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**SolidWorks**

On a December afternoon in 1995, Jon Hirschtick, Michael Payne, and Victor Leventhal sat around a conference table discussing a pleasant dilemma: how much equity money should they accept? Their original goal was to raise \$4.5 million, but the situation had evolved so that more than \$10 million was now available at twice the anticipated share price. If they took it all, their ownership would be diluted only by the amount they anticipated when they began looking for a second round of venture capital. On the other hand, they could accept \$4.5 million and halve the dilution.

They believed \$4.5 million would be more than enough financing to take them to profitability, but other issues weighed in favor of taking the extra money. Their venture was in a maturing market unaccustomed to start-up companies. A richer bank account would go a long way toward reassuring prospective customers. Such an account would also send a message to competitors: “No dirty tricks, we’re here to stay and we have the means to counterattack if necessary.” Finally, a deep war chest would allow them to pursue opportunities not usually considered by start-ups: they could grow much more aggressively.

Did they really want such a large safety net? The \$4.5 million goal already included a generous safety margin. Much of the \$10 million would probably just sit in the bank as an expensive insurance policy. Besides, things were going very well: they launched at Autofact in Chicago, the biggest tradeshow in the industry, and shipped their CAD (computer aided design) software product on schedule in November. It was the hit of the show and won the Best New Product award. Sales orders were rolling in and SolidWorks was even slightly ahead of pro forma revenue projections. They didn’t feel anxious. They felt fortunate.

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## **Rounding Out the Entrepreneurial Team**

Another reason for optimism was successfully bringing Victor Leventhal onto the executive management team. Landing Victor Leventhal had been quite a coup; he was a top industry professional with 28 years of experience. Vic had managed a \$1 billion division of IBM for several years in the 1970s and early 1980s, then joined Computerland as executive vice president responsible for sales and marketing. At Computerland for 6 years, his accomplishments included creating a direct salesforce that generated over \$120 million in its first year. When approached about joining SolidWorks, Vic was the CEO of a CAD systems reseller with \$21 million in annual sales. The CAD reseller had grown over 200 percent in the five years Vic was at the helm.

When Vic joined SolidWorks in October 1994, Mike and Jon's biggest concern was whether they could work together—would they encounter the “too many chiefs” syndrome? However, Jon believed that the risk paid off during the search for a second round of capital:

The management team bandwidth was really important. The fact that we had Vic, Mike, and I meant that we had enough people to think about a strategic partnership with the Japanese. We had enough brain cycles in the day. That was very important to doing this deal. If Vic hadn't been here, we wouldn't have had the management capital to do it. By having an extra, really smart, experienced person around, by moving aggressively to expand our team, we ended up able to do important initiatives that otherwise couldn't have happened. We didn't have the money when we were building our team. We chased the people, then the money chased us.

While Jon and Michael managed the product development and organizational aspects of the company start-up, Vic developed the sales and marketing plan. They worked well together on negotiating the strategic partnership, launching the product, and in dealing with the lawsuit.

## **The Lawsuit**

Producing and launching the product was a smooth operation. Jon Hirschtick was an experienced CAD visionary and CEO, Michael Payne was the best in the business at delivering leading-edge CAD software on schedule, and Victor Leventhal was a CAD/CAM/CAE marketing channel guru. In addition to a hot management team, the conceptual goal was exciting so they had attracted many excellent CAD people to SolidWorks—perhaps too many.

In the fall of 1995, Parametric Technology Corp. (PTC) filed a lawsuit alleging that SolidWorks recruited PTC's employees in violation of noncompete agreements. As Jon recalled, the lawsuit became a rallying cry for SolidWorks' employees as they saw several coworkers singled out by their giant competitor:

It really galvanized the company. People said, “If they're going to go after us like that, we want to win even more.”

They were fortunate that the lawsuit was settled quickly. A protracted lawsuit could have been significant burden for a young company.

## **Driving the Second Round**

The management team wanted to raise a pool of \$4.5 million for the second round of capital. Jon began negotiating in the spring of 1995.

After a board meeting, one of my board members took me aside and said, “You need to drive the process if you want a good valuation. Get out early and find a way to get the price up. If you wait until you need the money, the venture capitalists will set the terms.”

Venture capitalists were unlikely to provide a second-round valuation as rich as the SolidWorks management team thought was merited, so they developed a plan for getting a higher price. Michael Payne described the rationale for finding a strategic investor.

Venture capitalists are only a tad away from bankers in that they have a prescribed formulas in their minds for initial funding, and for subsequent funding. On subsequent funding, 1.2 to 2.0 times the first round if things are going well, less if it isn't. We thought the company was worth a lot more than that, so we worked to have someone else set the price. Someone with more skin in the game.

The valuation issue was only one of their concerns; total capitalization, dilution, timing, and other terms were also critical to crafting a good deal. It would require time to strike the right deal with a strategic partner.

### **Second Round Funding, Part I: Strategic Partnership**

The decision about who to court for a strategic partner was made by the executive team. There was a history of distributors investing in CAD software companies, and Michael and Vic both knew Japanese distributors who were interested in selling SolidWorks software and who had invested in past strategic partnerships. These were huge, global companies Vic had actually been involved in negotiating a second round deal with a Japanese distributor in 1990. It takes a long time to penetrate the Japanese market, so finding a Japanese distributor early on made good marketing sense. The SolidWorks team spent minimal time considering prospective European strategic partners as Victor Leventhal explained:

It was very uncommon in Europe to find the kind of agreement we structured. Japan was an island, but Europe was eight or nine separate countries. We didn't think we could find a European partner who could accomplish what we wanted.

SolidWorks was seeking specific characteristics in a strategic partner. The investment had to be at least \$2 million, and valuation had to be generous, but SolidWorks' first priority was the partner's strength as a distribution channel.

Negotiations with Kubota began in early spring of 1995 and continued for nearly nine months. This was in part because the Japanese generally take a long time to finalize deals. It was also because of the structure of Kubota. It was Kubota's venture capital entity on the West

Coast that made the investment, but a distribution entity in Japan that negotiated the distribution agreement. Kubota's VC group insisted, "ROI is very important," but they couldn't make the deal without the distribution agreement, and vice versa. In the end, Kubota made the investment and secured SolidWorks' distribution rights in Japan. Jon Hirschtick recalled the negotiations:

Kubota was very entrepreneurial in approaching this deal. They treated the investment like a venture deal. We liked that. The distribution deal also stood alone, on its own merits. In fact, the venture guys and the distribution guys never even visited SolidWorks at the same time.

The SolidWorks team aimed to maximize the terms of both deals. The valuation had to be right, but the distribution agreement had to stand on its own. Jon reported that if Kubota didn't deliver the prescribed Japanese market share, the agreement would lapse:

We picked two goals: total dollars sold, and Japanese sales as a percentage of total revenue. Total revenue gave them a floor in case our U.S. sales skyrocketed. The percentage of revenue formula was good because we didn't know how well we would really do, but we knew how much of what we sold should come from Japan, so it was something we could agree on.

Another important point was observation rights on SolidWorks' board of directors. Kubota gained the right to be formally briefed, but did not get the right to attend board meetings. This arrangement was based largely on the advice of Axel Bichara, who led the syndicate for Atlas Ventures:

We deal with this all the time. When a strategic investor has a board seat, they have a conflict of interest when it comes to strategic decisions. The stakes for the parent company are a much bigger concern than return on investment. The other time this is an issue is at the harvest. In an IPO, there's not much of a problem, but it can be a problem in an acquisition. The first scenario is that the strategic partner is the interested party. They go to the board meetings and know things inside out. It can be a plus, but it can also be a minus. They know the players and issues and absolutely have an inside track to picking things up at the right time. You are in a weaker position when the buyer is on the board. Even worse, potential acquirers get scared off by the strategic investor on the board, so competitors may not even bid. A big upside for us is when competitive bidding gets going, but a strategic investor can keep that from happening.

However, Axel conceded that Kubota also won many points in the negotiations:

The Japanese used to do deals with relatively little equity and a lot of prepaid license fees, and we tried very hard to get that kind of deal. They didn't pay a penny of prepaid fees. They got a good deal.

The first-round investors had pro rata rights\* and wanted to participate in the second round. Jon’s working assumption had been that the strategic partner would provide half of the second round. However, the Japanese investment model was to dominate their round of funding and Jon encouraged Kubota to make a large investment. He suggested an investment of \$4 million with a 4.5 times step-up, “Why \$4 million and \$4.50 a share? Like any deal; you go in looking for something high, at a high price.”

## Valuation

The SolidWorks management team took care of their top priority by only negotiating with strong distributors, and the \$2 million investment goal was not uncommon for this kind of a deal. The contested point was SolidWorks’ pre-money valuation, as Jon Hirschtick explained:

My job is to get capital at the best price for my shareholders. How do I do that? One way is to look at companies we compare ourselves to. What are they worth today, and what were they worth right after they went public? (see Exhibits 1 and 2) I backed that out to come up with a valuation model to justify a high valuation. Then I wrote to the Japanese, “OK, I understand you value it based on some venture formula, or cash flows, but I value it based on comparables. Take three companies no one has ever heard of, x, y, & z.” I said, “Look, we expect to have this kind of revenue and this kind of valuation. We’re asking you for a tenth of that valuation now.” That’s how I argued valuation.

### Exhibit 1 - Comparable Companies: CAD Industry

Company	Year	Revenue	Valuation	Source
Autodesk	1985	\$29.5 million	\$173 million	Value Line
Autodesk	1994	\$455.0 million	\$1,960 million	Value Line
PTC	1989	\$11.0 million	\$131 million	Value Line
PTC	1990	\$25.5 million	\$250 million	Value Line
PTC	1994	\$244.0 million	\$2,294 million	Value Line
Rasna	1995	\$24.0 million	\$234 million	Public stock price

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\* pro rata rights: the right granted an investor to maintain the same percentage ownership in the event of future financing.

## Exhibit 2 - Comparable Companies: Electrical CAD and Software Tools Industries

Company	Year	Revenue	Valuation	Source
Arcsys	1995	\$ 6.1 million	\$375 million	Public stock price
Pure Software	1995	\$21.4 million	\$470 million	Public stock price
Atria Software	1995	\$20.7 million	\$392 million	Public stock price

It was already late in the negotiations when the Kubota VCs received authorization to make the \$4 million investment. There was no room for negotiations, any other figure would have required going back through Kubota's corporate approval process. Jon knew that time was running out:

We started the negotiations with \$2.5 million in the bank, and we were down to hundreds of thousands of dollars when we closed with Kubota. It takes a long time to close an investment deal with the Japanese. One of the important things about the first round was that we had money left in the bank when we signed the deal for the second round.

Kubota agreed to a price of \$4.50 a share, but stipulated that it was subject to another VC firm investing at least a token amount at the same price.

### Second-Round Funding, Part II: Venture Capital

This agreement created a difficult situation for the VCs. On the one hand, they liked the high valuation because of its impact on their original investment. On the other hand, while they wanted to put more money into SolidWorks, they also sought a good multiple on their investment: \$4.50 was just too rich. They argued that the strategic investor received more than just ROI for their investment, so naturally Kubota was willing to pay an inflated price. The VCs received nothing of strategic value, so they thought that they should be offered a discounted price to reflect the premium paid by Kubota.

Jon argued along a different line: the size of Kubota's investment took it out of the pure strategic investment category. Kubota's VC unit invested \$4 million with standard ROI goals. In addition, Kubota had stipulated that no other investor would receive preferential treatment. Finally, SolidWorks raised enough money that it didn't need any investor that didn't agree to the set valuation. The VCs had to evaluate the deal on its own merits with terms as they were laid down by the strategic partnership:

Jon Hirschtick: I couldn't have gotten that valuation from American VCs, but once I had it from Kubota, they could justify it. Also, Kubota wouldn't accept anyone else getting a better deal, so the VCs had to sign on at the same price. It was their only option. The Kubota VC didn't see this as a distribution deal, he was in it for the ROI, so he wasn't about to let an insider

get preferential conversion ratios\* or something like that. The reality is that Kubota was getting more, but they expected to dominate this round. If others wanted to come in, the price was set.

Axel Bichara: This was a high price, but a good company. Just looking at the second round by itself, it was an opportunity to invest at a given value and the deal looked good at \$4.50 in terms of multiple and IRR. I had no problem justifying a \$35 million pre-money evaluation—we had a chance to make 10 times our money in 3 to 4 years. This is one of the few companies that has the potential to be \$500 million within a few years and I think it's a good risk.

### **Contemplating Appropriate Funding**

Jon, Michael, and Vic let negotiations develop with a variety of prospective investors for nine months, and offers of money poured in from all sides: VCs, private investors, and employees. The total available at \$4.50 was over \$10 million. Jon described his negotiating strategy:

I left things open for a long time. I was not in a rush to close the deal. We let the situation ripen, and we just said that we'd close the round when the Kubota deal closed. It was like a poker hand, sometimes you just want other people to signal their intentions first. The key was that we weren't desperate for the money.

In addition to Kubota's \$4 million, Atlas Venture and Burr Egan Deleage wanted to invest about \$2 million each, and North Bridge wanted to invest between \$500,000 and \$1 million. SolidWorks' employees also wanted to invest over half a million dollars, and there were several private investors who wanted to invest another \$1 million. Jon was glad to have employee money in the pool, "There's no way I'd turn down money from someone who has the opportunity to work late and make us more profitable."

As Jon, Michael, and Vic talked about which money to take, and how much, several factors loomed large: ownership dilution, management control, employee morale, market perception, competitive uncertainty, and financing growth. The conversation was lively as they agreed on principles like, "I make money when the company is successful and goes public" and "You can't be a successful company unless you act like a successful company" only to find that they disagreed about how those principles applied to diluting ownership in exchange for a rainy day insurance policy.

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\* Preferential conversion ratios refers to the conversion of preferred stock to common stock.