Entrepreneurship and The Opportunity Today

Raj Jaswa Professor, Entrepreneurship IIT

Source: Stanford University STVP

What is Entrepreneurship?

"The Pursuit of Opportunity Without Regard to Resources Controlled"

Howard Stevenson
Harvard Business School

What's an Opportunity?

A product or service around which you can build a profitable company and net a positive return to investors.

What's an Assessment?

A quick way for you to evaluate whether your opportunity is worth spending years of time and money on.

What is the need you are trying to satisfy?

Clearly define the need you are trying to satisfy, who the customer is and what drives the need. Figure out how they are solving the problem today and how big a pain point it is.

What is the potential market size?

Size up the market, know the growth projections and incumbents' shares of the market, determine market share that you can acquire.

What is your competitive advantage?

Scope out the competitive landscape and identify your competitive advantages (Technology, IP, channel innovation etc.). Understand how disruptive your innovation is and how sustainable your competitive advantage will be.

Opportunity ID - The 5 Filters



Raj Jaswa - 3 Different Companies

- Technology: Semiconductor, Enterprise Software, Consumer
- Funding: Angel, VC, VC
- Size of Funding: <\$1M, >\$35M, -\$10M
- Customer: PC mfrs, Global Corporations, Entertainment Companies
- Product: Chip, IT Services, Video Distribution
- Team: 80% Chinese, 50:50 US/India, 80% US
- Business Model: OPTi: never Lost money; Selectica: never
 Made money; Dyyno: goal was profitable recurring \$
- Exit: OPTi IPO 1993 \$400M; Selectica IPO 2000 \$5B; Dyyno shut operations and planned to License Platform

OPTi-World's Largest Chipset company in 5 years

- The odds:
 - No money
 - No technology
 - No fab
 - Competition: Chips, Intel, TI, VLSI, WD Public cos
- In 5 years (1994):
 - 25 million PCs/Laptop Chipsets Leader, 25% mkt share
 - IBM, Compaq, HP, Dell, Acer, NEC are customers
 - Rev of \$163M in 1995
 - IPO in 1993 for \$400M valuation
- More Information: http://www.sec.gov/Archives/edgar/data/89929 7/0001012870-97-000640.txt

Selectica – Enterprise Configuration Software Leader in 5 years

- The odds:
 - 5 years late to market versus Trilogy, Calico
 - No experience in Enterprise SW mkt
 - No relations or credibility with Fortune 500 CIOs
- In 5 years, (2000)
 - Replaced Trilogy/Calico at IBM, Dell, GE, Aetna, Cisco
 - Signed \$10M license deals
 - 800 employees Worldwide
 - Rev of \$50M, IPO \$5B, raised \$230M
- http://www.sec.gov/Archives/edgar/data/1090908/000089161800 003630/0000891618-00-003630.txt

Winning Entrepreneurial Strategies

- Responsive to Market
- Fast Product Development
- Great Teamwork Delegate, trust
- Fierce Competitor Sun Tzu Art of War
- Lose the Battle, not the War
- Personalize your Customer relationships
- Total transparency
- Learn Teach Team to Learn

How do we get started?

Where are Opportunities Born?

- Technology shifts
 - Moore's Law
 - Disruptive technology
- Market changes
 - Value chain disruption/obsolescence
 - Deregulation
- Societal changes
 - Changes in how we live, learn, work (internet).
 - The world is flat (outsourcing)

Idea/Opportunity Brainstorming

- All ideas/opportunities are welcome
- But you are IITB Engineers start with an engineering idea!
- Use your RESEARCH; you have an inherent advantage!
- There are no "dumb" ideas so go off on tangents
- Each idea gets deeply explored, tossed or morphed
- Analyze strengths, weaknesses, opportunities, competitive threats

The power of exponential growth ... Disruptive technologies create exponential growth Exponential Linear

...looks different at its infancy

"Maybe For Others"

"The Americans have need of the telephone, but we do not. We have plenty of messenger boys." —

Chief Engineer, British Post Office, 1878

"The horse is here to stay but the automobile is only a novelty - a fad." — The president of Michigan Savings Bank advising not to invest in the Ford Motor Co., 1 9 0 3



'Fad"

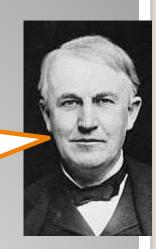


"How, sir, would you make a ship sail against the wind and currents by lighting a bonfire under her deck? I pray you, excuse me, I have not the time to listen to such nonsense."

Napoleon Bonaparte, when told of Robert
 Fulton's steamboat, 1800s

The difficulties look insurmountable

"It is apparent to me that the possibilities of the aeroplane, which two or three years ago were thought to hold the solution to the [flying machine] problem, have been exhausted, and that we must turn elsewhere." — Thomas Edison, American inventor, 1895

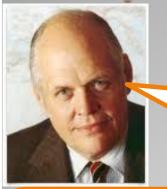


"Atomic energy might be as good as our presentday explosives, but it is unlikely to produce anything very much more dangerous." — Winston Churchill, then First Lord of the Admiralty, 1939

"This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us." — A Western Union memo, 1876/8



The potential impact looks marginal



"There is no reason anyone would want a computer in their home." — Ken Olson, founder of Digital Equipment Corp. (DEC), maker of mainframe computers, arguing against the PC, 1977

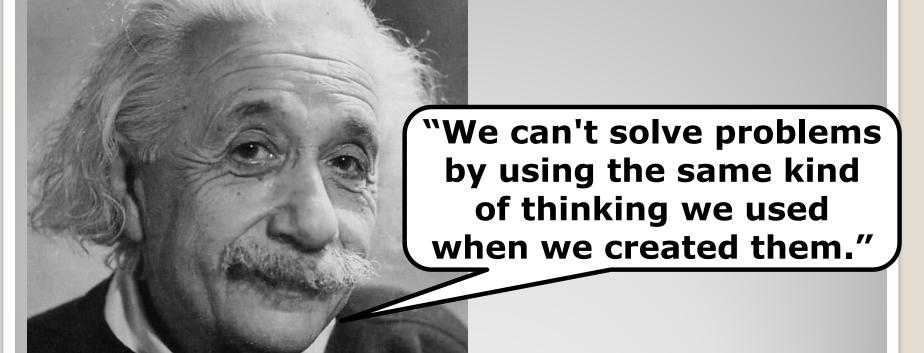
"The world potential market for copying machines is 5000 at most." — IBM, to the eventual founders of Xerox, saying the photocopier did not have a market large enough to justify p r o d u c t i o n , 1 9 5 9



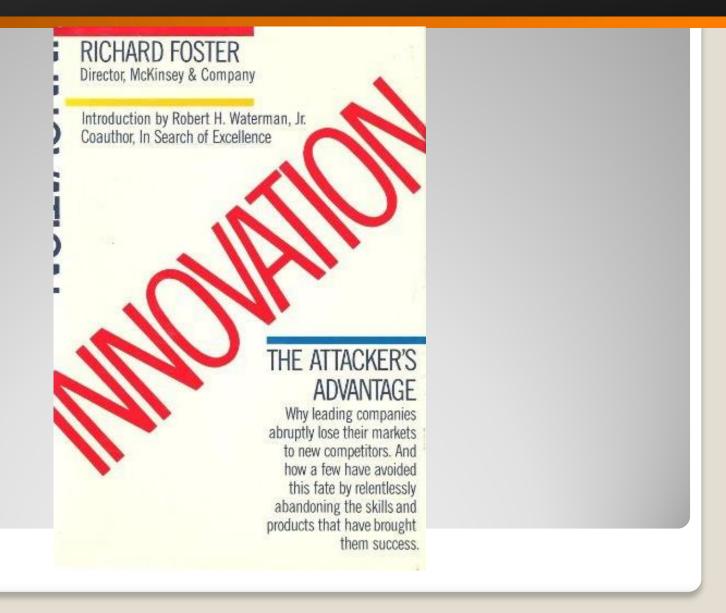


"There is practically no chance communications space satellites will be used to provide better telephone, telegraph, television, or radio service inside the United States." — T. Craven, FCC Commissioner (USA), 1961





Innovation: The Attacker's Advantage



Brainstorming Guidelines

- Key: Finding a Tech Venture Opportunity That Has Substantial Market Size
 - No Consulting Businesses
- Leverage Your Own Experience/Expertise, e.g. research area, if possible
 - The More Relevant DNA on Team, the Better
- Try to Find a Disruptive Business (Tech or Bus Model+Tech)
 - "Me Too" Doesn't Work Well
 - Substantial Products May Take More Than 1 yr to Develop
- Remember, You'll Have to Explain the Whole Business at the end, Not Just do some "Customer Development"
 - Complex Products Usually Require Substantial Engineering Resources
- Be Fearless: Dump Bad Ideas Quickly
 - Fast Iteration Now Pays Big Dividends Later

The Opportunity for the Next Generation...

- Smart phones and Tablets provide mobile internet platform worldwide
- 3G/4G make browsing and audio/video viable on mobile
- Social Networking ubiquity ... billions of active, connected users
- Revolutionising human behaviour
- Mega startups...Google, Facebook, Twitter, Linkedin, Zynga, Groupon, Dropbox...