

Top Ten Decisions that Can Make or Break Your High Tech Start-Up

Dr. Anne S. York

College of Business Administration

Copyright 10/2008, all rights reserved

Creighton
UNIVERSITY

High Tech Startup Jeopardy

- Answer: 6/million
- Answer: Less than 4%
- Answer: 70%
- Answer: \$6.5 million
- Answer: 6 out of 1,000
- Answer: \$150,000
- Answer: 1 billion

#10: Protect Your Ideas

- Don't publish or present anything until you've talked with the technology transfer office
- Be careful whom you share your plan with (note: not presentation!)
- Insist on CDA's
- Number copies of business plan and keep records of who gets them

#9: Do Your Market Research Early

- Know your competitors
 - Other researchers
 - Substitutes (current solution)
 - Projects under development
- Consider whether licensing or start-up makes sense
 - Distribution channels
 - Inventor interest and capability
 - Funding
 - Payment method

#8: Put Together the Right Team

- Know your strengths and weaknesses
- Choose team members that complement and care
- Don't hire what you can get for free
- Always under staff and over work
- Hire slowly, fire quickly
- Role of inventor?

#7: Agree on Ownership

- Be careful how you split ownership
- Get it in writing up front
- Discover what motivates partners, key employees
- Pay only for performance
- Expect quality
- Choose carefully

#6: Talk to People

- It's cheaper
- It's quicker
- It's better
- Connections are key!
- Note: these days it can be on the internet

#5: Find the Right Funding

- Grants
- Bank loans
- Angel investment
- Venture capital
- Fund in phases
- Note: you have to have your own "skin in the game" to attract outside investment

#4: Understand and Manage Cash Flow

- This is a presentation by itself!
- It's critical to understand the difference between cash flow and profit
- Cash flow ("burn rate") is what matters
- Detour to convince you.....

Cash Flow vs. Profit

Cash Flow

- +Sales
(cash/credit/terms)
- +Bank Loan
- - Eqpt./Invent.
(lease/buy)
- - Materials
(cash/credit)
- - Labor (plus training)
- - Interest/Principal
- - Taxes
- - Advertising/Admin

**Only record when cash
comes in or out**

Accounting Profit

- Revenue
- Expense
 - Supplies and materials
 - Labor
 - Depreciation
 - Advertising and admin
 - Interest and taxes
- Asset (eqpt./inventory)
- Liability (loan)

**Expenses must be
matched with
revenues!**

Restaurant Example

- Assume you want to start a restaurant
 - Initial investment - \$14,000 equity
 - Ongoing sales and costs
 - Sources of capital: loans, investors, savings

Assumptions ...

- You purchase \$9,000 eqpt./invent.
- Month 1 you sell \$25,000.
- Your sales are doubling every month.
- You make 50% of sales to corporate customers taking 30-45 days to pay.
- Your direct costs (labor, materials) are 50% of sales.
- Your suppliers require cash up front
- Your building lease is \$1,000/month.
- Training takes two weeks.

Accounting Income Statement

	June	July	August
Revenues	25.0	50.0	100.0
Cost of goods sold	<u>12.5</u>	<u>25.0</u>	<u>50.0</u>
Gross margin	12.5	25.0	50.0
Adv/admin	<u>5.0</u>	<u>10.0</u>	<u>20.0</u>
Operating profit	<u>7.5</u>	<u>15.0</u>	<u>30.0</u>
Depreciation (3 yr.)	<u>.3</u>	<u>.3</u>	<u>.3</u>
EBIT	7.2	14.7	29.7
Interest	0.0	0.0	0.0
Taxes (40%)	<u>2.9</u>	<u>5.9</u>	<u>11.9</u>
Net profit	<u>4.3</u>	<u>8.8</u>	<u>17.8</u>

Cash Budget

	May	June	July	August
Cash Sales	0	12.5	25.0	50.0
Corp. Sales	0		12.5	25.0
Net Cash In	0	12.5	37.5	75.5
Labor/Mtls.	12.5	25.0	50.0	100.0
Equipment	9.0			
Adv./Admin.	5.0	10.0	20.0	40.0
Interest/Principal	?	?	?	?
Taxes		2.9	5.9	11.9
Net Cash Out	(26.5)	(37.9)	(75.9)	(151.9)
Net cash flow	(12.5)*	(25.4)	(38.4)	(76.4)
Loan Needed	12.0	37.4	75.8	152.2

Why Are the Two So Different?

- Inventory/materials paid ahead of sales
- Corporate accounts receivable
- Equipment paid ahead of sales
- Training paid ahead of work
- Employee turnover

What Can You Do....

- Credit policy/discounts for cash
- Lease equipment
- Reduce employee turnover
- Slow growth rate (less advertising)
- See bank loan or additional investment
- Bootstrap: Never pay for what you can get for free

#3: Understand and Manage Growth

- Unmanaged, unexpected growth is the # 1 business killer
- It's worse than silly mistakes and lack of experience
- Detour to convince you.....

#2: Present Your Work in Simple, Compelling Terms

- Simplicity is key
- What is the problem your technology solves?
- What is the current solution?
- How is your technology different/better (simply!)?
- Why should someone invest in you?

#1: Be Willing to Do What It Takes to Succeed

- Must have “skin in the game”
- Quit or ease off of your “day” job
- Expect a lower standard of living
- Put your own money on the line
- Apprentice if possible
- Eat, breathe, think your business for the first three years
- If it isn't working, pull the plug

Questions?

- A really good book: *High Tech Start-up* by John Nesheim
- Sample tech business plans: in *Technology Ventures* by Dorf and Byers
- *Building Biotechnology* by Yali Friedman
- A few last words about our new bioscience entrepreneurship program
- Thank you!