to see where the next technology is coming from. Once you get that in your blood, you're addicted."¹

It was a curious time to start a new venture fund. Owing to the collapse of the dot-coms, commitments to venture capital funds had fallen off a cliff. Commitments dropped from \$82.7 billion in 2000 to \$12.0 billion in 2002, the lowest level seen since 1996.

The first few fundraising meetings did not bode well. Riechers recalls an early meeting with a large endowment fund manager: "The guy just started screaming at us. He went on a tirade about the venture capital industry. He obviously wasn't irritated at us specifically—we just happened to be the guys in the room at the time."

¹ Alistair Christopher, "Q&A: Art Marks: What Made an 18-Year Vet Come Out of Retirement?", *Venture Capital Journal*, June 2002: xx-xx.

What made Marks abandon a relaxing retirement to fight a hostile market climate in venture capital? He believed he could succeed by getting back to the basics, by returning to "old-school" venture capital principles: smaller funds, fewer partners, fewer deals, and more attention paid to each deal. "We thought the big problem during the bubble was that no one had time to do due diligence. There was too much competition, too much pressure to move fast. We said to ourselves, the key thing is to *go slow*. Do a lot of due diligence," said Marks.

When the three partners had first started talking about the VC due diligence process, they had realized a couple of surprising things. First, they realized there were no established "best practices" for due diligence—despite the fact that thousands of smart people were doling out billions of dollars in investments each year. Second, none of the partners had ever developed a "framework" for analyzing deals. They had certainly looked for many of the same elements across deals—the strength of management, the size of the market, the density of competition, etc.—but the methodology they'd used had tended to vary from deal to deal.

To the three partners, this smelled like an opportunity. According to Marks, Valhalla would have a multi-pronged strategy. First, they'd invest more time in the due diligence process. This would yield several advantages: allowing them to choose better deals, helping them craft smarter deal terms (e.g., weighing the relative merit of a higher valuation versus more board control), and helping them assess the company's operating plans. A second part of the strategy was to work more closely with management. Marks believed the payoff from a closer relationship with management would outweigh the heavier use of scarce partner time. The final element of the strategy was to focus on East Coast information technology deals, which reflected the partners' location and expertise.

Telco Exchange

Telco Exchange (TX) was based in Fairfax, a mere nine miles from the Valhalla office in Vienna. TX made a dramatic entrance onto Valhalla's radar in July 2003. In the same week, they had the deal recommended to them, independently, by a lawyer, a recruiter, and a CFO at a local company. Riechers said, "We were impressed by the serendipity. So we invited them in for a presentation." As it turns out, Riechers said with a laugh, "They'd actually orchestrated the whole thing. All three of our 'sources' were on their advisory board. I guess we should have suspected it."

When TX made a presentation to the firm on July 25, 2003, the partners were immediately interested in the deal. It fit Valhalla's target profile perfectly: early-stage, IT-oriented, based in the mid-Atlantic region. One week later, all of the partners went on a field trip to the TX office.

TX competed in the "enterprise telecommunications management" (ETM) space. "Enterprise telecommunications management" was a soporific buzzword for a real source of pain in big organizations. According to the Aberdeen Group, the average Fortune 500 company spent almost 1% of its revenue on telecommunications. This 1%—which translates to about \$116mm per year—was bewilderingly hard to administer. The money was spent on everything from cell phones to giant T3 data pipes. Orders were placed by junior salesmen and CIOs and everyone in-between.

Simply handling the invoices could be a Herculean task. In fact, the average Fortune 500 company processed an astonishing 15,000 telecom-related bills each year! Some bills were hundreds of pages long, arriving in their own boxes. Needless to say, it was tough for a manager to pinch pennies when it was a challenge simply to file the documents, much less scrutinize them.

Valhalla's conversations with TX's customers identified big problems that had been solved by the company's software. A sampling of the customers' comments revealed accomplishments such as:

- Dramatically reducing the number of invoices that had to be dealt with
- Identifying telecom circuits the company was being billed for that hadn't been used for years
- Generating \$500,000 in savings by identifying overcharges from service providers
- Creating an inventory of telecom assets to help managers keep track of the big picture
- Streamlining the process of adding new telecom resources

As a venture deal, TX was highly atypical. For one, TX was seeking a Series A financing after having been in existence for 14 years. TX had originated as a project inside another company, CICAT Networks. CICAT, also based in Fairfax, was a company that provided outsourced telecom provisioning. CICAT had started to create TX's software in the 1990s and eventually spun out TX as a separate entity in 2001.

By the time TX approached Valhalla for investment, it was a profitable company on track to do \$2mm in 2003 bookings. It had already signed up blue-chip customers such as IKON and Marriott. Most Series A ventures did not have this much of a track record.

Another atypical element to the TX deal was the CEO, Bryant Dunetz, who was almost 70 years old. Dunetz's son, Kevin, was the CTO. In the real world, an older CEO whose son worked in the business would not have been unusual. In the world of venture capital, though, it was enough to scare some firms away.

Test-driving the New Due Diligence Process

Marks and his partners had diagrammed their new due diligence process. (See **Exhibit 2** for an overview of the process.) They were eager to try it out, and TX became the guinea pig.

The Valhalla team worried about how entrepreneurs would respond to the new process. Would entrepreneurs be spooked by the intense scrutiny Valhalla would put them through? Would Valhalla miss out on deals because entrepreneurs decided to take their deals to bigger, less analysis-intensive funds? Charles Curran, a Partner at Valhalla, said, "Some entrepreneurs have had bad experiences with venture capitalists who got involved in ways that were not productive. If those entrepreneurs perceive us as the 'Bearhug VC', that could be a real concern."

The team was also concerned about wasting their time. Marks said, "Our model is that we're going to do a lot of work. We want to make sure we get rewarded for that." And yet there was ample opportunity for Valhalla to come up empty-handed. For instance, what if Valhalla poured a half-dozen partner-months into due diligence on one deal, only to lose the deal to another VC that offered a slightly higher pre-money valuation? Lots of partner time and no closed deals was not a recipe for success.

With these concerns—and big hopes, as well—as the context, Valhalla began to dig into TX's business. The theme of the new due diligence process was, as Marks said, "We're going to make mistakes. But one mistake we're not going to make is the 'I wish we'd discovered that earlier' mistake."

Valhalla set out to answer three key questions. The partners called these questions the "real, win, worth" framework. Marks had adapted the framework from a GE marketing course that was used to assess new product ideas. The three questions were:

1. Is it real? (I.e., is there a strong market demand and is it growing?)
2. Can they win? (I.e., does the company have a competitive advantage in the marketplace and can it sustain that advantage over time?)
3. Is it worth it? (I.e., if we assume good performance, does this turn out to be a compelling investment opportunity?)

Gene Riechers and Scott Frederick worked intensively for approximately seven weeks on the investment memo. They emerged from the process feeling confident about the investment. The customer calls had been particularly compelling. Most enterprise software companies spent a fortune on sales and marketing. Yet TX's customers had, in some cases, actually sought them out. One Fortune 500 company, which was now a satisfied customer of TX, had discovered TX's products by doing a search on Google. This was the kind of thing that brought joy to the heart of a venture capitalist.

There was one snag, however. The Valhalla team agreed that, in order to make the investment, Dunetz (the TX CEO) would have to agree to let Valhalla search for a new CEO. Marks said, "Dunetz and his son were incredibly capable, self-motivated people who had taken the company this far. But we felt we needed new management, and we didn't want there to be any misunderstanding about that. We also felt obligated to make it clear that, once a new CEO comes in, he or she would have full authority to make any personnel or strategy changes they thought appropriate." Marks summarized the situation: "Clearly, this was a very sensitive issue. And our hope was that the TX team would embrace the idea, not just 'accept' it."

Dunetz had been prepared for this possibility, and he agreed that another CEO might help the company reach the next level. He agreed to transition to the role of Chairman once a suitable replacement was located.

Unfortunately, this was not the stickiest point of negotiation. The two sides were relatively far apart on valuation. Valhalla intended to offer a \$5 million pre-money valuation, but Dunetz was holding out for a \$10 million valuation.

The 100-day plan

The Valhalla team made one crucial discovery during its inaugural due diligence effort. They realized that the due diligence efforts could be put to a secondary (perhaps primary) use. As Art Marks said, "Usually the way it works is that you do all this due diligence work, you learn everything there is to know about the company, and then you use it to negotiate. You spend five weeks arguing back and forth with the CEO about the valuation. It dawned on us that, rather than spend five weeks haggling, we could use what we'd learned and spend some real time helping the company execute on its plans."

The partners came up with a new concept: the 100-day plan. (See **Exhibit 1** for an example of a 100-day plan.) It was envisioned as a joint action plan for both the investors and the management team. Joint tasks might include recruiting new managers or board members, establish banking and legal relationships, revising the company's financial plan, and setting timelines for product development.

The 100-day plan took place before the close of the investment but after the term sheet had been agreed to by both parties. Typically in venture capital firms, this period was used primarily for drawing up legal documents, conducting background checks on the top management, and finalizing

negotiations. Scott Frederick, the co-author of the investment memo, believed that they could use this period to assess how well Valhalla would work with the TX management team.

"When you're headed towards a deal, it's easy for both sides to hear what they want to hear. Then, you show up at the first board meeting and find out you weren't on the same page at all. The 100-day plan provides a sense of transparency about what is important and what the goals are. It gives us a chance to get comfortable with each other," said Frederick.

Assessing the trial run

In general, the trial run of the due diligence process had been a success, according to the partners. Marks said, "The proof that it worked, to us, was that Dunetz had another term sheet before we got involved, and he had another one on the way when we submitted ours. And Dunetz told us, 'I know what you guys are like, and that means more to me than the specific terms.'"

Frederick said, "Doing this due diligence documentation is not the most fun part of our jobs. It can be laborious. But I think it's a vital exercise to put pen to paper, because it forces clarity of thought. It's easy to talk yourself into thinking that you know more than you know. When you force yourself to write a structured memo, it's easier to see the weak spots in your case. Then, you can spend time figuring out whether those weak spots are terminal."

All the partners were aware that their approach to due diligence was not costless. Curran said, "I am absolutely a believer in what we are doing. But there are potential downsides to it. Our process is tough and somewhat conservative. We think it will reduce the number of times that we strike out with a deal. But might it also keep us from hitting a home run? A shocking percentage of venture capital profits are driven by a very small number of 'mega-hit' deals, such as eBay. Would something like eBay have gotten a unanimous 'yes' vote after going through our process? We are cognizant of this risk."

The investment decision

This was Valhalla's first deal. The fund's limited partners would be watching carefully. Was TX the right deal?

Marks liked the picture of TX that was presented in the investment memo. It struck him as a good risk overall. However, it wasn't a good deal at any price. Marks thought about the issues raised by the memo. He started scribbling notes on a pad, marking down his assessment of TX's biggest challenges. He wanted to make sure that the risks were, if possible, reflected in the deal terms offered to TX.

He knew that, as always, there was a disagreement between the investors and the company over the proper pre-money valuation, and he wanted to offer constructive feedback to Riechers and Frederick the next day. Was TX worth the \$10mm pre-money valuation that the CEO wanted?

He was also looking forward to discussing the trial run of the new due diligence process in the partner's meeting the next day. It had gone from campfire talk to reality in less than 15 months. The 22-page document in front of him was proof of concept, but not necessarily proof of success. Had this been the best use of Scott Frederick's time? Would Riechers, having invested so much time in the deal, become too attached to the investment? Tomorrow's morning would be the first installment of a long discussion about how Valhalla could improve the art of dissecting deals.

Exhibit 1 Excerpt from Telco Exchange investment memo

To:	Valhalla Partners
From:	Scott Frederick
Subject:	Telco Exchange – Investment Memo
Date:	September 8, 2003-Finalized October 16, 2003 by Gene Riechers

This memorandum serves as an investment proposal for Telco Exchange (TX), a Fairfax, VA-based company delivering “enterprise telecommunications management” (ETM) or “strategic communications management” (SCM) software.

Their product helps companies strategically manage their telecom assets and reduce the cost of managing their voice and data networks. Their product appears to be the most comprehensive and most highly integrated software offering available. It has three main modules:

Service Order Management: Enables an enterprise to strategically manage their procurement processes for telecom equipment and services. Module includes multi-carrier and multi-vendor product catalogs; an order processing system complete with automated interfaces and workflow for placing, approving, routing and tracking orders. Module also includes sophisticated project management functionality, so that an enterprise can easily “turn-up” or “turn-down” standardized facilities with automated circuit ordering and labor scheduling. Module also includes trouble ticket management and the ability to expedite orders. TX claims to be the only software vendor which has integrated with AT&T’s provisioning systems.

Inventory Management: Enables an enterprise to maintain a dynamic, central repository of all voice and data networking assets (services, circuits and equipment). Module can be integrated with existing ERP systems (Oracle, SAP and PeopleSoft) as well as with an enterprise’s general ledger to facilitate cost center accounting and the automatic issuance and termination of services. Note: They do not do automatic network discovery, so building the database requires some custom data acquisition work, but they have built tools to manage the process.

Financial Management: Enables an enterprise to automate the invoice management process by receiving service provider invoices electronically, validating charges against inventory, and preparing invoices for payment. Module also includes rate table and MACD order reconciliation; as well as contract management features to ensure contract and SLA compliance.

In our sector review, Valhalla identified “Enterprise Telecom Management” as a desirable target based on the inevitable increase in the complexity and rate of change of enterprise telecom networks, the potential cost savings for an enterprise, and the trend toward enterprises attempting to automate non-strategic, highly administrative business processes.

Although there are a number of service oriented solutions on the market; no one has established a dominant technology-oriented solution. TX appears to have the most robust product offering on the market and an impressive list of satisfied customers (Agere Systems, IKON Office Solutions, Marriott, and others). The company is now focused on sales and marketing execution in order to gain market share before competitors are able to match the functionality of their solution.

We are contemplating leading a \$5.0 mm Series A Preferred investment with a Valhalla Partners’ investment of \$2.5 mm along with \$2.5 mm from Columbia Capital. We have given the company initial

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

guidance on a \$5.0 mm pre-money (post-expanded option pool) valuation, resulting in a Valhalla ownership position of around 25%. In making the investment, we are assuming that the company will need to raise another \$5mm in the year 2005. When calculating our expected ROI, we are assuming that we contribute our pro-rata to that financing, for a total Valhalla investment of \$3.75 mm. Columbia Capital is an excellent partner because we have worked with them successfully and they have significant telecom expertise (note: they have an investment in Vibrant Solutions which provides cost and revenue management software to carriers).

Forecasts of a success scenario place the value of the company at \$170 to \$343 mm and the value of our share post an illiquidity discount at \$26 to 45 mm in 2007. Assuming we invested \$3.75 mm in total we would return 6.8 to 12.1 times our capital.

Under our more conservative forecasts, the company will reach a value of between \$115 to \$140 mm and will still reach profitability. Under such a scenario we estimate our share of the company post an illiquidity discount to be valued at between \$17 and \$23 mm, producing a 4.6 to 6.1 times return on our capital.

Note: the one-time \$250,000 software license assumption used in both these models leaves room for considerable up-side (as the company is currently in discussions for a 7 figure license deal, as well as term license deals which would result in larger recurring revenue streams). Also the above analysis does not take into consideration the beneficial impact of our securities being participating preferred securities.

While the management team is raw and will need significant additions, the combination of a very large untapped market, a unique and robust product offering, impressive customer traction and an attractive valuation make this an appropriate candidate for Valhalla.

INVESTMENT SUMMARY

Positives	Negatives
Company addresses a real customer pain in a new, high-growth market (where in-house development is not a viable option)	Unproven management team with significant holes
Impressive customer list with proven ROI	CEO likely to be replaced; and CEO and CTO are related (Father / Son)
Diligence suggests TX has the most comprehensive and highly integrated software-based solution on the market	Well-funded competitors focused on administrative outsourcing can and are developing software solutions (e.g. Teldata, QuantumShift, ProfitLine and BroadMargin)
AT&T is introducing TX to key accounts, as are some of the leading outsourced vendors (Note: Teldata Control expressed an interest in investing in TX).	Vendors with financial management-only solutions could use a "beach-head" strategy and develop more comprehensive and robust product offerings
TX will benefit from increasing telecom complexity and trend toward business process automation	Aberdeen seems narrowly focused on "cost management" as opposed to "strategic management"
Valuation is attractive and <u>we can help</u>	Aberdeen is also pushing complete "outsourced" solutions including dispute resolution services

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

THE FOLLOWING POINTS HIGHLIGHT THE INVESTMENT THESIS FOR TX:

- “Enterprise Telecom Management”/ “Strategic Communications Management” is a fast-growing market w/ the potential for less than 12 month ROI.
- Diligence suggests that TX has the most comprehensive and highly integrated software solution on the market. They are winning in competitive situations and are being introduced to key customers by AT&T, as well as some of their expected competitors on the outsourcing side (namely Teldata Control).
- TX has an impressive list of referenceable customers (Agere Systems, IKON Office Solutions, Marriott, and others). Current deal sizes are between \$100,000 and \$950,000; and TX is close to signing a large deal with Circuit City.
- TX’s software has been running at Agere for roughly two years and at IKON for over one year, so there is reduced technology risk.
- TX was profitable in 2002 and is currently running close to cash-flow breakeven for 2003. They appear to have developed a replicable sales process and we think the business has the ability to scale well, offering the potential for more than \$50,000,000 in annual revenue within four years. Equally important, we believe they can achieve these revenue numbers in a capital efficient manner. If TX hits our revised projections, they will not need to raise more money until 2005, and they should be able to become profitable with the addition of an incremental \$5 mm.

COMPANY HISTORY AND CURRENT STATUS

TX was initially incubated by CICAT Networks (CICAT). CICAT was founded in 1989 to provide enterprise customers with outsourced telecom services. CICAT specialized in circuit ordering and provisioning services, and in doing so established key relationships with the Tier 1 providers, LECs and CLECs. Equally important, through these 14 years of experience CICAT’s principals developed a deep understanding of how all types of services needed to be ordered and provisioned. These experiences provided the basis for TX’s service order management, inventory management and financial management modules.

In the second half of 2001, CICAT’s principals launched TX as an independent software company. Sustained by a short term loan from CICAT, the founders signed Agere Systems as their first customer in August of 2001. Telesis and NEC were signed in early 2002. Then in 3Q02 IKON Office Solutions became the company’s largest customer to date. In December 2002, the company signed a major international retailer as a customer and began paying back the short term loan from CICAT out of operating cash flow.

In the first half of 2003, the company signed Marriott. During this period the company was also focused on implementing at the major international retailer, moving into new office space and beginning to raise their first institutional round. A large deal with Circuit City is expected to be closed in the near term.

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

WHAT DO YOU HAVE TO BELIEVE?

- 1) Their product is currently more robust and offers a more comprehensive solution than the competition.
- 2) TX will be able to maintain its product advantage.
- 3) The market wants a robust and comprehensive software-based solution (as opposed to a more narrowly focused financial management / invoice processing module).
- 4) The market wants a robust and comprehensive software-based solution (as opposed to an outsourced solution complete with dispute resolution).
- 5) The market for Enterprise Telecom Management or Strategic Communications Management software will continue to grow rapidly.
- 6) TX will be able to replicate its initial sales success and maintain a significant average deal size. The revised forecast is reasonable. Note: The key assumptions in our revised forecast are:
 - a) After a 6 month training period, each salesmen will average closing 1.0 deal per quarter until 2006, after which they will be able to average 1.25 deals per quarter;
 - b) The company will be able to average \$250,000 in one-time software revenue per deal, plus an equivalent amount of one-time services revenue, plus an on-going 20% annual maintenance contract.
 - c) *Note: this last assumption creates the potential for considerable upside. The Company is currently in discussions with potential customers quoting a seven figure software license; and they have already sold several term licenses which set up the potential for larger recurring revenue streams.*
- 7) The management team can execute well vs. competition. We will be able to replace the CEO with minimal disruption to the existing team.
- 8) We can help the company recruit additional sales resources and improve pipeline yield. We can fine tune the sales model and pricing strategy. We can help prioritize the product development process. We can help upgrade financial systems and personnel.

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

IS IT REAL?

Discussion drawn largely from the Aberdeen Group's April 2003 report on Total Telecommunications Cost Management.

In a March 2003, the Aberdeen Group identified telecommunications management “as one of the hottest new emerging sectors in the business process automation marketplace.” They estimate that telecommunications costs – including voice, data and wireless services — are the 2nd or 3rd largest indirect expense at most large companies.

- The average Fortune 500 Company spends \$116 million a year on telecom services and processes more than 15,000 telecom-related bills per year.
- The average mid-market enterprise spends \$26 million a year on telecom services and processes 3,000 telecom-related bills per year.

However, few enterprises have a comprehensive and accurate way to determine what they are spending on telecom services, with whom, and why. Aberdeen research indicates that 85% of mid-market enterprises' telecom bills are paid in full and go un-audited by the enterprise. Aberdeen research also suggests that the relationship between error rates and invoice dollar size is counterintuitive. The high-volume, low-dollar invoices present the greatest opportunity for savings because error rates are lowest among high dollar items due to increased sales process scrutiny. As a result, highly manual “stare and compare” efforts are rarely effective. In addition, the procurement processes for telecom services in most large enterprises tend to be very decentralized, and handled by people who understand a T-1 in detail but don't understand or care about what a purchase order is. As a result, order compliance is poor and the cost to complete an order through manual processes is excessive. This dynamic has created a great opportunity for the creation of high value-added business process automation software focused on an enterprise's telecom assets.

The average Fortune 500 Company spends \$116 mm on telecommunications. To provide perspective, the average revenue of a Fortune 500 Company in 2002 was \$13.9 billion, making the annual telecom service spend 0.84% of revenue. Meanwhile the average profit of a Fortune 500 Company in 2002 was \$139 million, or 1% of revenue. Thus even incremental improvement in telecom costs could have a significant improvement on profits because indirect expense cuts drop straight to the bottom line.

Market Drivers

As the global economy stagnates, companies continue to focus on streamlining internal processes and cutting costs. The economy has a counter-cyclical impact on the Business Process Outsourcing (BPO) and Business Process Automation (BPA) markets. Companies faced with competitive and cost pressures will be compelled to focus on core competencies and look for external help in non-core areas. After reducing head count, organizations have devoted major attention to cutting indirect costs, which represent 30% to 60% of companies' total expenditure budgets.

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

IT and telecom budgets are not insulated from this trend; yet few enterprises have had an easy, comprehensive way to determine what they are spending on telecom services, with whom and how. This is because, typically, many different areas of a company are purchasing telecom services. For one, an operations manager may be responsible for local and long distance service; often this can be true for each division or regional office. Second, an IT manager may be responsible for network services. Third, a marketing manager may select a preferred audio conferencing service for client calls. Finally, a sales representative may be reimbursed for wireless services through a company's travel and entertainment reimbursement process.

Organizational issues such as increased merger and acquisition activity, decentralized operating cultures and the promotion of entrepreneurial environments have contributed to procurement management challenges such as maverick buying (where buying decisions are made outside of existing purchasing contracts) and under-leveraged corporate buying power.

Additional market drivers include increasing corporate complexity and technological change. As mentioned elsewhere, the average mid-market U.S. enterprise receives more than 300 telecom-related bills per month. Enterprises, particularly those with many satellite offices, are inundated with separate bills for every location. Moreover, with new telecom services such as wireless devices becoming more widespread, enterprises are receiving still more monthly statements. In the meantime, telecom bills are growing increasingly complex – they can average more than 100 pages, chock full of indecipherable line items. At the same time, the complexion of enterprise communications technologies is rapidly changing. Underlying technologies – Internet Protocol, telephony, Ethernet Wireless Area Networks, etc. – are forcing architectural shifts in the workplaces.

CAN TELCO EXCHANGE WIN?

There are a number of companies attempting to address the invoice processing side of enterprise telecom management, either through a software solution (e.g. Stonehouse Technologies, Tangoe, TeleSoft, Formity Systems and Visionael), or through a highly manual outsourced approach (MSS Group, Teldata Control, Profitline, Broadmargin, QuantumShift). These solutions can provide significant value, but they only address the financial management piece of the puzzle, and do not adequately address service order management or inventory management. If an enterprise out-sources or purchases invoice processing software, they may be ensuring accurate and efficient invoice payment, but they are treating a symptom and not addressing the root cause of many of their problems.

TX offers a more comprehensive and highly integrated solution. As a result, TX is able to not only catch invoice errors, it is able to identify unnecessary services and equipment, prevent erroneous ordering, ensure that all the requisite elements of a circuit are disconnected when they are no longer needed, ensure contract compliance, facilitate true cost-center accounting and prevent the need for multiple re-keyings by order administrators. TX's software solves these problems by providing their customers with a holistic view of their communications infrastructure, automating the ordering process, providing a common set of data for all parties to work with, applying business rules to ensure that corporate policies are followed and that contracts are adhered to, and by integrating with an organization's existing software applications.

TX's Service Order Management and Inventory Management capabilities are important differentiators. Where their competitors focus primarily on cost management, TX is able to provide a more strategic offering and move their customer's closer to the Holy Grail – complete network optimization. TX's goal is to allow an enterprise to apply the same discipline and rigor to their communications investments that they have previously applied to their customers through Customer Relationship Management (CRM), and to their production resources through Enterprise Resource Planning (ERP).

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

In addition, to the more narrowly focused software vendors and the complete third-party outsourcing firms, a third set of competitors could come from large, established companies that offer full-service consulting and IT services to the Fortune 500. Competitors in this space generally offer more complete business process outsourcing. These players include IBM, CSC, EDS, Accenture and Bearing Point.

A fourth set of potential competitors could come from the Enterprise Spend Management (ESM) world (e.g. Ariba and Commerce One). These companies have historically focused on office supplies; maintenance, repair and operations (MRO) materials; and computers and peripheral devices; because these areas have more universally understood attributes and pricing structures that can be effectively represented in a Web-based catalog format. However, it is certainly possible that these companies will try to move into the procurement and management of more complex business services.

A fifth set of potential competitors could come from the Network Management Providers such as HP (Openview), IBM (Tivoli) and Computer Associates (Unicenter).

However, the complexities inherent in telecommunications provisioning, billing and inventory management should provide a barrier to entry and at a minimum should place a traditional network management or ESM vendor (who is unlikely to have the in-depth, telecom specific knowledge that TX has) at a significant disadvantage.

Another company to keep an eye on is Peregrine Systems (*"the Infrastructure Management Company"*). Founded in 1981, Peregrine Systems develops and sells enterprise software to enable its 3,500 customers to manage their IT resources. One of the company's products, AssetCenter, claims to be the industry's leading IT Management software. It provides inventory, financial and contract management functionality. Peregrine Systems just emerged from Bankruptcy protection and released version 4.3 of AssetCenter in June of 2003. The latest version of the product "automates business processes for inventory reconciliation, improving the accuracy of data, while addressing growing challenges in software license management." Peregrine essentially does for software license management what Telco Exchange does for telecommunications management. However, their website also talks about a "Cable and Circuit" product which allows their customers to: "easily manage the connected infrastructure. This solution details the physical connectivity at a granular level, enabling you to manage and understand the data and voice services you provide to the rest of the organization. Cable and Circuit provides a set of best practices that reflect a lifecycle approach to managing the connected infrastructure, assisting end-users through common business practices and storing critical physical, business, financial, and contractual information about networks, into a centralized repository."

Our due diligence calls suggest that TX can compete favorably with the aforementioned companies. Our calls suggest that TX offers the most complete and most highly integrated telecommunications management solution on the market. When TX loses competitive accounts it has been because the customer has chosen (a) to completely outsource their telecommunications management, (b) to use outside analysts to manage their dispute resolution, or (c) to purchase a cheaper, more limited financial management-only solution. If a customer wants to keep management in-house and they recognize the importance of inventory management (or that you cannot do effective invoice reconciliation without an accurate circuit inventory), TX seems to compete very well.

Once purchased, customers appear very happy and the ROI is compelling.

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

CUSTOMER CALLS

Senior manager @ IKON:

- Runs \$50,000,000 a year telecommunications budget
- Found TX via a Google search; knew he wanted an Oracle based system that could manage inventory and invoices, and which could interact with their general ledger and HR systems
- Looked closely at Teldata (but their outsourced solution would have cost in excess of \$1mm a year) and ProfitLab (but they couldn't match TX's functionality). Note: it was impressive that TX beat out ProfitLab b/c ProfitLab was already IKON's audit vendor and the CEO of ProfitLab used to run a division of IKON.
- Recognized the power of TX's system and fought hard for it; he strongly believes in their vision.
- Said TX is a "godsend"; and TX has "made me a superstar within the company"
- Believes that any company with more than 1,000 cell phones should buy TX for that reason alone b/c TX helped save \$100,000 a month on their Nextel bill.
- TX dramatically reduced the number of invoices they have to deal with and the inventory management system identified circuits that they were being billed for in locations that they closed four years ago.
- All told, he claims that TX will save IKON \$3.3 mm this year
- Thinks team is "outstanding" and "very responsive"

Senior manager @ Agere:

- 32 veteran of AT&T; 2 years at Lucent
- He knew that Agere would need a telecommunications management system after the spin-out; and he estimated that it would have cost 2-3x what TX charged to fix Lucent's homegrown system. AT&T Solutions did a study and confirmed his cost estimates.
- Used combination of Gartner, Andersen and the web to identify provisioning and inventory tools.
- He identified 10 candidates and short-listed 4 (but, he couldn't remember their names).
- Said that TX's provisioning background and experience was a real strength; especially fact that they understood both voice and data (very different technical needs)
- Very impressed by their software; he committed 25% of his budget (including headcount) for a 5 year license. He also has a contract with Teldata Control for bill reconciliation.
- ROI "wasn't an issue"; "tool is very powerful"; "absolutely moves you to a higher level of management".
- "Currently looking to give them more business and add modules."
- Views them as "a business partner, not just a vendor".

Senior manager @ Marriott Corporation:

- Manages about 15 people
- Marriott has 2,600 hotel and remote site locations worldwide
- Three years ago, he began looking for an enterprise telecom management platform; he sent out an RFI and looked at Gartner reports. Initially narrowed their list down to MetaSolv (they originally wanted to target enterprise customers as well as carriers) and Wisor Telecom and a 3rd company he couldn't remember. Sept. 11th then devastated the hotel industry and the project was shelved.
- One year ago, he revisited the project and learned that MetaSolv was only focused on carriers. Then a Marriott affiliate (Marriott Vacation Clubs) recommended that he speak with TX.

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

- He also evaluated Tangoe – and while he concluded that they had a good solution for financial management, they did not have inventory tracking capabilities. Conversely, when he had evaluated MetaSolv and others, he found that they had strong inventory tracking functionality but weak financial management capabilities.
- TX was the first company he found that had both inventory management and financial management capabilities.
- The final reason he chose TX was their AT&T relationship. AT&T had recommended TX and roughly 90% of the Marriott network rides on AT&T, so the deep integration with AT&T's provisioning systems was a significant positive.
- Marriott's evaluation process lasted 9 months – the project is currently in the testing phase. He believes the project will go live in January 2004. The implementation is on schedule and in some areas (AT&T XML integration) ahead of schedule.
- He said that the value proposition was pretty easy to sell internally. By doing a high-level, cursory manual billing audit, he found \$500,000 of annual savings due to overcharging by AT&T. He said the savings would be significantly larger if he took a deep look, but he did not need to do this to convince the buying authorities of the ROI.
- He shares the TX vision and believes there is real value in an end-to-end platform that manages all aspects of telecommunications (above and beyond mere bill reconciliation and auditing). "Innovation and Automation" are key themes to the projects he is funding.
- TX is a top 5 IT priority for Marriott
- Team at TX has been "outstanding, knowledgeable and very customer-centric"
- Future functionality they'd like to see would be integration into Siebel and HP Openview.

In conclusion, we believe TX should be able to compete well, especially with customers that fit the following profile:

- Greater than \$10mm in annual telecom spend
- Multiple locations and/or frequent location churn
- Forced to deal with a heterogeneous telecom environment (e.g. multiple carriers)
- In the midst of a technical / infrastructure up-grade
- In need of tighter cost allocations
- In the midst of a BPO/BPA or cost savings initiative

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

IS IT WORTH IT?

Proposed Capitalization Table

The proposed fully diluted capitalization of the company is as follows:

	Pre-Money	Post-Money
Valhalla Partners		25.0%
Columbia Capital		25.0%
Current management: CEO and 3 VPs	100.0%	35.0%
Employees (Options)	0.0%	15.0%
TOTAL	100.0%	100.0%

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

Working from the public comparables' trading multiples (see next page), we see the following valuation scenarios:

Valhalla Ownership	25%
Total Valhalla Investment	\$ 3,750,000

Company's Model		Exit Multiple	Company Exit Valuation	40% Discount	20% Discount	Post-Discount Valhalla Multiple	Valhalla Multiple (No Discount)
2007 Revenue	\$ 84,700,000	2.0	\$ 169,400,000	\$ 101,640,000	\$ 135,520,000	6.8 - 9.0	11.3
2007 Net Income (After-Tax)	\$ 9,834,000	23.0	\$ 226,182,000	\$ 135,709,200	\$ 180,945,600	9.0 - 12.1	15.1

Valhalla's Model (Conservative Scenario)		Exit Multiple	Company Exit Valuation	40% Discount	20% Discount	Post-Discount Valhalla Multiple	Valhalla Multiple (No Discount)
2007 Revenue	\$ 57,480,000	2.0	\$ 114,960,000	\$ 68,976,000	\$ 91,968,000	4.6 - 6.1	7.7
2007 Net Income (After-Tax)	\$ 3,999,600	23.0	\$ 91,990,800	\$ 55,194,480	\$ 73,592,640	3.7 - 4.9	6.1

* Note: We reduced the Net Income estimates in the Company's model by 50% b/c their model resulted in unrealistic margins. *
 Note 2: After-Tax Net Income assumes a 33% tax rate.

Our forecasts result in returns that range from 3.7 to 15.1 times invested capital.

Our more conservative forecasts (based on the revisions to their financial model outlined above and assuming an illiquidity discount) result in returns that range from 4.6 to 6.1 times invested capital.

However, none of these valuation forecasts take into consideration the beneficial impact of our securities being participating preferred securities.

We also believe that there is a significant chance that exit multiples increase between now and the time at which we exit the investment.

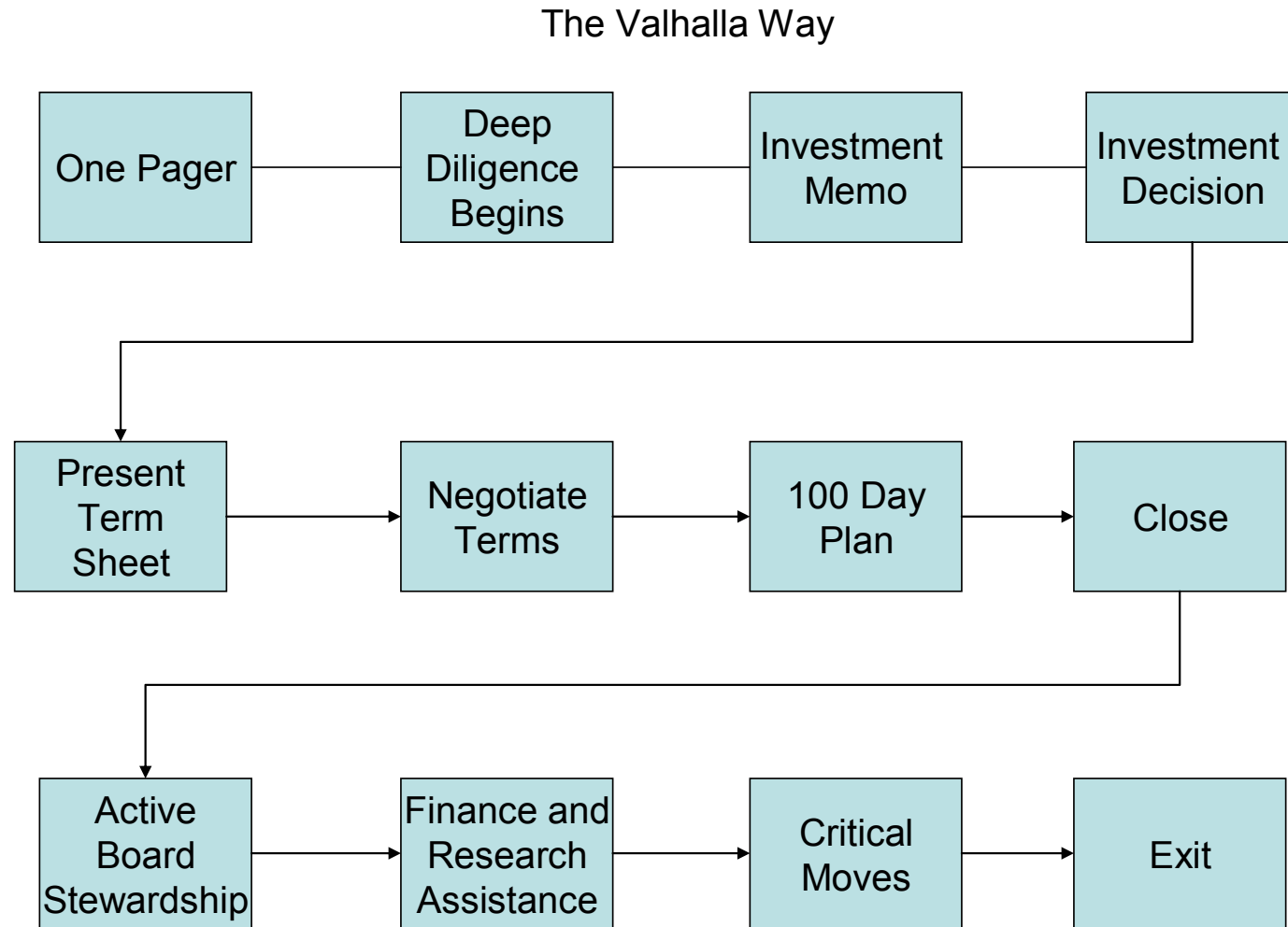
Another significant opportunity for upside is for the company to exceed the assumed \$250,000 in one-time software license revenue per transaction.

Exhibit 1 (continued) Excerpt from Telco Exchange investment memo

“100 DAY PLAN”

- 1) Identify and recruit CEO and, potentially, CFO candidates
- 2) Help identify sales talent
- 3) Help identify and recruit strong, value-add and independent Director
- 4) Work with company to establish appropriate revenue recognition policies
- 5) Work with company to establish appropriate stock-option plan
- 6) Work with company to develop new name and branding message
- 7) Work with company to establish proper analyst relationships and to articulate “strategic telecom management” message
- 8) Work with company on pricing strategy
 - a) How should the products be packaged and priced?
 - b) Multiple year licenses?
 - c) Gain share opportunities?
 - d) Product / services mix?
 - e) Channel development and pricing
- 9) Introduce company to national accounting firms and appropriate banks

Source: Company

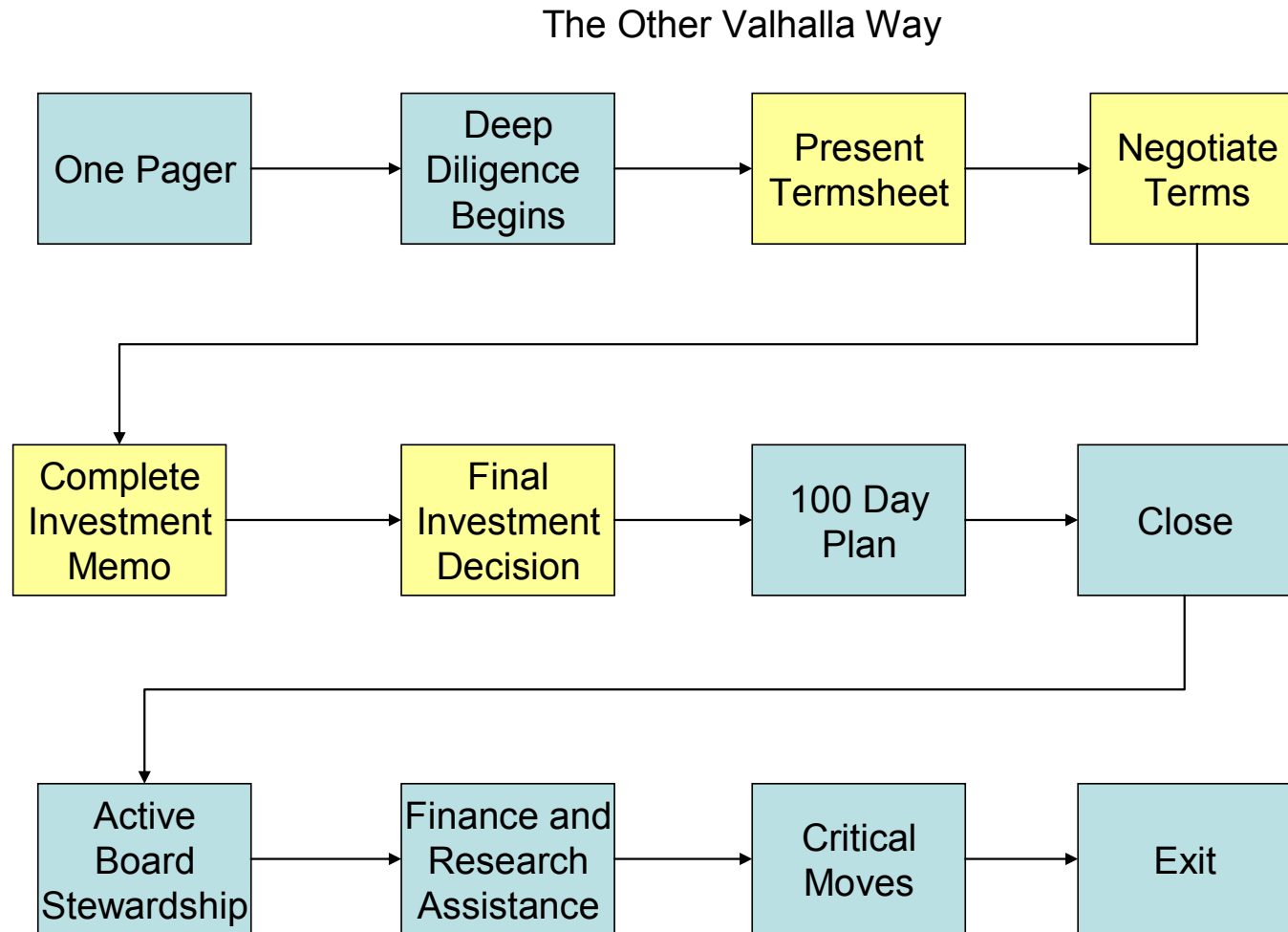
Exhibit 2 Overview of Valhalla Partners due diligence process

9/17/2004

Valhalla Partners, LP Confidential

Source: Company

Exhibit 2 (continued) Overview of Valhalla Partners due diligence process



9/17/2004

Valhalla Partners, LP Confidential

Source: Company