Writing Business Plans

Howard Anderson
Bill Aulet
Matt Marx
15 mistakes young entrepreneurs make…(from Fortune)

15. You are trapped in the “college bubble”
14. You have no prototype.. Or you do, but your users are irrelevant
13. You didn’t research the competition
12. you haven’t talked to customers
• 9. You didn’t practice your pitch
• 8. You don’t tell a good story
• 7. You know nothing about the investors across the table
• 6. You make stuff up instead of saying “I don’t know”
• 5. You seek confirming, not disconfirming evidence
• 4. You pick advisors who are easily accessible, not particularly relevant

• 3. You hire for short term needs, not long term fit

• 2. You treat fundraising like an end, not a means

• **1. You do more than one Business Plan competition**
Total U.S. health care
100% = $2.1 trillion*

Prescription drugs ($140 billion)
93%
7%

Pharmaceutical sales by therapeutic area
100% = $140 billion

Oncology $9.8b
22%

Neurologics
15%

Respiratory
12%

Anti-infectives
15%

Cardio-vascular
20%

Alimentary/metabolism
15%

Other
9%

* Estimates for 2002, estimated 16.6% of GDP
Source: Internet research, IMS, Evaluate
US Potential Per Year

Sales potential USD millions: 150

Market potential USD millions: 3,000

Market penetration (%): 5%

Number of treated patients (million): 0.15

Cases diagnosed (million):
- Incidence (million): 0.5
- Diagnosed (%): 40%
- Treated (%): 75%

Price per patient (USD): 20,000

Price per treatment (USD): 10,000

Number of treatments: 2

Source: Medical books, Internet research, WHO Global Health statistics
What’s Wrong With Most Business Plans?

1. They are boring, overwritten, confusing
2. They are unconvincing in attempting to do a money extraction from those with money
3. They quickly convince the sophisticated reader of the inadequacies of the team seeking money
4. They are poorly written
Gordon Mathews:

- What segment?
- Chief Info Officers?
- Homeowners?
- Small Businessmen?
- Financial Officers
A business Plan starts with Assumptions…..

• What is the problem you are trying to solve? How many have this problem? Why is your solution a Better Solution?

• Which part of the market
  • will be most likely to use and
  • pay a premium
Business Plans
Pluses and Minuses

+’s
1. Conveys “urgency”
2. Shows mastery of a subject
3. Builds on logic
4. Shows understanding of the real world

-’s
1. Rehash of bad numbers
2. No real reason why this company should make it.
3. Makes false or unsubstantiated claims
4. Promises “unreal” results.
The 15.390 Scorecard: Each Plan covers these subjects in about 5 pages each...

- Market
- Technology
- Personnel
- Finance
- Competition
- Tactics
- Alliances
- Distribution/Sales
Start with a one-page overview (executive summary)

- This is the market we are going after. Size. Shape. Growth
- This is how the market breaks down and what our niche will be
- This is the technology (advantages/disadvantages)
- This is how we are organized
Example: Voice Mail

- Our market: Fortune 500 companies with large sales forces
This is our Distribution Strategy

- **Direct** We will build black boxes for $500K/3000 users which we will sell through a dedicated sales force.
- **Potential US customers**: 5,000

- **Indirect** We will also license to PBX manufacturers and Central Office Switch Manufactures:
- **Potential OEM partners**: 20
And these are the financial Results

- 5 year plan,
- cash need
- personnel growth
- This is the amount of funding we will need and this is what we will use the money for
- This is our exit plan and schedule
Example: One Page Summary

The Aardvark Electronic company will enter the … market, which is growing at XX% yearly and now is a $XX industry. The five dominant companies together only control 35% of the market and....
What are the goals of your one page summary

1. To get the v.c. to read the rest of the plan
2. To convince him/her that you have the requisite expertise and understand the market well enough to be credible
3. To convince him/her that their knowledge will be increased in that segment whether or not they decide to follow up your suggestion
4. To convince them to bring your proposal up to the next level
Show a logic trail

• Build credibility
• Use facts
• Show Intelligence
• Build a Logic Trail
• Identify strengths and weaknesses in your plan
• Show how the v.c. will make money
Part I: What Market Are You Going After

1. What is the size and shape of the market you are going after. Cite a source (Yankee Group, et al). Make sure the source you cite is credible (Not Frost and Sullivan)

2. How has the market been growing? U.S. and Global?

3. Who are the major players? Pie Chart.

4. What are the Important Distribution Models in the Industry
Part I: continued

5. What externalities will affect the market? (Example: New requirement for computer backup from Federal Banking Act,… etc.)
6. What externalities may inhibit the market?
7. What is the profitability of those in the market in this product line? Gross Margin? Trends?
Would the reader understand - really understand - the market

- If so, continue. If not redo. The standard is whether they could tell someone else, after reading your section, what the true size and dynamics of your industry are. What you are really demonstrating is that YOU understand the market. If they don’t see any special insight or if your analysis seems faulty, everything else you say will be discounted.
II. The Technology Section

• What is the state of the art in technology used by the industry leaders?

• What new technology or what use of new technology are you planning? How will that give you some advantage or overcome a disadvantage?

• Is the Industry moving towards some set of standards? What are they? If they are overlapping, where do they overlap?
Technology continued...

• What will be your technological approach? Is your strategy dependent on this new technology or not?

• If the technology IS your product, then Focus on what you are going to do, build, design - but DON’T list everything you might do….. You will lose your v.c.
Technology continued....

• How risky is the technology? What might have been done to take risk out of the equation?
• Is the technology moving in multiple directions and, if so, what are they?
• Does the technology require that some group - users for example - have to validate the technology and how long will this take?
Technology continued......

• … or is your product SLIPSTREAMING behind the new direction of the leader.
• (example: we are building our application on Windows or Android....)
III. Competition

• Who is the competition? Major players, minor players, fast growing players. What is the strengths and weaknesses of each? Be real honest here.

• Who is gaining market share fastest and why. Example: XYZ has taken a complex technology and successfully moved it through the Novell Platinum VAR Channel, which was the first time that......
Competition continued

• How’s the competition organized? Number of salespeople? Experience? How does the product look to the customer? Is the competition a strategic or a tactical vendor?

• How good is their service regarded? Strong regionally, nationally, or internationally? Is their distribution better than their technology or the other way around?
Competition

• What does the competition look like organizationally?
• Where are they going? Which products are cash cows? How are they spending their R&D dollars?
Personnel

• Tell me WHY this person is outstanding
• What were the past few jobs he had?
• Promotion?
• What specific skills does he/she bring that are necessary for this job?
• Won contest? Voted most outstanding?
• Did the team work together before?
What was the result when the team worked together?

- Achieved record sales for product line
- Introduced new product in half the usual time
- Achieved breakthrough
Make me very happy of your team

- But what happens when one or more of the team members is still at their old place of employment?
Describe them generically

• Our team member has been employed by a major semiconductor manufacturer for the past three years as…. She is currently Vice President, Development for the …. Division, having 230 people reporting to her. Her division ranks number one is sales growth and profitability.
Personnel

- Describe what new hires will be made, within which time frame, and how they will fit into your org plan.
- “We will be hiring four regional vice presidents during the second quarter who will be paid $65K base with a guaranteed bonus of $30K and they will be in place by the fourth quarter.”
Tactics

• How EXACTLY are you going to proceed?
• “We will enter into an OEM agreement with one of the five….”
• “Our pricing will be …”
• “Our manufacturing will be done in house for the first 2000 units; we will then go off shore for ….”
• “Our financing will allow us to do… but not… It is our plan to..”
Tactics

• It is usually thought that Tactics follow Strategy; although often it is the reverse.
• Tactics are much closer to reality. This section shows your mind at work.
• Most Strategy statements sound exactly alike - “we will become the dominant company in the … by emphasizing excellent service, value to the customer”
It's OK to make those statements, but now back them up...

Tactically…. “we are devoting 30% of our personnel cost to Customer Service. We will run a 24x7 Help Center, based on Siebel Systems and Directed by Gwen Geller, who was VP of Customer Service at Amazon.com….Our standard is that 90% of all calls will be answered by the second ring and 90% of all questions will be solved at the first level of support. For second level….we will…
Tactics show you know what you are doing….

• It gives the VC some confidence that you really know what you are talking about.

• It makes you commit to some course of action. VC’s like action.

• It shows that you understand the strengths and weaknesses of your competitors.

• It reduces your risk.
Tactics, by their very nature, change...

… so it is expected that your plan will also change.
Finance

• This is the stumbling block of most plans.
• Project too high and you are not taken seriously. Project too low and the VC sees a lack of vision… and a likelihood he/she won’t make serious money.
• Serious money is defined as 3-10X their investment in four years.
Finance Starts with Assumptions, Not Numbers

• Assumptions:
  • “The product, Rel 1.0, will take six months and four programmers.”
  • It will take us two months to hire and train the four programmers.
  • We will be beta testing the product for six months…
  • We will not show revenue for the first 9 months…..
Finance doesn’t like surprises

• What will the “burn rate” be, by month, for the first 24 months?

• What will be benchmarks be for each quarter (“By the end of the second quarter, the beta version will be ready for testing. By the end of the fourth quarter, we will be taking orders, but only for companies within the Northeast where we can do servicing.”)
Finance like easy to read, easy to understand numbers….

- “We will hit cash breakeven in the 19th month….
And profitability in the 24th month….
Financing Wants to be Done a Year at a Time

- “By the end of the first year, we will have hit Milestones A, B, C
- And we will be in the market for our Second Round, which we anticipate will be done at a 2X step-up from Round 1
Financing Wants to Know Two Exit Strategies

• Our Plans are to find either a strategic partner by the third anniversary… and to do so at a price of XX or YY times EBITDA… or we will be consolidating the industry by acquiring companies at ZZ times EBITDA….

• “Our plans are an initial IPO, at a pre money value of ZZ, based on these comparables…..”
PowerPoint Pitches
What Matters

- Clarity of Thought
- Logical Argument
- Communication Skills
- Credibility
- Enthusiasm
- Ability to Listen and Learn/Respond
- Leadership Skills
Clarity of Thought

- Prove the market (Who cares?)
- Explain what your solution is (What is it and why will they buy it?)
- Prove you have a unfair advantage (Why you?)
- Prove the time is right (Why now?)
- WIIFM?
- What do you want from me?
Clarity of Thought

- Business Plan elements for thought process (Next Lecture)
- Do not overwhelm the audience – Clarity is About Being Concise
- But … have detailed backup materials ready for the questions
- Their time and brain cycles are very precious
- Tell ‘Em What Your Going to Tell ‘Em, Tell ‘Em and then Tell ‘Em What You Told ‘Em
- Style of “Three Key Points” is best
“I don’t have time to write you a two page letter so I am writing you this twenty page letter”

- Mark Twain
Your pitch is your business plan in real time in front of real people

• Do your homework before the meeting!!

• Even if the ppt presentation is not tailored, tailor your words and delivery

• Know who “has the ink” and be very clear about what’s in it for her/him and what you want from him/her
Logical Thought

- Be methodical and use facts, data and specific examples

- Make sure everything flows logically from the opening minute to the end

- If they don’t “get it” – revisit your logic closely
Communication Skills

- Use simple very professional charts
- Do let the media obscure your message
- Presentation Skills
  - Stand Up!
  - Keep slides simple
  - Touch, turn, talk
Physical Communication
Other Key Points

• Look your audience in the eye and don’t lose eye contact while you are making a point

• Smile

• Don’t worry about pauses – they can help you
Credibility

• Make no unsubstantiated claims

  *wrong:* “our drug will sail through the FDA”

  *right:* “we’re well poised for the FDA process, as our scientists have 40 years combined experience getting drugs approved”

• Don’t exaggerate or use dramatic language

  *wrong:* “this market’s taking off like wildfire”

  *right:* “Most analysts agree that the market will grow 85% per year for the next five years” (and have the sources)

• Brag about each other, but factually …

  *wrong:* “Now I would like to introduce our awesome, rock star CTO who’s going to rock your world”

  *right:* “We’re really thrilled to have a CTO who was a Fulbright Scholar, and just sold his last company for $20 billion”
Enthusiasm

• Passion is essential for any new venture

• Enthusiasm especially when linked with likability is contagious and very valuable - do you give other people energy?
Ability to Listen and Respond

• Failure will happen, how will you respond when knocked out of your homeostasis?

• Quick clock speed indicator

• Will they like working with you and are you capable of effectively utilizing their value add?
Leadership Skills

- Be there early
- Greet them outside the room and walk them in
- The first few moments are “make or break”
Start and End Strong
Business Leadership

• Start and End Strong

• Be Professional at All Times
  ▶ Start on time and end on time
  ▶ Do homework
  ▶ Follow Up

• Confidently Introduce Your Team
Be Prepared

• Hard copies of your presentations

• Electronic Copy of your presentation
  ‣ On memory stick
  ‣ Careful with fonts
  ‣ Lap top

• Back up if AV problems or you don’t have time
Be Prepared

• Practice

• Practice

• Practice
Step #15: Designing a Business Model

What is a business model?

- Financial interface w/customer
- Not just pricing – *how* they pay, not simply *how much*
- Nature of the property rights exchanged

- “macro” & “micro” business models
- Dynamic business models
Why bother?

- Instagram
- groupme
- zite
- SIRI
"Macro" business models

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Weill, Malone, Urso, Herman, and Woerner (2005)
## “Macro” business models

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- Examples of “macro” business model innovation
  - Xerox: creator/distributor → landlord
  - Amazon: distributor, mfg, utility, headhunter

Weill, Malone, Urso, Herman, and Woerner (2005)
“Micro” business models

- One Time Upfront Charge (plus maintenance)
- Licensing
- Subscription/Leasing
- Shared Savings
- Consumables
- O&M (Operating and Maintenance)
- Cost Plus

- Advertising
- Transaction %
- Freemium
- Cell Phone Plan (or PPA in energy)
- Utility model (per usage)
- Franchise model
- Micro-transactions
- Parking meter
15.390 example: CellJet

- Machine capable of injecting molecules across cell membranes

- Initial business model: sell $400,000 on-premise equipment to R&D departments

- Revised business model: operate “cell injection service bureau”
Business models @ Tellme

• 1.0 Advertising-supported voice portal
  ▸ $100MM invested ➞ revenue of $200,000
• 2.0 Custom B2B solutions
  ▸ 2.1 Fixed-fee development + per-minute charge
    • Fandango: $500k development + $0.03/minute
  ▸ 2.2 Everything rolled into per-minute service charge
    • FedEx: $0.02/minute
  ▸ 2.3 Everything rolled into per-minute service charge, but service charge contingent on performance
    • 1-800-555-1212: $0.10 per automated call
Dynamic business models

• (when) should we pivot?
• Is there more to it than trial and error?
• Do you ever plan to pivot?

• Mullins, John and Randy Komisar. *Getting to Plan B: Breaking through to a better business model.*
Key business model dilemma for high-technology startups

**Licensing technology to incumbents/OEMs**

**Integrate technology into “whole product”**
Licensing can be esp. difficult for startups

- Lack reputation to attract OEM attention
  - (Maybe less of a problem at MIT)
- Weak negotiating leverage → poor revenue, premature exclusivity, etc.
- Hard to be “Intel inside” w/o a brand
- Probably only have a patent \textit{application}
- Granted patent does not entail a better product – only a novel approach
Way out: *temporary integration*

- Start by integrating technology into “whole product”
- Prove value in the product market, build brand and reputation
- Pivot back to a scaleable licensing model, possibly divesting non-core assets
Temporary integration at Qualcomm

- Known as CDMA licensing powerhouse
- Did/could not license CDMA in 1992
  - “Violates the laws of physics” – Stanford prof
- Built Qualcomm cell phones and Qualcomm cell towers – no one would!
- Established superiority
- Sold off cell phones/towers to Kyocera and Ericsson in 1997, “pivoting” to a pure licensing business model
Andrew Viterbi, Qualcomm co-founder (w/Irwin Jacobs)

• “[F]or this large and complex opportunity it was essential to produce the infrastructure as well as the handsets…it was necessary to convince the carriers that CDMA was indeed a workable technology which had a major advantage over alternates: GSM, U.S. and Japanese TDMA standards. All of this took a lot of effort, several successful demonstrations, some luck and about 3 or 4 years; there were many skeptics.”
Temporary integration in the speech recognition industry

- 651 entrants since 1952
- Difficult to establish superiority—ARPA
- Entrants undertaking temporary integration → acquisitions/IPOs
  - Less so for high-status spinoffs
- Temporary integration raises sales per employee, credit rating after pivot
- Not from licensing → integration pivot!
Other examples of temporary integration

- **Ex-post: Vlingo**
  - Wanted phone OEM deals, too small
  - Released mobile app
  - Won Samsung Galaxy S-Voice deal

- **Ex-ante: FinSix**
  - “brickless” laptop cord technology
  - Easy to license, but worried abt leverage
  - Will sell consumer product…temporarily

- **Self-publishing books/music/movies**
Business model wrap

• Think macro
  ▸ What is the “financial interface”? Which property rights are being exchanged?
  ▸ How are you being paid not just how-much?

• If commercializing technology
  ▸ License or integrate?
  ▸ If license, consider *temporary* integration

• Brainstorm, collect customer feedback
Does It Make a Big Difference?

- iTunes
- Google
- Salesforce.com
- EnerNOC
- Blockbuster
- LinkedIn
- Amie Street

- Datatel
- Gillette
- Hewlett Packard
- Electronics Stores
- Intralinks
- Others?
Even Small Differences Can Have a Huge Impact

• Freemium vs. Free Trial - Is there a big difference?
• Well, the goal is to convert free customers to paying customers
• With a free trial, you can provide full access to the full suite of functionality to the customer and you gain control of your funnel and subsequently gain leverage in the sales process
• More info at: http://www.layeredthoughts.com/startups/the-psychological-difference-between-freemium-free-trial-plans
Considerations

- Customer Perspective
- Attacker vs. Defender
- Lifetime Value of the Customer
- DMU and DMP
- Is it a 2 Sided Market?
- Maturity of Product
- Your Financial Resources
Key Elements

Customer

Your Value Creation

Competition

Distribution
Action

• Spend sometime brainstorming difference business models
• Get a bit crazy too
• List the pro’s and con’s of each
• Test on customers before you decide on one