

TE 250: Week 12

Financing

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Agenda

- Review rest of semester
- Intellectual Property
- Funding
- Pitch presentation examples
- Guest Speaker: Haven Allen, mHUB Chicago

Looking at the rest of the semester...

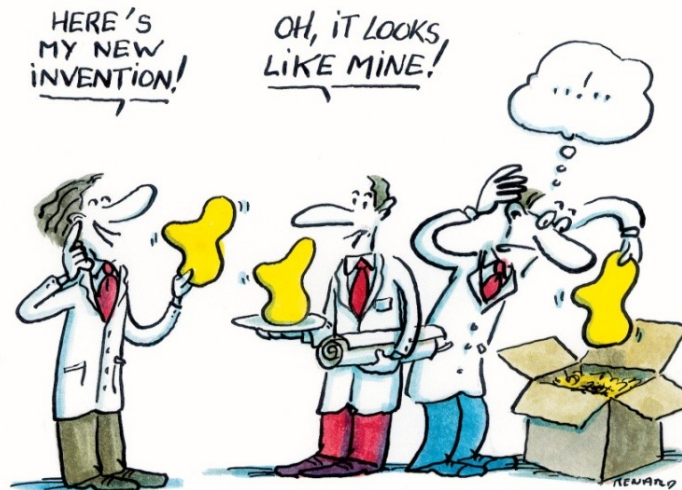
- Should be accumulating interviews and documenting them on the tracker. How are they impacting your vision for a solution?
- Topics still to be covered:
 - ~~Week 10: Market segmentation and sizing with breakout (10pts)~~
 - ~~Week 11: Venture formation, etc with breakout (10pts)~~
 - Week 12: IP and Finance, Making a pitch with breakout (10pts)
 - Week 13: Alternate activity – combined with TE360/460 – 1 hr class (10pts)
 - Week 14/15: Final Pitches
- Final Presentations (2): 4/26 & 5/3
- Attendance mandatory for both final presentation sessions
 - Failure to attend without excused absence results in loss of significant participation points

Intellectual Property

What is intellectual property (IP)?

Encompasses all forms of creativity:

- Inventions, discoveries, processes, know-how, show-how
- Unique materials, chemicals, biologicals, plants
- Original data and creative or artistic works
- Software, computer code



All companies have IP
Not all companies have an IP strategy
IP often is the main asset of a startup

Two sides of the coin

1. Freedom to Operate - make sure someone else's IP will not prevent your company from carrying out its business objectives
2. Blocking - protect your company's IP so it can be used to gain a competitive advantage in the marketplace by precluding others from utilizing the IP

Ownership of Work of Others (all IP)

- Employers - gain rights over works of employees if the work was created *within the scope of employment*
- Work for Hire – company commissioning the work may or may not become the owner (contractor owns the work unless documented otherwise – Nike Swish)

Always document these issues in a signed agreement

Ways to Protect IP

1. Copyrights – original works of authorship, including software
 - Books, movies, websites, etc.
 - 70/100 year rights
2. Trademarks – word, symbol or device that identifies the source of goods
 - Company logos
 - Perpetual rights
3. Patents – right to exclude others from making, using, or offering for sale the invention
 - 20 years from filing
4. Trade Secrets – secret information that gives owner a competitive advantage
 - KFC's secret recipe
 - Perpetual rights if it stay secret



Steps to getting a Copyright

1. Nothing

- Copyright is automatic upon creation
- Notice © 2018 Board of Trustees of the University of Illinois
- Registration not required - Prevents claim of “innocent” infringement
- Cost of registration between \$35 and \$55 depending on circumstances.



What is a Trademark?

- ▶ Distinctive Words, Names or symbols
- ▶ Identifies brand, manufacturer, origin
- ▶ Consistently used on products in marketplace
- ▶ Valid for 10 years, renewable
- ▶ Must be used, Must be enforced
- ▶ Cannot be generic
- ▶ Symbols ® vs ™
- ▶ Fees ~\$400 per class
- ▶ Average consumer cannot be confused

Examples:

- Logos: Nike Swoosh
- Names: Coca Cola®, Ivory, Kodak®, Crock Pot, Hoola Hoop
- Color/Sound: Pink – Corning insulation, NBC chimes
- Slogans: Don't leave Home without it, Have you driven a Ford lately?
- Container Shape/Packaging: Coke bottle





What is a Patent?

Purpose: “to promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries”

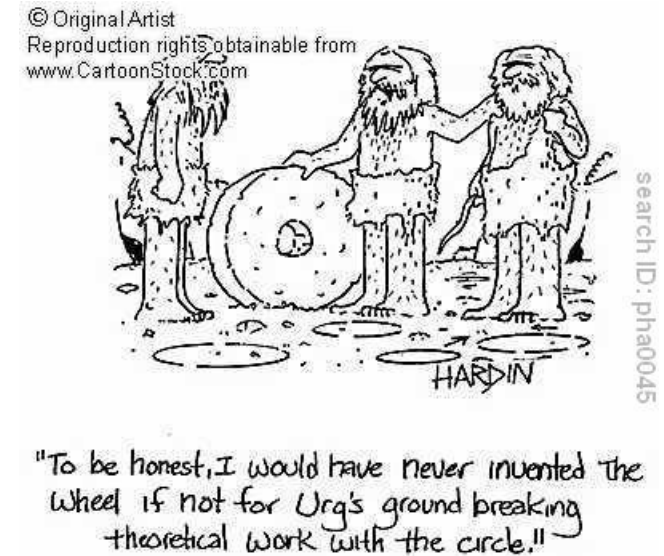
U.S. Constitution, Article I, Section 8

Utility Patents-Inventions can be:

- Compositions of matter – chemicals, bacteria, new drugs
- Machines, Devices, Manufactures, methods of making
- Processes, methods of treatment – using new or old compounds
- Any new or useful improvements or combinations thereof

What is Patentable?

- ▶ A patentable invention is anything under the sun made by man provided it passes the following tests:
 1. Novel
 2. Not obvious
 3. Useful
 4. Enabled
- ▶ Cannot Patent:
 - Naturally occurring articles
 - Laws of Nature, scientific principles
 - E.g. DNA



How do you obtain a Patent ?

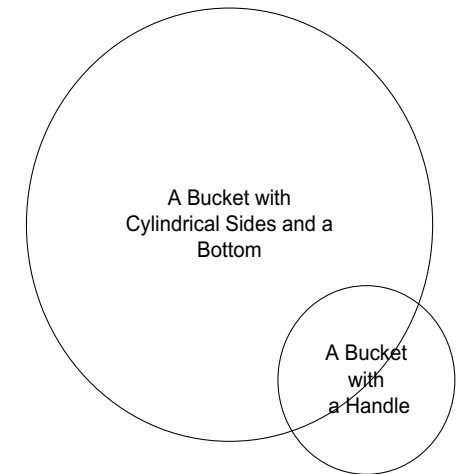
- ▶ File a patent application (description, drawings, claims) with the US Patent and Trademark Office (PTO)
 - Prosecute: Iterative process between PTO Examiner and you to arrive at claims
 - Claims are what defines your property
 - Costs range from initial filing fee of \$140 to \$000's depending on claims, countries filed in addition to legal expenses
- ▶ Patent 'Issued' around 2-3 years after first filing
 - Duration of patent is 20 years from filing
- International (Patent Cooperation Treaty)

What does a Patent do for you?



A patent gives its owner the right to *exclude* others from making, selling, using, or importing the patented invention for a limited time (20 yr)

- ▶ A patent does not guarantee you the right to practice!
 - May need other patents
 - Overlapping Patent Rights
 - Freedom to Operate
- ▶ Authorizing others is licensing.
- ▶ Using others' claims in a patent without a license is infringement
 - ▶ 3x penalties



CONFIDENTIAL

Trade Secrets – Definition

- Any formula, pattern, device or compilation of information used in a business that gives the trade secret owner an *opportunity to obtain an advantage* over competitors who do not know it. The trade secret can not be public knowledge.
- Examples: KFC secret recipe, Coke formula



Licensing as a way to Commercialize IP

- ▶ What is a **License**?
 - A legal agreement between the owner of the IP (licensor) giving a company (licensee) the right to use the IP.
- ▶ Defines rights and obligations of the parties
 - Right to Sublicense
 - Term/Duration
- ▶ Owners can divide IP rights by
 - Field of use
 - Geographical territory
 - Exclusivity
- ▶ Requires Licensee to
 - Royalty payment
 - Diligence in commercialization
 - Defines remedies if obligations are breached



Start Up IP Considerations

Your Product Features	Utility Patent < 1-yr old	Design Patent < 1-yr old	Trademark	Copyright
Brands, names, logos, slogans				
2-Dimensional designs				
3-D product shapes (appearance only, not function)				
Creative, artistic works (books & writings, artwork, audio, video, graphic design, printed materials, website text & design)				
Software source code				
Software functionality, web apps, business methods				
How your invention <u>works</u> (a better device or way of doing something)				
How your invention <u>looks</u> (an aesthetic/ornamental design)				

TECHSTARTUPLAWYER

<https://live-techstartuplawyer.pantheon.io/wp-content/uploads/2013/11/IP-Checklist-Article-2.pdf>

Note: business methods patents more difficult to obtain since 2014

Financing

Commercial Pathway

- “Venture Backable” Startup

- Very strong and targeted value prop
- Large and growing market (>\$500m)
- Scalable product offering
- Team is highly experienced

- “Lifestyle” Startup

- Low capital investment required
- Quick to revenue
- Manageable by a small team

- Small Business

- Low capital investment
- Quick to revenue
- Linear growth possible

- “Buyable” Startup

- Need investment to reduce well defined risk that increases value
- Other entities better positioned to take to market (e.g. Therapeutics)

- License

- Other entities have capabilities needed to realize market value
 - Partial solution or complimentary tech
 - Access to customers
 - Sales, service, distribution, manufacturing infrastructure

WARNING: Some opportunities don't have a path!

Broad Categories of Funding

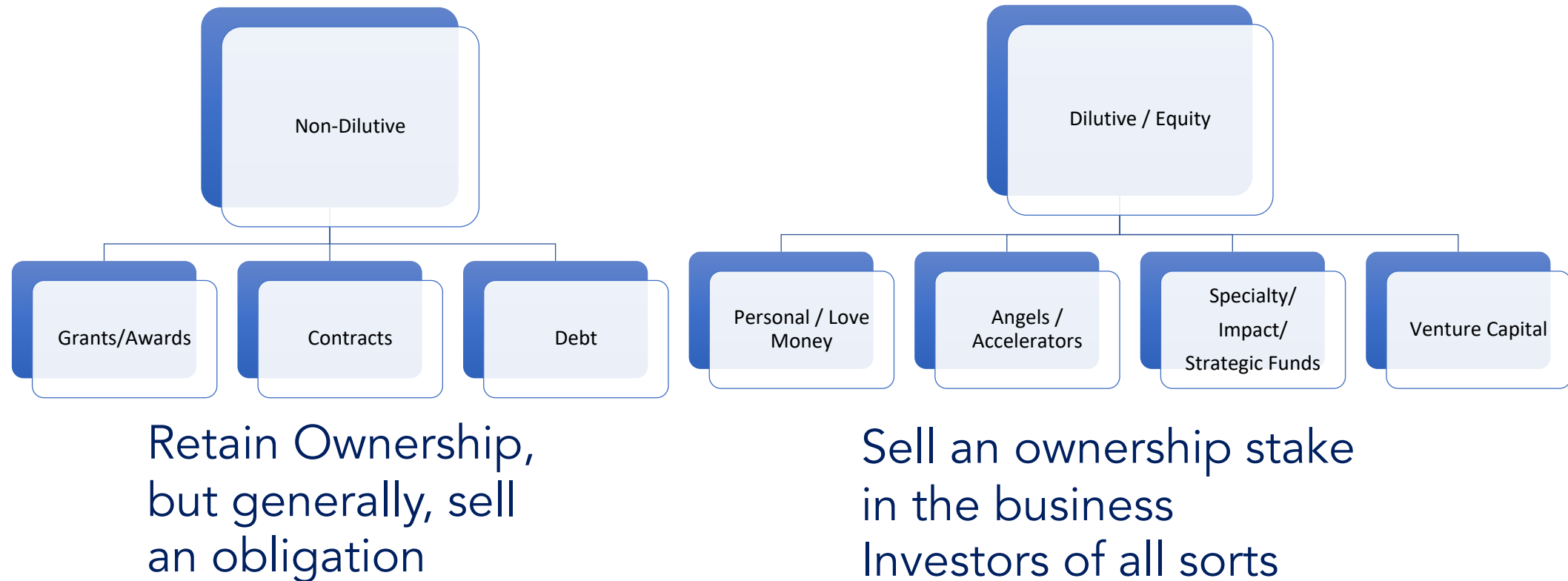
1. Non-Dilutive

- Retain ownership in the business,
but generally, owe something in return
 - eg. Grants, Loans, Awards, Strategic,
Revenues

2. Equity (Dilutive)

- Sell ownership stake in the business
 - eg. Investors of all sorts

Other People's Money



Sources of Non-Dilutive Funding

- Grants / Awards
 - Business Competitions / Awards
 - Business/Economic Development Organizations
 - Government and Foundation Grants
- Contracts / Revenues
 - Crowdfunding
 - Bootstrap (company profits)
 - Contract Research / Joint Development Agreements
- Debt
 - Banks (SBA)
 - Bonds

Dilutive Funding Options

Equity Funding

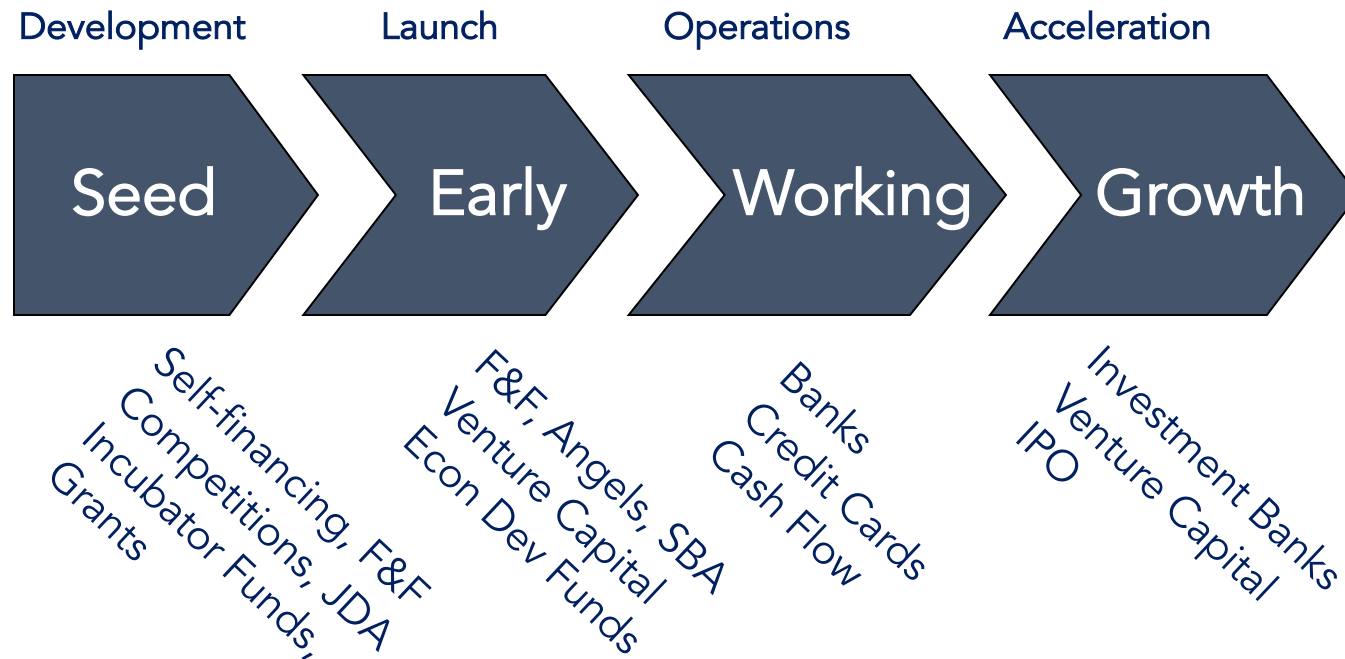
- Share an ownership stake in the business in exchange for capital
 - company stock or membership
- Can have significant effects:
 - Cap Table
 - Operating Control
 - Board of Directors
 - By-laws
 - Voting Rights
 - Future rights, protective covenants

Sources of Equity Funding

- Personal Funds
- Friends & Family
- Angel Investors
- Accelerators
- Impact Investment Funds
- Strategic Capital
- Venture Capital
- Investment Banks / Private Equity
- Initial Public Offering (IPO)

Types of Funding

- Different types of capital
for different stages of business



Financial Projections

What's the Point

Financial projections demonstrate:

- Your aspirations for the business
- Your understanding of key drivers of profits and growth
- Your understanding of key drivers of ROI for investors
- Whether it fits an investor's profile

Revenue (Business) Model

Your revenue model describes how you will charge for the goods and services that you provide in order to generate a profit

What Types of Business Models?

Examples?

- One Time Upfront Charge (plus maintenance)
- Subscription/Leasing
- Consumables
- Upsell High Margin Add Ons
- Advertising
- Transaction %
- Utility model (per usage)
- Freemium to Premium
- Cost Plus
- Cell Phone Plan (or PPA in energy)
- Shared Savings
- O&M (Operating and Maintenance)
- Franchise model
- Micro-transactions
- Parking meter
- Licensing
- Other

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Revenue Model Metrics

Customer lifetime value (CLTV):

- How much profit does an average customer generate over time?
- $(\text{Price} - \text{cost per transaction}) * (\text{average transactions during customer lifetime})$
- $(\text{Subscription price} - \text{monthly customer support cost}) * (\text{average number of months before churn})$

CLTV and CAC

Customer Lifetime Value must be greater than Customer Acquisition Cost

- If CLTV > CAC, then the business model is probably viable
- If CLTV is much higher than CAC, then the business model is probably scalable

Revenue Growth

Traditional Sales Model:

$$\text{Revenue} = \text{Customers} * \text{Visits} * \underline{\text{Average Ticket Price}}$$

Subscription Sales Model:

$$\text{Revenue} = \text{Paying Subscribers} * \text{Average Months before Churn} * \underline{\text{Monthly Subscription Price}}$$

Pricing

Rule #1

Price must be $>$ Cost

Rule #2

Price must be \leq the customer's willingness to pay

Breakout: How will you get paid?
Discuss in your team
Share with class

Resources

SCORE (free templates)

- *<https://www.score.org/resource/business-planning-financial-statements-template-gallery>*

Foresight (Paid – templates plus tutorials)

- *<https://foresight.is/>*

Getting ready to pitch

Make It Compelling. . .Dramatic. . . Personal

- Chapter 1
 - *Feeling the pain*
- Chapter 2
 - *We can take the pain away*
- Chapter 3
 - *Why is it worth it?*
- Chapter 4
 - *Why US???*
- Chapter 5
 - *How will we all make \$\$\$?*
- *The ASK!!!*

Context Matters

- What do you want?
 - Money?
 - Advisors?
 - Tech talent?
 - Introductions to customers?
- Do you need investors, particularly VCs?
- How much do you need?
- Why?

These things are different

- Your business plan
- Your elevator pitch
- Your pitch deck

The version that can be sent to potential investors and does not require you to give an in-person or phone presentation alongside it.

- Your other pitch deck

Used only with you presenting alongside, and largely dependent on illustrations/graphics with significantly less text than the version above.

First things first



Do your research and know who you are pitching to.

You Want to Convey. . .

Big pain point (s) and compelling solution (s)

Credible team

Unit economic model that works

Market likes what you're doing

Progress has been made

Capital efficient

Understanding of risks and plan to address

Commitment to next steps

Right attitude!

Party on Demand

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



Delivery

Three options:

1. Use Notes
2. Memorize a script
3. Remember key bullet points, and use visual cues on slides



Delivery

Three **ONE** options:

1. ~~Use Notes~~ **NO (The audience knows they are just watching you read.)**
2. Memorize a script
3. Remember key bullet points, and use visual cues on slides



Delivery

Three **ONE** options:

1. ~~Use Notes~~ **NO (The audience knows they are just watching you read.)**
2. ~~Memorize a script~~ **NO (You may get stuck in “the valley of awkwardness”. Your words sound recited or worse, you forget your lines.)**
3. **Remember key bullet points, and use visual cues on slides YES, THIS.**



Useful Practice Techniques

- Divide up the presentation and practice sections
- Practice in front of the mirror
- Recruit at least two test audiences
- Use tools
 - PowerPoint's timer
 - Tape recorder
 - Video




Dealing with Q&A

- Know who is in the audience. What is their basis of knowledge?
- Listen
- Anticipate objections and how to handle “talkers”
- In a pitch situation, plan as a team.
 - Let the person who presented the content answer first
 - Give a direct, two-sentence answer
 - OPTIONAL – one team member can add a short comment
 - Appendix slides are useful – if you get to them smoothly
- Use specific data to win points



Most Common Overall Problems

- Spending way too much time on the “problem”
- Running out of time, not preparing for the 10-min time limit
- Talking too much in Q&A; not listening or making time for investors’ questions
- Not taking feedback well
- Reading from the slides/screens
- Not presenting a big enough opportunity



Summary:

Keep it simple, and practice a lot

- Content
 - What is the purpose of your presentation?
 - Who is the audience?
 - Plan for your time
 - Stick to the theme
- Structure
 - Work on transitions, story, and arc
- Slides
 - 7-10 maximum for a 10 minute presentation
 - Not too much text
 - Graphics to illustrate key points
- Delivery
 - Match style to situation
 - Practice until you can present without notes, and not from memorizing a script

Pitch Presentations

- Attendance is mandatory - in-class peer team assessments
 - Must use university excused absence process to be excused
- Presentation structure
 - 10 minutes for presentation – cut off at end of time
 - 5 minutes for audience questions
 - 3 minutes for doing peer assessment online
 - 2 minutes for transition to next team
- Detailed grading rubric on Canvas
 - Pitch is 150 pts in Final Assignment category (60% of cat, ~20% of final grade)
- 3 items of Engagement & Team Participation category (30% final grade)
 - Team peer assessment during Wk 14 & 15 class
 - Results of Team participation assessment due Dec 8
 - Class Participation - did you do the required number of interviews and note taking

Example from previous semester

- https://mediaspace.illinois.edu/media/t/1_bkqex8tl
- 41:30 – 51:33

Getting ready for Week 13

- Guest Speaker: 1-2pm
 - Entrepreneur Mike Quinn
 - Location: 0035 Campus Instructional Facility
 - Must check in with me in the room to receive participation credit
- Team Assignment: Finish interviews
- Start thinking about your pitch deck



Guest Speaker: Haven Allen Chief Executive Officer at mHUB

Not-for-profit startups