

Lecture 7

Feb 13, 2018

Conferences
Wheelchair Exercise
Business Models

Essence of this class is Henry and Erik

There is an indomitable quality within the human spirit that cannot be destroyed; a face deep within the human personality that is impregnable to all assaults.

(Chester Himes)

izquotes.com

Today

- Mentors!
- Conferences coming up
- How to attend a conference
- Wheelchair Exercise
- Midterm discussion
- Business Models
- Costs

Why do you attend conferences

How do you optimize your time at a conference?

Pre work suggestions

- Get Caltech business card
- Research companies, institutions presenting
- Compile possible useful contacts/ Make appts

At conference

Study layout of contributors

- Targeted walk
- Random walk
 - Random conversations
- Schedule Paper attendance

Whom do you see there?

- Management
- Sales and Marketing
- Technical

Whom do you see there?

- Management
- Sales and Marketing
- Technical

What would be a good result?

- Applicable Information about the industry
- Pricing info
- Raised interest in what you are doing?
- Useful, helpful, follow-up contacts

Conferences

Abilities
EXPO

LOS ANGELES
FEBRUARY 23-25, 2018
LA CONVENTION CENTER
WEST HALL A

FRIDAY 11AM – 5PM; SATURDAY 11AM – 5PM; SUNDAY 11AM – 4 PM

www.abilities.com/losangeles

<https://www.youtube.com/watch?v=YbOc2R4B4uQ>

Conferences

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Transportation??

Uber

LA Tech + Aging Conference

Friday, March 2, 2018

Millenium Biltmore Hotel

Los Angeles

<http://www.agingintothefuture.com>

Preparation

- We have a great resource in Pasadena- Villa Retirement Homes with a great partner, Dmitriy Estrin
- Has anyone reached out to them yet?

Co-creation Session

- Each session will be moderated by expert facilitators
- All 600 conference attendees will be pre-assigned to a Co-Creation group including older adults (consumers) and professionals who work with seniors

Schedule

- 15 minutes - Tech Startups tell their story and demo their product/solution
- 15 minutes - Audience Feedback: Positive applications, what works well
- 15 minutes - Audience Feedback: Challenges, concerns, what may not work well
- 15 minutes – Suggestions and Takeaways

The whole class is invited

- Last year, all who attended participated and learned from the experience

Transportation in LA

- Car pool
- Or shared Uber X better

Reimbursement

- Receipts <\$200 to Carolina Oseguera X4271
susta@caltech.edu
- Above \$200, let's talk or e-mail

Conferences

RESNA

Rehabilitation Engineering and Assistive
Technology Society of North America

2018 Annual Conference, Washington, DC

<http://www.resna.org/news-events/annual-meeting/resna-2018-annual-conference>

July 11 - 12, 2018 Pre-Conference

July 13 - 15, 2018 Conference

Past Caltech Participation

- 2016 Two Caltech teams chosen to present
- 2017 One Team was chosen

Wheelchair exercise

- You will have ½ day to go through your normal routine on a wheelchair
- The objective is obvious
- There are many activities which are not wheelchair accessible
- There are many activities which are much more difficult than you had pictured
- What surprises you the most about the exercise?
- What improvements can be made to
 - The environment
 - The device

Schedule of HW Presentations

- One per class
- 5 minutes

HW

- Midterm is Thursday
- It is a look at what you have accomplished and what needs to be done to make a working (non-elegant!) design

What are some of things that we worry about to devise an effective solution to a problem

Business Models

- Business Model as defined here is your structure for receiving *compensation*.
- Your choice of business model (s) are a critical consideration for your company.
- Effects your fundability
- Most companies do not exploit all the possibilities they have to monetize their product

Business Models

- Direct Sales*
- Commission*
- Advertising
- Donation*
- Selling*
- Services and service fees*
- Parts*
- Freemium *
- Upselling*
- Subscriptions*
- Auction
- Distribution
- Interest rate differential
- Options
- Insurance
- Financing*
- Razor blade*

Business Models (continued)

- Selling customer information*
- Razor and Blades
- Servitization
- Sell project
- Trading
- Insurance
- Publisher
- Broker
- Reseller
- Value added reseller

Successful business Models have

1. Foothold: identify niche customer, early adopter

Valuable Feedback

Cheap marketing

2. Differentiation

Amazon.com added

- user reviews
- recommendations,
- wish lists
- speedy shipping

3. Pricing

- **Pricing: Salesforce.com monthly service fee instead of large upfront fee**

Business Models

- Business Model as defined here is your structure for receiving *compensation*.
- Your choice of business model (s) are a critical consideration for your operation.
- It is also a critical point of review by prospective financiers
- Most companies do not exploit all the possibilities they have to monetize their product

A word on Pricing

- If it's covered by insurance- who cares?
- Pricing is what people can afford to pay
- Pricing is based on competitive value

Biz Models – Financial Questions

1. How will you charge for your solution?
2. What would make your customers excited about your price structure now?
Over time?
3. How will you generate recurring sales from your customers (printers versus ink, hardware vs ongoing service)?

Biz Models – Financial Questions

4. How will you deliver continuously increasing value over time?
5. How can you extend your model to enable continuous cash flow, profits and growth?
6. Is there more than one way to monetize your product?

Biz Models – Financial Q' s

7. What gross margin can you generate?

Primary indicator of value

Needs to support your overhead

Needs to allow room for partners/customers to make money.

8. How do you generate positive cash flow?

Payment terms with suppliers and customers – bias these in your favor

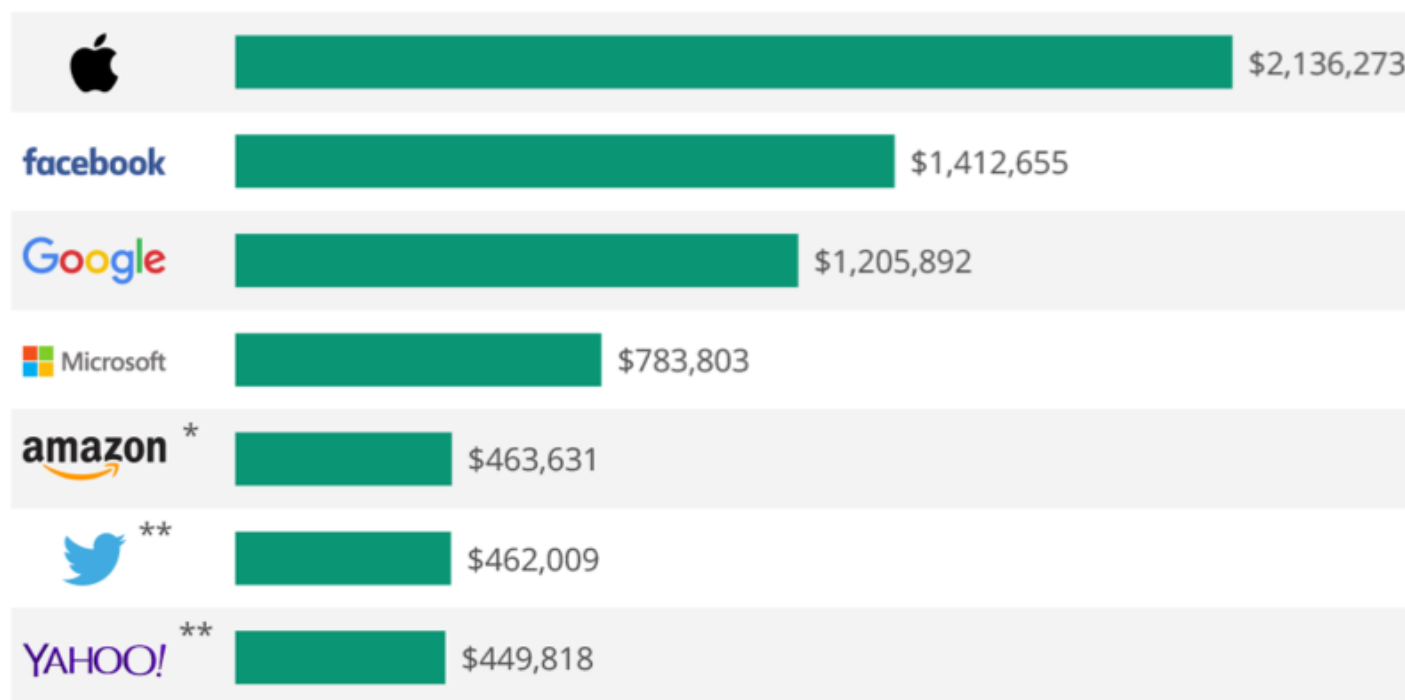
Working capital needs - minimize

Understand who is paying the cost of money

Biz Models – Financial Q' s

9. What are your sales/employee?
10. What is your “cost of growth”
(scalability)
11. How defensible are your margins?
consider Porter' s forces
12. How do all these affect the value of your
enterprise?

Tech Companies' Revenue per Employee in 2015



* Amazon's employee count includes part-time employees

** Twelve months ending September 2015

Break-out

- What business models might make sense for your product?

The other side- costs

Startup Costs

- List and numerical equivalent of “stuff” you need to start business
 - Land/building
 - Equipment
 - Operational
 - Office
 - Vehicle
 - Furniture
 - Professional Fees
 - Accountant
 - Lawyer
 - Consultants
 - Raw Materials/Supplies
 - Insurance
 - Liability
 - Building
 - Bonding
 - Life/Key person
 - Health
 - Membership Fees
 - Advertising/promotions
 - Reserve for Wages/Salaries
 - Banking
 - Line of Credit
 - Account Initiation
 - Loan Initiation

Some of What matters

1. Managing complexity of the Health care market
2. Cleverness in reducing costs
3. Volume and the time to achieve volume
4. Great Customer –Partners
5. Management of Network/Stakeholders
6. Managing power disproportionate

What do you think matters?