

# Nurturing the next Steve Jobs in your school

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It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to heaven, we were all going direct the other way - in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.

----Charles Dickens---- A Tale of Two Cities

### Risk taking in tough times

- In economic times like what we went through in 2008-2009 people tend to become risk averse
- However, a true entrepreneur seeks opportunity in every situation no matter how dire it may appear
- The Entrepreneurs that are truly successful are the ones that survive and excel through all the tough times
- Pre-historic times
  - For survival
    - Darwin's "Survival of the fittest"
- Challenges of Entrepreneurs
  - competition, environment, financial hardships, solo journey
- So, what is an entrepreneur?

### Some Historical Examples



- Early to Mid 1900s
  - Henry Ford
  - Sam Walton
- '60s to '80s
  - Gordon Moore
  - Bill Gates
  - Steve Jobs
  - Richard Branson
- '90s and 2000s
  - Mark Andreesen
  - Larry Page and Sergey Brin
  - Mark Zuckerberg

Do we see some common traits?

#### **Entrepreneurial Spirit**

- Passion
- Focus
- Risk Taking
- Leadership
- Motivation
- Commitment
- Perseverance
- Receptive to feedback
- Responsibility
- Preparation



# Can we teach enterpreneurship?

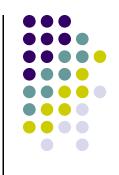


- How does education affect entrepreneurship?
- Several examples of successful entrepreneurs with no formal college education
- Motivate individuals to 'struggle, survive, achieve far beyond one would have imagined'
- Steve Jobs' example
- "Get up early, Work hard, and find oil!" Paul Getty
- Inspire students to ask questions
- Emphasize not on grades, but 'independent thinking'
- Cultivate the entrepreneur spirit!

### Why be on your own?

- Follow your dream
- Realize your true potential
- Be a catalyst for change
- Be your own boss
- There is no other option

### What about Entrepreneurship?



Now that we know the traits of an entrepreneur – how do they operate? Has entrepreneurship changed over time or has it stayed the same? Let's explore some of these questions.

### What hasn't changed?

- The Entrepreneurial Spirit
- Recognizing Opportunities
- Partnering to Grow
- Learning from Failures

### What has changed?



- Ways to jump start
- Trust
- Communication
- Global Talent can work together because cultural barriers have come down
- Costs have come down

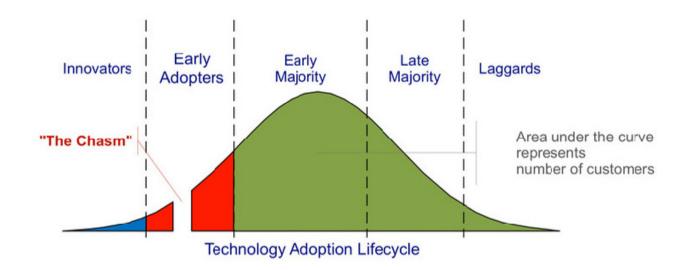
## Life Cycle of a Typical Silicon Valley Startup



- Entrepreneur has an idea
- Moonlighting for prototype
- Assembling the right founding team
- Fund raising
  - Friends, Family and Fools?!
  - Angels
  - VCs
  - Different rounds of fund raising
- Building the team
- First validation from 'early adopters'
- "Crossing the Chasm"
- Building sales and revenues for the next step OR folding up and going belly up
- M&A or IPO

### "Crossing the Chasm"





 "Crossing the Chasm: Marketing and Selling Disruptive Products to Mainstream Customers" – Geoffrey A. Moore

## How do you Cross the Chasm?



- Don't get lost in initial success with early adopters
- Learn from Feedback from the Early Adopter visionaries
- Choose a Target Market Segment beachhead approach
- Work diligently to satisfy Early Majority Pragmatist
- Understand and go for the whole product
- Positioning your product
- Build a Marketing Strategy
- Choosing the most appropriate distribution channel and pricing

### Ways to jump Start

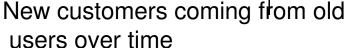


- The Old Way
  - Idea, Concept
  - Build Business Plan, Prototype
  - Build local team
  - Bootstrap or raise money (Angel or VC)
  - Execute on initial milestones
- The New Way
  - Idea, Concept
  - LILO (Little in Lots Out)
  - Utilize Global talent
  - Noodleconomics (hit revenue milestone with a shoe string budget)
    - Cost of failure has been brought down
  - New tools of connectivity with global team and global clients
    - Skype, Twitter, LinkedIn, Facebook
- Disclaimer there are always ideas that require going the 'old way' or some where in between; even there, the initial part follows the 'new way'

## Innovation Validation Cycle: Social Media Example

Rate of acquiring new users

Acquisition



Virality



#### Iteratre to Perfect

- 'Churn'
- Net Customer Value
- Productivity

Monetization

% of users that participate in the business model



Engagement

Average length of time spent per user



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#### **Trust and Communication**

- Good communication leads to greater trust
- Trust building used to require
  - Face-to-face interaction
  - Brick and Mortar presence
- Now it means
  - 24 x 7 connectivity
  - Communications through variety of means
    - Skype calls
    - Conference call and Live Meetings
  - Online interactions and presence
    - Twitter and Facebook status
    - LinkedIn network
  - Quality of work
  - Ownership and Deliverance
  - Meeting and Exceeding Expectations

#### What does this all mean?



- Teach kids to follow their dream!
- Encourage risk taking
  - Cost of failure is at historical lows
- Build global solutions by local expertise
- The student of today has to compete not from the kids next doors, but kids in the next corner of the world.
- The next Steve Jobs can come from as easily from from Calcutta or Calicut, as from Cupertino!

### Recent Startup trends



### What are people thinking?



- Mobile Internet and related
  - Commerce mobile, easy, economical
  - Advertising more online and mobile
  - Content Creation online, mobile centric
- Big Data and the Cloud
  - Analytics
  - Usage
- Empowering people by connected mobile devices
- Use of technology in Healthcare
  - Personalized Medicine
  - Technology Aided better diagnostics

## **Growth of Internet – some** facts



Rank	Country	07-10 Internet User Additions (MMs)	2010 Internet Users (MMs)	Y/Y Growth	Population Penetration
1	China	246	459	20%	34%
2	India	42	88	43	8
3	Nigeria	35	45	2	28
4	Russia	25	60	0	42
5	Iran	24	37	31	49
6	USA	22	244	2	79
7	Brazil	21	79	4	41
8	Philippines	18	23	292	25
9	Mexico	13	35	24	31
10	Pakistan	12	29	43	17
	Top 10 World	457 693	1,099 2,054	16% 13%	29% 30%

Hote: "Russia data as of 610; all other data as of 5210. Source: United Hallons / International Telecommunications Union.

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Tremendous Potential of growth; Think global, not local!

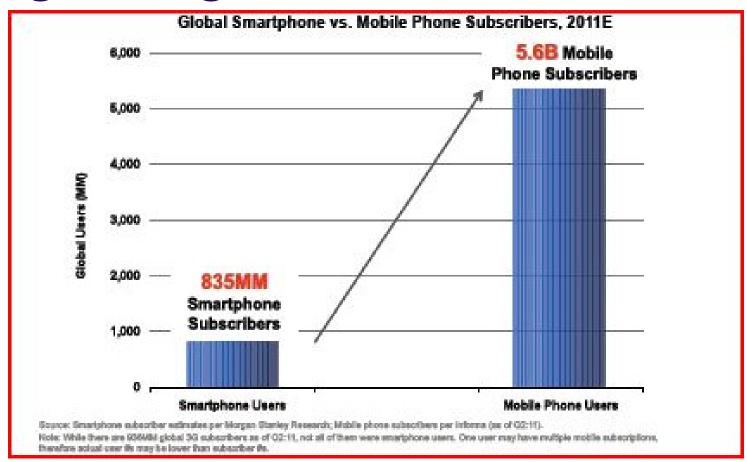
## Proven locally, could work globally!



Company	'Test Market' / Origin*	Social Service	Users
⊚ sнаzаm	UK	Sound Recognition / Music Discovery	100MM+
Spotify	Sweden	Music Discovery & Streaming	15MM+
<b>Waze</b>	Israel	Driving Navigation	7MM+
SOUNDCLOUD	Germany / UK / Sweden	Sound Discovery & Sharing	7MM+

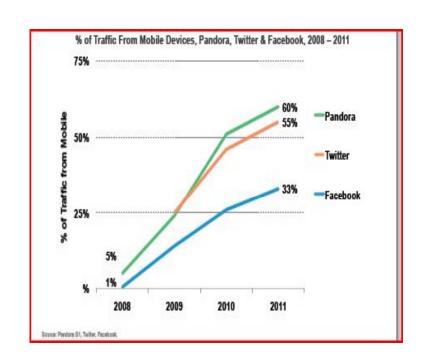
# Mobile Growth – Smartphones growing

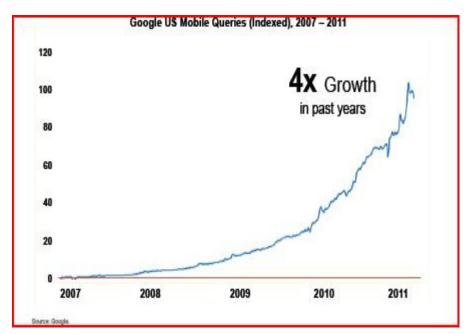








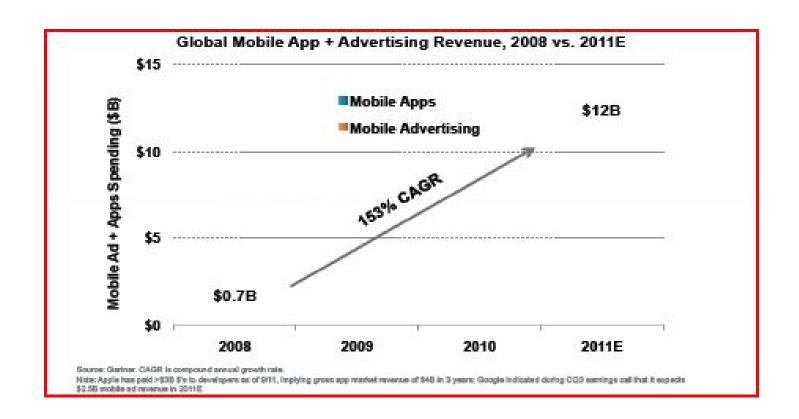




Siri – voice based search on iPhone 3GS, attempt to change the paradigm of search







## Growth in local commerce via mobile





## Healthcare Technological Trends and Unsolved Problems



- The Bigger Picture
  - How is the current macro economic picture affecting the use of technology in healthcare?
  - We all area living longer (children born today will go on to live 100 years). Our expectations of how we live when we are older is changing. How is all of this affecting the kinds of solutions we need to develop for future?
  - If you can't get reimbursed, we won't use it? Designing for practicality.
  - How to address 'billion dollar babies' like Avandia?
- Key Trends, Solutions and Unsolved Problems
  - What should be the key driver for technological solutions?
    - Prevention Cardiovascular diseases, Diabetes how can technology help? Examples?
    - Early Diagnosis BRCA gene, Congestive heart failure, Alzheimer's examples
    - New Non-invasive surgical methods? Robotic Surgery
    - Wireless Health Continuous Patient Monitoring
    - Examples from Stents, Ophthalmology. Other fields
    - Breath Analytics
    - RNA based Coronary malfunction detection



Breathe Sample

**Detector** 

Disease Indications/ Conditions

**Algorithms** 

**Diagnosis** 

Collector/ Storage

Processing of sample collector/ storage Full Size Portable

Other

GC/MS Biosensors:

**Photometric** 

Electroche mical

Ion Channel Switch

Amperometric Probes

Other

Cancer

**Tuberculosis** 

Kidney Disease

**Asthma** 

**Diabetes** 

Heart Disease

**Cystic Fibrosis** 

**Dehydration** 

Other

Known Biomarkers

Prediction of new biomarkers

Feedback mechanisms

Intelligence Systems Confidence Intervals

**P-Values** 

**Prognosis** 

### Thank you!

Questions and Comments? anurag.bist@ashmarip.com



## **Using Global Talent: Moxair Example**





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Engineering

Sales and Marketing

#### **Moxair**



- Profile
  - Founded in 2005
  - Changed paths in 2006 narrow down focus
  - Bootstrapped, No external funding sought
  - Distributed Engineering Team CA, Barcelona, Spain; India
  - Marketing and Sales Team in US, Korea and Singapore
  - Software and Hardware IP for Display Power Management for mobile devices
- Key Lessons
  - Bootstrap vs External funding (pros and cons)
  - Use of global engineering talent in a cost-efficient and opportunistic manner
  - Crossing the Chasm
    - Better management of early adopter relationships
    - Leverage existing relationships with early majority to build confidence and cross references

#### **VxTel**

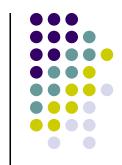


- Profile
  - Founded in early 1999
  - Raised >\$60 mil over three rounds of venture financing
  - Grew from 5 to 160 people in over 2 years
    - Offices in Irvine, Fremont (CA); Boulder (CO); Bangalore (India)
  - Delivered Silicon and Systems for VoIP infrastructure
  - Successful VoIP infrastructure delpoyment in China and Japan
  - Exit in 2001 Intel acquired for \$550 Mil.
  - First investor was returned \$120 Mil for \$5 Mil.
- Key Lessons
  - Find the Right Team Complimentary skill sets
  - Less is More!
  - Don't be afraid to come from behind and replace the leaders
  - Flawless execution

#### **Ashmar**



- Profile
  - Founded in 2007
  - Providing IP Analytics and Research to corporations worldwide
  - Presence in CA and India
- Key Lessons
  - Use Cost Arbitrage
  - Best Sourcing
  - Build Processes to help in long run
  - Drive through isolation, hit the ramp
  - Find Partners and ways to hit the ramp early



ID Attornova			ID Attornova
IP Attorneys Researchers	Researchers	IP Attorneys	IP Attorneys Business Managers
Business Managers			Designers
Technology Market Analysis	Conceptualization	Research & development	Value Extraction
Landscape Analysis	Patentability Search	Patent Drafting	Commercialization Study
White Space Analysis	Freedom to use Study	Patent Filing & Prosecution	Litigation Support
Competitive Analysis	State-of-art Study		Patent Valuation, Acquisition & Partnership
Overlap Analysis	Marketability Study		Claims Mapping
Licensing need Analysis			Portfolio Analysis

## **Key Metrics for Gating Commercialization**



- Let's create a flow chart
  - One trick pony or Can create a sustainable differentiation?
  - Is the core team motivated for the 'marathon', not 'a hundred yard dash'?
  - How does the competitive landscape look?
  - How large is the opportunity?
  - Technology and Market risks?
  - Can a seasoned interim management team be assembled?
  - Can a seed funding be sought or arranged to achieve key next major milestones?
  - Can we build a differentiated IP and product portfolio and roadmap?

# Some ideas for creating successful University spinoffs



- How to excite the key Professors, researchers and students to convert their research idea into strong passion?
  - Will Profs be engaged for extended period of time (more time in summer vacations, for example; can get distracted with regular semester duties)
  - Incentives and Career roadmaps for all researchers from the universities
  - Incentive to Universities
    - Soft benefits, direct benefits as in participating on the success up side
- Infrastructure and support framework for securing key seed money for achieving the well defined next steps
- Mentoring and temp CXOs for company's critical initial growth
- Product or Customer engagement champion who can fine tune the technical and business roadmap on a day-to-day basis