



#4

Spotfire: Managing a Multinational Start-up

As he prepared to leave for another trip to Sweden, Chris Ahlberg, co-founder and CEO of Spotfire, stopped briefly by Rock Gnatovich's desk. As Gnatovich looked up, the two men smiled briefly, thinking back to all that had happened in the few months since Gnatovich joined Spotfire as President. The 29-year old Swede and the 45-year old American were working together well and the results were clear to everyone. Each knew, however, that there was a great deal more left to be done. It was June 24, 1998, and Spotfire had just moved from temporary offices in a posh downtown Boston highrise to a more modest permanent location in Cambridge across the road from MIT.

Ahlberg and Gnatovich chatted about recent progress in getting clients to adopt Spotfire throughout their R&D operations, and Gnatovich told him of a \$50,000 purchase order they'd received that day. After reviewing their plans for the coming week, Ahlberg slipped a Discman and the latest Beastie Boys CD into his suitcase, and got ready to leave for Göteborg, where Spotfire's development team was based and where the company had been born.

"Don't forget," teased Gnatovich, as Ahlberg walked away, "we need you on this side of the Atlantic, too."

As Ahlberg waited for the elevator to arrive, Gnatovich's words stuck with him. Roughly half of Spotfire's current sales were in the United States, and over the longer term the United States would remain its most important market. Maintaining product development in Sweden had its advantages, but was it the best way forward? Spotfire would need additional funding within a year, and he and Gnatovich had a lot to accomplish if they were to position the firm in a way that would command the valuation they sought. Was the Swedish operation a hindrance to those tasks, or could it be used to Spotfire's advantage?

Ahlberg knew his business challenges were more than enough to keep him occupied, but on this particular trip the business would have to come second. After a brief visit with the development team in Sweden, Ahlberg would fly to Bermuda. His fiancé, who was soon to begin her MBA studies, was working in Bermuda for the Swedish construction company Skanska. Both would put their work aside for the moment—with their wedding just three days away, Chris knew he was not likely to have much time to look out a window and ponder the company's strategy!

From Ph.D. to CEO

Spotfire's core products were based on Ahlberg's doctoral research, along with the data visualization research of co-founders Staffan Truvé and Erik Wistrand. (See **Exhibit 1** for resumes of

Charles M. Williams Fellow Chad Ellis, MBA '98 prepared this case under the supervision of Professor Walter Kuemmerle as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

Copyright © 1998 by the President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call 1-800-545-7685, write Harvard Business School Publishing, Boston, MA 02163, or go to <http://www.hbsp.harvard.edu>. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the permission of Harvard Business School.



Spotfire's senior managers and **Exhibit 2** for Spotfire's organization chart.) Ahlberg received his Ph.D. in 1996 from Chalmers University of Technology in Sweden. Much of the most important thesis work, however, was done at the University of Maryland, which had excellent facilities and support for the type of research Ahlberg wanted to pursue. Ahlberg's motivation for pursuing a doctorate was largely intellectual curiosity, rather than any specific academic or entrepreneurial career path. "The Ph.D. allowed me to pursue some of the early ideas behind Spotfire that would have been hard to go after otherwise," he explained.

During his studies at Chalmers, Ahlberg participated in an entrepreneurship program in which he gave a brief presentation of the visualization technology he was developing. Innovations Kapital, one of the few Swedish venture capital (VC) firms operating at the time, saw the presentation and expressed interest. By the time Ahlberg earned his Ph.D., he had written a basic business plan and planned to turn his technology into a venture. Despite this rather unusual development from a Ph.D., Ahlberg did not consider himself the typical entrepreneur: "I was never the guy who had four different jobs to make money everywhere, but I've always done lots of entrepreneurial stuff. It's just so much fun with the somewhat crazy environment it creates!"

In April 1996, with seed financing from Innovations Kapital, Ahlberg, Truvé and Wistrand formed IVEE Development AB, later renamed Spotfire after the Company's core product. Although Spotfire recorded some income that year (see **Exhibit 3** for Spotfire's historic and projected P&L statements and **Exhibit 4** for Spotfire's historic and projected Cash Flow statements) from consulting, the focus of the firm was developing a commercial product.

In the first year of operations, Spotfire sought business from a wide variety of firms with data visualization needs. "We were far too all over the place," recalled Ahlberg. "The idea was to get out there and learn what we had, see what we could do with it." Spotfire sold its software to clients in packaged goods for consumers, manufacturing, banking, telecommunications and a range of other industries. Such a broad approach allowed Spotfire to learn from a variety of customers, but made it impossible to develop a more complete product which would add more value for a particular customer base.

In early 1997, Ahlberg sought out Atlas Ventures, which would later provide the bulk of Spotfire's \$3 million first round financing. Atlas urged Spotfire to adopt a "vertical" strategy, focusing on one specific market where it could provide real solutions software by tailoring the product's data visualization capabilities to specific user needs. Ahlberg recalled:

Picking a specific market was really difficult, as our technology was appealing to so many customers. Financial services companies had money, but also highly developed in-house tools. Technology companies had money but less satisfactory in-house tools. In the end our decision was partly driven by our early successes at Astra and Unilever.

Spotfire decided to focus on the related fields of chemistry and biology, in general, and the pharmaceutical industry in particular. (See **Exhibit 5** for a list of Spotfire's key customers as of early 1998.)

In November 1997, Ahlberg flew to the United States with Jonas Karlsson, a sales representative. "Jonas had the right American mindset for the trip," explained Ahlberg, "because he'd worked for American companies like Kodak and Parametric Technology." The two men visited a dozen companies, and convinced eight of them to become customers. "It was our first real sales trip in the United States," he recalled, "and we had no idea what to expect." Within the first two months of selling, they had generated \$100,000 in revenues for Spotfire and, of equal importance, had gained positive response from many of their customers, giving Spotfire a base of external credibility for further sales efforts and for raising capital.

Adding Professional Management

In addition to recommending a vertical product/marketing strategy, Atlas felt that Spotfire had reached a stage where Chris needed to bring on a professional manager. Meanwhile, Gnatovich, who had managed an Internet start-up through its acquisition by Parametric Technology, was looking for a new challenge. Between January and May of 1998 he helped Atlas evaluate business plans and carry out due diligence on potential portfolio firms, while keeping an eye out for a company he could get involved with. When Spotfire was suggested, Gnatovich was intrigued:

I liked Chris's early customer orientation. When you sit in on a lot of VC presentations, you get used to entrepreneurs who think their product or technology will carry the day all on its own. They have no customer validation, just their own conviction. Even though I had no direct experience in the pharmaceutical/biotech business, I called up several customers and had a very good feel for how this company could succeed...and knew I could sell people with the necessary experience on joining this business.

Gnatovich joined Spotfire in May as President, with Ahlberg remaining as CEO.

Ahlberg and Gnatovich offered quite a contrast. Ahlberg, 29, was the very image of a young entrepreneur—a passion for his product, infectious enthusiasm and marketing flair, but with little management experience. Gnatovich, 45, was a seasoned manager, who had run and grown several small companies in addition to his work with VC firms, and had strong opinions about what a company like Spotfire had to do to succeed.

From the start, the two men split the responsibilities of the U.S. operation while Ahlberg continued to manage Europe through his co-founders. Ahlberg was in charge of product development, linking customer feedback with the development team in Göteborg, as well as product marketing. Gnatovich was to develop and implement the sales strategy.

Both men were comfortable with the relationship, despite the difference in age and experience. "You have to hire people who are better than you are at whatever they are going to do," said Ahlberg. "I agreed with Atlas that we needed someone like Rock to come on board, and my only regret is that it took us too long to find him."

Visual Discovery

Many modern business endeavors involved gathering and using large, complex data sets. Firms wishing to analyze the data they had collected typically turned to dedicated statisticians and data analysts, using advanced statistics and algorithmic tools, such as SAS and DataMind. In many cases, however, these dedicated analysts lacked the skills or insights to interpret the data appropriately, just as those best able to interpret the data lacked the extensive training needed to use statistical analysis software.

Spotfire's technology was designed to enable individual researchers to visualize data in an intuitive and interactive format. By displaying data in a wide range of graphic formats, an experienced researcher could identify patterns or trends that could enable her quickly to develop leads or to eliminate unpromising lines of study. In drug discovery, for example, Spotfire software enabled researchers to mine data from extensive warehouses of chemical compound structure and behavior, looking for desired characteristics or interactions. This could dramatically reduce the early search process for candidate compounds and therefore reduce overall discovery time and time to market. (See Exhibit 6 for a summary of Spotfire's usage potential at various stages in the drug discovery process.) Early successes at Swedish-based Astra and Anglo-Dutch Unilever had

convinced Ahlberg and his co-founders that the huge potential revenues that came from discovering new patentable drugs/compounds offered Spotfire a tremendous opportunity.

Dr. Greg Tucker-Kellogg, of the Genetics Institute,¹ one of Spotfire's early US customers, explained the value of Spotfire software to the Institute's genetic research:

Due to technological advances, we can now measure the activity levels of hundreds or thousands of genes under particular conditions in a single measurement. Interpreting the vast data generated by such an experiment is a key step in early drug discovery. Spotfire offers visual data filtering; it's intuitive in a way very few products are.²

Before Spotfire, a researcher had to go through a large number of steps, undoing and redoing different analyses. The process typically took anywhere from two hours to two days. Spotfire easily cuts that time in half.

Spotfire offered customers two basic product types, Spotfire Pro and plug-in programs. Spotfire Pro was the company's flagship data visualization tool. Spotfire Pro was applicable to any industry or broad category of data analysis. Spotfire Pro customers included manufacturing firms, financial services companies, and a wide range of other industries.

Spotfire also developed plug-in products designed for use with Spotfire Pro and which offered added value to a particular subset of customers, with more tailored forms of analysis. In Chemistry, for example, Spotfire developed Structure Visualizer, a plug-in product that linked Spotfire Pro with ISIS, the dominant chemical analysis database software operated by MDL³. The plug-in allowed researchers to visualize the compound structures, reactions and other data ISIS makes available. Kathleen Mensler of MDL explained, "The use of Spotfire Pro as the visual front end to ISIS will significantly increase the effective use of the chemical compound database."⁴ Ahlberg elaborated, "The Structure Visualizer provides visual access to the compound database that is so critical to scientists in pre-clinical discovery."

Competition

As a new and somewhat revolutionary product, Spotfire faced not only conventional competition from similar products (discussed below), but also the need to persuade customers that "data visualization" was something they should spend money on in the first place. "So far we haven't walked into a situation where there's money budgeted for data visualization," said Ahlberg. "What we have are companies who have a problem but who haven't thought of this approach as a solution."

This need to persuade often drove the structure of early deals. Rather than attempt to sell an entire organization, Spotfire concentrated on getting the product in the door and in use, trusting that once researchers saw what it could do for them they would be able to move up the management chain and pursue an order for the larger organization. Ahlberg explained:

¹ Genetics Institute, a subsidiary of American Home Products Corporation, was a leading biopharmaceutical company specializing in recombinant DNA and related technologies.

² Casewriter interview.

³ ISIS was the core product of MDL, a \$53 million revenue subsidiary of Reed Elsevier, the Dutch publishing conglomerate.

⁴ Spotfire press release.

We often based our proposal on how much money we thought the particular department head could spend without seeking outside approval. This meant that first-stage deals were typically \$30,000 or less. In the early stage deals, our biggest competition isn't from other data visualization products, but simply from alternate demands on departmental budgets.

On some new products Spotfire had decided to introduce a quarterly payment plan, instead of their traditional annual fee, as a further inducement to get potential customers to give the software a trial run.

After gaining bottom-up support, Spotfire faced both direct and indirect competition to winning a larger order. Oxford Molecular, a competitor to MDL, offered a directly competing product in DIVA.⁵ Rather than being a core business itself, DIVA served primarily as a competitive tool in the chemical database business, and did not allow the full interactivity offered by Spotfire. Ahlberg hoped that with the introduction of Spotfire's plug-in for MDL, which now gave full data mining and visualization capability to MDL users, Oxford would allow Spotfire to develop a plug-in product for their own database as well.

Another form of competition came from companies like Netgenics,⁶ whose SYNERGY software integrated incompatible databases and analysis algorithms into a single format, for research in the biotechnology and pharmaceutical industries. "While our product is most attractive to the researchers, Netgenics goes straight to the CIO and says, 'We can build your entire IT structure,'" explained Gnatovich. "They're top down, while we're bottom up. In our view, their products are poor (in terms of data visualization), but their story is compelling to a CIO worried about system control."

Market Size

Spotfire's estimate of the market potential in Chemistry, Pharmaceutical and Biotechnology was as follows:

Chemistry MDL had sold its core database product for roughly 25,000 seats, representing a dominant market share of about 90%. MDL believed the potential market for ISIS was closer to 75,000, but growth had been very slow in recent years, suggesting that the "true" market might be closer to around 30,000 seats. Spotfire felt that almost every MDL user was a potential customer for Spotfire Pro and the MDL Plug-in.

Pharmaceutical and biotechnology The combined *Fortune* 1000 and *Fortune* Global 1000 pharmaceutical and biotech companies employed a total of 1.2 to 1.3 million people at the end of 1997. While many of these firms did not disclose exact R&D employment, Spotfire estimated that 12% of these employees were in R&D.⁷ Based on experience with Pharmaceutical and Biotechnology companies who had already adopted Spotfire the company further estimated that full adoption would imply one seat for every two R&D employees.

⁵ Diverse Information Visualization and Analysis.

⁶ Netgenics was incorporated in 1996 and had raised \$8.1 million in VC funding.

⁷ Estimate came from extrapolation from firms that did disclose the number of employees in R&D.

A House Divided?

With its origins in Sweden and its main market in the United States, Spotfire had to wrestle with early identity questions. The development team of Swedish engineers, fueled by national pride, felt that identifying Spotfire as a Swedish firm could be an asset, given the country's strong technical reputation. Gnatovich strongly disagreed:

In my early meetings with the team in Sweden it became clear that this was going to be a problem. We already had challenges associated with being a small company with a young and only partially proven product. I told them flat-out, "This has to be an international company. If you present yourself as a Swedish firm, you've lost."

An early indicator of the perception problems Spotfire could face in the United States occurred during the move to its Cambridge offices. The new office required about \$25,000 of general office equipment, and Gnatovich wanted to arrange lease financing to preserve the company's cash.

I assumed that with \$2 million in the bank and solid VC backing, this would be a simple deal. Then they [the finance company] asked me the name of our bank. When I told them it was Svenska Handelsbanken, their eyes glazed over, and they didn't want to offer us any financing. Never mind the two million, never mind that this is an international bank and we could put them in touch with the account manager in New York. They didn't want to know.

Spotfire was eventually offered financing, but on such unfavorable terms that Ahlberg and Gnatovich realized they needed to establish a relationship with a U.S. bank. "They wanted personal guarantees, they wanted to give us the money in stages, and they wanted a very high interest rate," said Gnatovich. "For a \$25,000 lease I'd have offered the company better terms out of my own pocket!"

Spotfire established dual headquarters: the European headquarters and development center in Göteborg, Sweden, and U.S. headquarters in Cambridge, Massachusetts. Both Ahlberg and Gnatovich were based in the United States, to signal the firm's commitment to its U.S. customer base.

Getting lease financing and demonstrating commitment weren't the only challenges to running an international start-up. Coordinating development in Sweden and marketing in the United States was a significant task, both in terms of information flow and morale. Ahlberg explained, "We have to make sure that the developers in Sweden feel connected to the U.S. marketing efforts, and that they are getting the best possible market feedback."

Spotfire addressed this challenge with regular meetings, both in Göteborg and Cambridge, and by having Ahlberg divide his time between the two offices. Members of the development team were also rotated through the Cambridge office, allowing them to spend time with customers and with the sales team. Despite the considerable expense and time investment, Ahlberg felt that the Göteborg/Cambridge division had its advantages as well.

"One of the key problems of any software company," Ahlberg explained, "is setting up an effective information feedback loop between marketing and development. It's hard work, it's often not a lot of fun, and it's not necessarily the strength of the entrepreneur. So, many companies fail to do it and are unable to update their products effectively as a result. We don't have the luxury of hoping that our marketing and development teams will talk to each other without a lot of effort on our part, so we are forced to do a better job than we might have otherwise."

Ahlberg felt that developing the formal feedback loop between the two offices would be one of his most important responsibilities over the next six months, and he had several specific programs in mind to accomplish it. Software developers would be rotated from Sweden to the United States to serve as sales consultants for six months at a time, giving them client access and building closer relationships between sales and development personnel. Ahlberg also developed a computerized system for reporting problems and ideas in a structured way. Already in place for a year, the system had facilitated communication between the two offices. The U.S. office would also employ research and product marketing people whose job would be to be a bridge between customers in the United States and the development team in Sweden. The final ingredient to building links between the two offices would be Ahlberg, "traveling like crazy back and forth."

In addition to creating urgency behind the drive to build communications between marketing and development, there were tangible benefits to locating the development team in Sweden. Even after allowing for more generous benefits, Swedish programmers cost roughly \$5,000 per month, compared to \$8,000 per month for a comparable programmer in Cambridge, and were less costly to recruit. Retention was also much easier, since headhunters trying to lure them to other jobs heavily targeted programmers in the United States. "I would hate to try to manage a development team in Cambridge right now," said Gnatovich.

Gnatovich had his own concerns about having product development in Sweden: "Basically it came down to two things: talent pool and work ethic. If we need a hundred programmers can we get them in Göteborg? And would they have the drive you need to support an entrepreneurial venture?"

Since joining, Gnatovich had been pleased with Göteborg's performance, but some of his concerns remained.

Sweden clearly has a large enough talent pool, but there aren't enough programmers with experience in product marketing or as end-users as we'd like—most have just been product developers. That makes communications with marketing harder. Also, while the work ethic has proven to be quite strong, there is still less of an entrepreneurial feel that sometimes makes me a little nervous. This will be the first summer I watch as the entire Göteborg office goes on August vacation.

It was not at all atypical for a middle-to-upper income Swede to own or have access to a Summer house and a boat, far away from Göteborg, so it would be difficult indeed to get programmers to return to work if anything urgent developed.

Financing

Spotfire's original funding consisted of \$300,000 in seed money from Innovations Kapital (IK) in April 1996, followed by another \$350,000 later that Fall. IK was a Swedish VC firm with approximately \$40 million under management from a first fund and plans to raise a second, larger fund. Most of IK's investments were early stage and concentrated on Information Technology and Biotechnology. For its investment, IK received 46% of Spotfire's equity. The Spotfire team had given away a considerable piece of equity to get IK backing – in part because there weren't many alternatives and in part because they trusted IK's skills in building Swedish ventures. (See Exhibit 7 for details on Spotfire's financing and equity ownership structure.) Carlstedt Research & Technology (CR&T), a high tech consulting firm which co-founder Truvé was involved with, also provided \$40,000 in early financing, as well as technical support.

With relatively low overhead and some income from consulting projects, this was enough to get Spotfire through its first year of operations, and to establish its credibility to a point where it could approach a first round of financing with a substantially more favorable valuation. In August

1997, Spotfire completed its first round, raising \$2,750,000 from Atlas Ventures⁸ and a further \$250,000 from Innovations Kapital. The second round of financing also set aside stock options, which would, upon exercise, amount to 20% of the company's equity. Atlas had been the first of a half-dozen VC firms Spotfire met with, and they expressed the highest level of interest. Ahlberg reflected on the negotiations:

It was hard to convince people on the West Coast to invest in Sweden, but otherwise I think we had a pretty good case. We met Atlas Ventures through IK, when one of the partners sat next to an Atlas guy at an EVCA (European Venture Capital Association) dinner and talked with him about Spotfire. He was interested and suggested that IK have me call Philippe Claude in the Paris office, which I did. With more than \$500 million invested, Atlas was pretty unique in the venture community both in size and in that they were truly trans-Atlantic with partners in both the US and in Europe. The fact that Atlas was global probably made it easier for them to evaluate us. Besides, they invested primarily in IT and in biotech, which helped them see Spotfire's potential clearly. I knew they could add a lot. Atlas wanted to buy roughly one-third of the company, so the negotiations on valuation had as much to do with how much we would raise as how much we would have to give away to get \$3 million. We offered to sell at \$3.40 per share, and Atlas offered \$1.65. We agreed on \$2.27.

Ahlberg's estimate of Spotfire's funding needs were headcount-driven: "Once you start laying out who you have to hire to achieve your goals you have to make sure you won't run out of money."

Atlas did considerable due diligence on the young firm. They spoke at length with several customers, making sure the product had the potential Ahlberg claimed, and also sought extensive personal references on each of the founders.

To protect their investment, Atlas insisted on three additional conditions common to VC investments. The first was an anti-dilution clause: if Spotfire did a follow-up financing at a lower valuation, Atlas would automatically be issued shares so as to protect their investment. (See **Exhibit 8** for a sample of software companies and VC financing details.) The second clause, commonly used to avoid being stuck in a "family business," stated that if no exit strategy had been carried out after five years, the VCs would have the option to withdraw their money with interest. In order to offer this and be consistent with Swedish law, the investment was done as a zero-coupon convertible bond with a term of five years. Finally, if Spotfire was acquired at a valuation that gave Atlas less than a 3x return, they would get their investment returned before dividing the rest pro-rata.

Atlas would have been willing to do without the first and third clauses in exchange for a lower valuation (Ahlberg estimated \$2 per share instead of \$2.27), but this had little appeal for the entrepreneur. "If we succeed in our plans, there is little risk that any future funding will be done at a lower valuation, and the likelihood of an acquisition taking place that does not return well over three times the VC's investment is remote."

Moving Forward—from Start-Up to Strategic Partner

Spotfire's challenge over the following twelve months was to establish itself as a strategic partner for its client companies, with Spotfire software forming a key element in their research processes. While the company had made strong progress in selling small orders, ranging from one to

⁸ A small percentage of Atlas Ventures's investment represented in-kind services.

a few dozen seats, few clients had converted to large-scale use. While this was consistent with the long selling cycle for large research houses, Spotfire's management knew that large-scale adoption was key both to the company's long term viability and the upcoming second round of financing. "In order to get the valuation we want," explained Rock, "we need to show that customers will buy in a big way."

In addition to the long selling cycle, the shift from trial to strategic use of Spotfire raised pricing issues as well. One of Spotfire's early sales was to Unilever, a U.K./Netherlands consumer products company with £30 billion in revenues. Gnatovich explained:

To get in Chris had to offer them 50% off on a twenty-seat deal. After trying the product out, Unilever was interested in going "research wide" with Spotfire, which means over a thousand seats. This is like a dream—they're saying they like our product and the benefit they get is directly proportional to the number of seats they have. But now that they've got \$1,500 a seat as the price at twenty, how can we avoid lowering the price even further as part of a global deal? At the end of this, what should be a multi-million dollar deal will probably be less than one million. We'll end up yielding on price, but will hopefully get good terms, with most of the cash up front.

Spotfire was now sufficiently well established that entry discounts were no longer necessary, but setting prices remained tricky. Gnatovich's goal was to sell Spotfire Pro for an annual fee of \$3,000 per seat. What the ultimate pricing structure would look like, and what discounts might have to be offered when customers scaled up their number of seats in use, remained unclear. Gnatovich knew it would be impossible to charge full list price for large adopters, but at least any future discounting would be done from \$3,000 per seat rather than \$1,500. How to price the appropriate Plug-in was more complicated.

"The plug-in represents a lot of the value of the overall product," said Gnatovich. "It's what transforms Spotfire Pro from a generic data visualization tool to a real solutions product, by linking the general data-mining capability with specific intelligence on tasks the user will want to use regularly. But from a software perspective, it's clearly a less complicated product, so we can't try to sell it at a comparable price."

Spotfire hoped to solve this problem by pricing the plug-ins with a different structure. A customer would be charged a flat subscription fee, somewhere between \$25,000 and \$50,000 per year, for the plug-in, which would cover up to 25 Spotfire Pro users. The argument behind the pricing structure would be that, because they have to integrate with third party software, the plug-ins involve ongoing costs associated with upgrades.

Fortunately, Ahlberg believed that Spotfire did not have to worry about customers paying for one or a few seats and then trying to pirate or otherwise gain free use of the software. "These companies are naturally very careful about intellectual property," he explained. "They don't fool around here."

The proposed timing for the second round of financing, in the second quarter of 1999, fit not only with Spotfire's cash needs, but with the strategic development of the firm as well. "By that time," said Gnatovich, "we hope to be at the point where we know we can execute. That's when you don't want to bootstrap anymore, you want to go big and to go worldwide." (See Exhibit 9 for Spotfire's headcount projections.) Gnatovich had put together a table with information on three publicly listed software firms. (See Exhibit 10.) He was not sure, however, how useful this table was going to be for the valuation of Spotfire.

Looking to the Future

As Ahlberg stepped into the elevator to head for Boston's Logan airport, he reflected on the challenges that lay ahead. Discussions had already begun with Spotfire's VCs on the second round of financing. For Spotfire to have the valuation he wanted, it would have to both increase its breadth and depth of market penetration and strengthen its internal infrastructure. Like any entrepreneur, he wore several hats in the company, selling software, managing relations between the two offices, and hiring key staff. But which tasks had priority now?

Ahlberg felt that Spotfire had given up too much equity in its seed round of financing. To avoid having that happen again, the firm needed both to expand its customer base and to convince some of its customers to adopt Spotfire on a much larger scale than they had to date. Meanwhile, they needed to introduce new products, such as a plug-in for biology databases, and continue to develop their existing product line so that new versions would be even more in-line with the needs of their customers.

Meanwhile, Spotfire also needed to develop its internal infrastructure. In addition to developing a formal feedback process to link development with marketing, Ahlberg knew Spotfire also needed to make some more key hires, such as a CFO, before the next financing round took place. He couldn't help thinking that arranging the final details of his wedding might prove a relaxing change of pace!