ENTREPRENEURSHIP OPPORTUNITIES & SKILLS

Radhika Nagpal & YY Zhou
My Double Career

**Academia**

- **Ph.D thesis (Princeton), 2000**
  - Memory and storage systems

- **UIUC, 2002-2009**
  - Software reliability and quality

- **UCSD, 2009-Now**
  - Data center management
  - Software quality

**Startups**

- **Emphora, 2000-2002**
  - Database storage
  - Acquired by a public company

- **Pattern Insight 2007-2012***
  - Software quality
  - Data center monitoring (acquired by VmWare in 2012)

- **Whova: Nov 2013-Now**
  - Event engagement and management
  - 7000 conferences, 83 countries
Success

what people think it looks like

Success

what it really looks like
Now I am sharing 10 of my mistakes

Learn from the mistakes of others.

You can't live long enough to make them all yourself.

~ Eleanor Roosevelt
Mistake 1: “I know more than the customers”

- Ph.D: Permanent head damage

- Story: My first startup in NJ
  - “Once I built it, customers will buy it”
    - NO, NO, NO!

- Correct way: find customers first
  - Understand their requirements and how much they want it
Mistake 2: Delay talking with customers

- “We want to build the perfect product!”

Story: Emphora’s initial customer traction
- A recent article: http://www.entrepreneur.com/article/269554
Mistake 3: Over-emphasize Technology Advantages

• How about go to market strategy?
  o Fitbit story
• How about easy to use?
  o Datadomain vs. its competitors
• How about cost of product and service?

• You are no longer playing in the technical world
  o 入乡随俗 Startup is in the business world. Play the game of business (that includes many things)
Mistake 4: Over-emphasize novelty

• Yes, there is some first mover advantage
• But have you heard of **last mover advantage**?
  o Example: Google
  o Why?
    • Early players have already educated the customers/users

• What investors like the most typically
  o Existing market, Not a new market
  o but with a unique approach
Mistake 5: Recruit people similar to me 😊

Diverse background, perspective and thinking helps perfecting the product, the business process

Story: Whova 2015
Mistake 6: Not focused in the first 3-4 years

Yes, your technology can have many applications. But pick one to focus
• Building a product is not as easy and quick as doing a research paper
  • May take 2-3 years to be ready for prime time

• Marketing/sales need to focus, too

Don’t “boil the ocean”
It’s NOT about doing and being
EVERYTHING for EVERYONE right now!

Story: Pattern Insight’s semi structure analysis (Series B)
Mistake 7: Over-emphasize Fund raising

Fund Raising is a Means Not an End

Posted on June 11, 2013 by steveblank

Not all that glitters is gold

William Shakespeare

For many entrepreneurs “raising money” has replaced “building a sustainable business” as their goal. That’s a big mistake. When you take money from investors their business model becomes yours.

One of my ex students came out to the ranch to give me an update on his startup. When I asked, “What are you working on?” the first words out of his mouth was his fund raising progress. Sigh… What I should have been hearing is the search for the business model, specifically the progress on product/market fit, but I hear the fund raising story first at least 90% of the time. It never makes me happy.

• Story: Pattern Insight Series B
Mistake 8: Confuse Product Idea with Business Model

- Building a product is NOT “the product” of your startup. Your business model is “the product”.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
<th>Unique Value Proposition</th>
<th>Unfair Advantage</th>
<th>Customer Segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 3 problems</td>
<td>Top 3 features</td>
<td>Single, clear, compelling message that states why you are different and worth buying</td>
<td>Can’t be easily copied or bought</td>
<td>Target customers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Metrics</th>
<th>Channels</th>
<th>Revenue Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key activities you measure</td>
<td>Path to customers</td>
<td>Revenue Model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Life Time Value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Revenue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gross Margin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Structure</th>
<th>Revenue Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Acquisition Costs</td>
<td>Revenue Model</td>
</tr>
<tr>
<td>Distribution Costs</td>
<td>Life Time Value</td>
</tr>
<tr>
<td>Hosting</td>
<td>Revenue</td>
</tr>
<tr>
<td>People, etc.</td>
<td>Gross Margin</td>
</tr>
</tbody>
</table>
Mistake 9: Over-Rely on Business People

- **No, business people will NOT be your savior**
  - Is your company good enough to attract top notch business people?
    - If not, why did he/she want to join you? What other opportunities does he/she have?
  - He/she is not as committed as you are
    - For them, it is just a job. For you, it is your baby
  - The business people you hire are not as exploratory as you
    - They will not help you find the business model

- **In the first 2-3 years you have to trust and rely on yourself!**

- See Steve Bank’s book
Mistake 10: Too optimistic

- Yes, investors (customers) are very interested....
  - But from interest to money in the bank, it can still take 6-24 months
- Yes, we still have enough money to run for 1 year
  - Is 1 year enough?
  - How about after 1 year?
- Once our product is ready, our investors will put in more money?
  - Really? Is it guaranteed?
- Once we hire sales people, we will get revenue from customers?
  - Really? How long your sales people need training? How long is your product’s sales cycle?
- **90% companies fail because**
  - They run out of money
  - So be **paranoid**
Now the boring but important part

• **Co-founder or early employee visa issues**
  
  ○ Yes, you can get H1 for them
    • You need to provide some evidence as a legitimate business such as investments, customer purchase/license, SBIR grants, etc.
  
  ○ Yes, you can get green card for them, and sometimes even faster than big companies
    • You can possibly apply EB-1 for them, green card in just 6-12 months
IP License from University

- Yes, if your startup is based on your research from university
  - The IP belongs to university and you have to license it
- Get to know the OTM (Office of Technology Management) earlier
  - Do not wait until you need to license the IP
  - Get to know their policies
  - Get to know them personally
- Ask other professors who have dealt with OTM before
  - What has been any lessons or pitfalls you need to watch out
- University owning equity in your startup has a good side and also bad side
Fund Raising

• Talk with investors earlier
  o More as an advisor not for investment in the first 2-4 meetings (meet them once every 3-4 months to update them with progress)
  o Keep in touch with them and have investors to observe your progress over 6-12 months period-----**build trust**
    • you are coachable (you took the advice and implemented it)
    • You can execute, not just talk
  o You want them to “convince” you that you should raise some money
    • Then you know you are ready to raise money from them

• You need to meet more people