

## Engineering 145

### Technology Entrepreneurship

#### Session 15: Financing

Professors Steve Blank and Tom Kosnik  
with insights from Ms. Ann Miura-Ko, Partner, Maples Investments

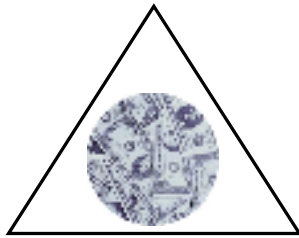


## Agenda

1. ABCs of Financing
2. Single vs. Multiple Rounds of Financing
3. Solidworks
  1. Opportunity and Risks
  2. Deal/Financing
  3. Outcome
  4. Epilogue
4. Takeaways

## ABCs of Financing

### A. Amount of Cash Needed and Purpose



B. Sources  
of Capital

C. Deal Structure  
and Terms

### Pros and Cons of taking Multiple Rounds vs. a Single Large Round of VC Financing

*Pros of taking a single round from a big VC/Cons  
of Taking money from a small VC:*

- 1. Lower financial risk.** You don't have to worry about raising another round.
- 2. Breathing room.** If you don't hit your targets when planned, you still have \$5M in the bank.
- 3. Brand Credibility.** More people may have heard of your VC firm. That might - or might not - open doors.

Thanks to Ann Miura-Ko, Partner at Maples Investments, for these insights

### Pros and Cons of taking Multiple Rounds vs. a Single Large Round of VC Financing

*Pros of multiple rounds, starting with a small  
VC/Cons of taking more money up front from a  
large VC:*

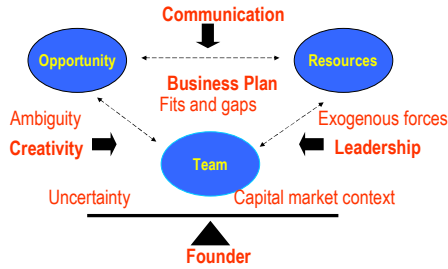
- 1. Retain ownership.** If you raise \$1-2M you may only have to sell 10-30% of the company.
- 2. Liquidity Options.** Taking less money preserves the potential for a \$50-100M exit.
- 3. Lower Dilution.** If you take less money today, you may get a higher valuation in later rounds.

Thanks to Ann Miura-Ko, Partner at Maples Investments, for these insights

### Steve Blank's Rules of Thumb for staged financing

1. Put index finger in mouth
2. Moisten index finger
3. Remove index finger from mouth
4. Hold moist index finger in air over your head
5. Determine which way the wind is blowing
6. If it feels breezy, frothy or bubbly outside, take angel round (as they will be around for the next round and your valuation has a probability of increasing)
7. If there is no wind and dead calm, take all the money you can when you can. Sit on the dollars and work on generating revenue like there is no tomorrow

### Is SWKS a High Potential Opportunity in September of 1994?



McGraw-Hill/Irwin

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### What are the major risks that SolidWorks needs to manage?

#### Four Categories of Risk:

- Technology
- Market
- Team
- Financial

1. What are the most critical risks?
2. How will you manage or prevent them?
3. What is your contingency plan if a risk becomes reality?

\* Adapted from Sahlman (1997), *How to write a great business plan.*

### SolidWorks' Options

#### Single Round

- Raise \_\_\_\_\_ Now.
  - 2 investors
  - Profitable

#### Multiple Rounds

- Raise \_\_\_\_\_ now.
- Raise \_\_\_\_\_ later (When) at \$\_\_\_\_/Share.

### Let's vote!

- Who would take the deal as is?
- Who would do one round, with more negotiating?
- Who wants to do multiple rounds?

### Epilogue

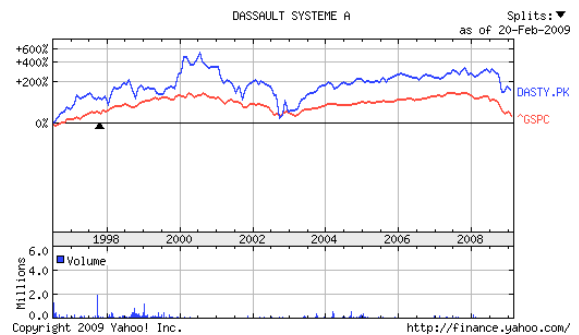
#### SURESNES, France, & CONCORD, MA, June 24, 1997

Dassault Systèmes S.A. (Nasdaq:DASTY) and SolidWorks Corporation announced that SolidWorks would be acquired by Dassault Systèmes.

The agreement called for Dassault Systèmes to issue 4.85 million shares of common stock in exchange for 100% of the outstanding capital stock of SolidWorks and all the shares issuable upon future exercise of outstanding options and warrants of SolidWorks.

The transaction was valued at \$310 million.

### Epilogue: Dassault DASTY.PK&I stock vs. S&P 500 Index



<http://finance.yahoo.com/q/bc?t=my&s=DASTY.PK&l=on&z=m&q=l&c=&c=GSPC>

Epilogue:  
What happened to Jon Hirschtick?  
(From an interview in 2007)

- Jon is not the CEO.
- He had an epiphany after 9/11, 2001. He gave up the CEO job so he could work part time and spend more time with his family.
- He has three roles at the company:
  - Coaching the senior executive team
  - Strategic projects (M & A)
  - Interacting with customers.
- He's a very happy co-founder, husband, & father.

[http://designsmarter.typepad.com/devonsowell/2007/02/an\\_interview\\_wi.html](http://designsmarter.typepad.com/devonsowell/2007/02/an_interview_wi.html)

Epilogue:  
What happened to Jon Hirschtick?  
(From an interview in 2007)

Jon: "I have the best job in the world. I really do, no one has more fun here than I do! I get all the benefit and, frankly, all the wonderful treatment by our employees. I don't have to carry the headaches of sales forecasting, I don't fire people... I don't have to do any of that stuff."

"I've been doing this 25 years, I've been doing SolidWorks for 13 years. I just called my wife today and told her how exciting this is for me."

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**SolidWorks "TakeAways"**

- Your job is to assemble a world class team.
  - Best-in-the-world talent
  - Investors with insight, a trustworthy network, and wisdom.
- Know the interests of your sources of capital.
  - FFF rarely have same interests as professional VCs.
  - Not all VCs have the same interests.
- Entrepreneurs and VCs often discuss how capital can *reduce risks*.
  - What are the most critical risks?
  - What milestones can deduce or eliminate those risks?
- A founder may or may not remain as a senior executive in a venture.
  - There's no one right answer...
  - What makes *you* happy?

Appendix

Additional information about Solidworks

Epilogue

**SURESNES, France, and CONCORD, Massachusetts, June 24, 1997** – Dassault Systèmes S.A. (Nasdaq:DASTY) and SolidWorks Corporation today announced the signing of a definitive agreement whereby the privately-held SolidWorks will be acquired by Dassault Systèmes in a stock transaction. Dassault Systèmes provides process-centric solutions for major industrial customers and suppliers through its CATIA-CADAM and VPM product lines, which are successfully marketed, distributed and supported worldwide by IBM. Through this unique strategic partnership with IBM, Dassault Systèmes is a leader in the worldwide CAD/CAM/CAE/PDM-II software market. SolidWorks, a pioneer in developing mechanical design software products for Windows, is a leading provider of cost-effective, easy-to-use production solid modeling solutions for the mainstream design-centric market. Together, Dassault Systèmes and SolidWorks will offer dedicated solutions for both market segments, thus meeting the needs of customers at all levels of product and process complexity.

The agreement calls for Dassault Systèmes to issue 4.85 million shares of common stock in exchange for 100% of the outstanding capital stock of SolidWorks and all the shares issuable upon future exercise of outstanding options and warrants of SolidWorks. Based on yesterday's closing price of the Dassault Systèmes common stock, the transaction is valued at approximately \$310 million. Subject to regulatory and shareholder approvals as well as other customary conditions to closing, the acquisition is expected to be completed in the 1997 third quarter. It is expected that the acquisition will be accounted for as a pooling of interests.

Epilogue: Devon Sowell's Blog:  
Interview with Jon Hirschtick in 2007

Jon: In 2001, my wife was pregnant with our fourth child in six years, in the crazy early years of the company. Our kids were 5, 3, and a newborn, and my wife got pregnant again. So I took a sabbatical.

Devon: Good for you.

Jon: Within ten days, there was September 11, and on the night of September 13 my father passed away, and on September 21 our fourth child was born. I had to drive to his funeral in Chicago because the flights weren't running because of September 11, and I had to leave my wife home because she was nine months pregnant. So I decided after the sabbatical that I couldn't go back to the way I was working, it was too much sacrifice in my personal life. I'd finished a year in which I'd flown 52 times on American. It was crazy, SolidWorks grew, took a lot of time, and we had a lot of passion for it.

So, anyways, John McEleney (current CEO of SolidWorks) was ready and was itching to go. The company had gotten to be a big company, \$100 million per year, and I was doing less and less of the things I like to do. I thought maybe I wasn't the best guy anymore. So Johnny and I worked out this deal where I would work part-time. So I feel like the luckiest guy in the world.

[http://designsmarter.typepad.com/devonsowell/2007/02/an\\_interview\\_wi.html](http://designsmarter.typepad.com/devonsowell/2007/02/an_interview_wi.html)

### Epilogue: Devon Sowell's Blog: Interview with Jon Hirschtick in 2007

In the five years since then... I have three different things that I do.

One is advising and consulting to the management team... Johnny and I spend a lot of time talking about things, we're great friends. I help a lot with marketing, new strategies... Or, I might take a look at FeatureXpert, how should that technology develop. A little bit of time I spend with the team in designing. I consult on marketing, what should we call it, how we should explain it to the world, what applications are there.

...Number two, strategic projects, looking at companies to acquire, or special days we do with other people.

The third thing I do is lots of customer interface... I talk about SolidWorks and I listen about SolidWorks. I go out to User Groups, I hear something, I might bring it back and say, "John, look, in three User Groups, this is sounding important, and I just thought you should know that." Or, he may say to me, "we're going to a bunch of User Groups and I want you to be promoting this message." ...

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### Solidworks Web Site

<http://www.solidworks.com/>

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