Media Ventures

MAS.664J / 15.376J

Exploring Media Lab Entrepreneurship & Digital Innovations

Spring 2013
Thurs! 10am-12noon
Media Lab E14-633

Professor Sandy Pentland
Joost Bonsen

First Class -->
Thurs Feb 7th 10am

http://stellar.mit.edu/S/course/15/sp13/15.376/

Summary – *Media Ventures – Media Lab Entrepreneurship & Digital Innovations* is a project-oriented *Action Lab* addressing the top challenges of humanity – e.g. *health, sustainability, creativity, commerce, and governance* – through new media innovations.

Seminar Description – Media Ventures is the flagship Spring semester *Action Lab* class within the Media Lab Entrepreneurship Program.

We survey a broad landscape of emerging media technologies interwoven with live- and historic-cases of both intra- and entre-preneurship based on Media Lab ideas, culminating in a term project.

The core goal is to gain increased understanding of how emergent media and digital innovations translate into commercial reality and transform society. We survey case examples of both successful and failed businesses and generally grapple with the difficulties of deploying and diffusing products.

Core Themes – This year we will be especially emphasizing social networks, quantified society, trust, privacy & info-rights, and "Big Data" analytics.

Alum Case Studies Include...

affectiva   curisma   sociometric solutions   RUONEX   Sense Networks   sourcemap   locu   CogitoHealth   innerscope   rephorest   peddl

Expected Student Deliverables – Students pick one of three term project options, all looking more deeply at one of the featured technologies or a compelling opportunity of their choosing, each at a different level of analysis:

1. Write a **Business Plan** for either an entre- or intrapreneurial venture for commercializing a compelling emerging technology opportunity.

2. Prepare a **Strategic Analysis** looking at how an established firm can best commercialize or respond to the emergent technology or industry changes; or

3. Craft an **Innovation Roadmap** looking at the big picture of technology and industry trends and analyzing the dominant dynamic drivers of innovation.

For past students, these analyses have been the basis for future research, publications, and new ventures. We encourage students to work in teams of their choosing on either one joint-term project or with different team members tackling each of the three levels of analysis. We expect serious participation including bi-weekly updates, either as presentations or in prose, all cumulating towards the term project.

General Info → jpbonsen@alum.mit.edu
Class Website → http://stellar.mit.edu/S/course/15/sp13/15.376/

Media Ventures (MV)
is centrally about

1. *Emergent Tech Innovations*
2. *Live-Case Studies*
3. *Hands-On Action Projects*

"Mens, Manus et Media"

Instructors

Alex (Sandy) Pentland

Joost Bonsen

Emerging Media Themes
include…

- Emerging Media Innovations
- Deployed Globally
- Quantified Self & Society
- Media Meets Math
- Social Incentives
- Big Data

- Computational Social Science
- City Science & Urban Informatics
- Smart, Personalized, Pervasive
- Data & Privacy Rights
  …and more!

Invention + Entrepreneurship → Innovations

- Accelerating **Ideas** into **Impact**
- **Transforming Society**
- Entrepreneurship = **Org'n Building**
  – *Both For Profit or Non-Profit*
- **Founding Ethos** of MIT…

http://mit-libraries.net/blog/wp-images/rogers1869sm.jpg

MIT Alumco Venture Legacy

AMGEN   BIOGEN   Genentech, Inc.   Campbell's TOMATO
BOSE   TERADYNE   ANALOG DEVICES   ThermoFisher SCIENTIFIC *The world leader in serving science*
hp invent   TEXAS INSTRUMENTS   intel *Leap ahead*   3Com
aspentech   atg   Avid   IDG *Answers for the Information Age*
Minute Maid   IBM Lotus software   AMP   The Gillette Company

~ US$ Hundreds of Billions in Market Valuation

MIT Alumni Venture Impact
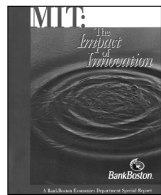
In 1997
4,000 companies
> 1 Million employees
~$250 Billion sales

Today
Over 25,800 active companies
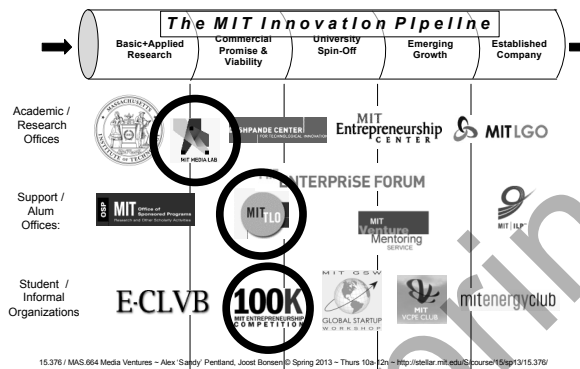> 3.3 Million employees
~$2 Trillion world sales
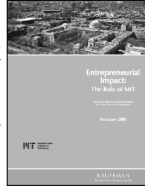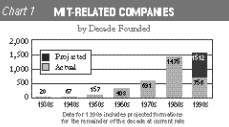
http://web.mit.edu/newsoffice/founders

http://web.mit.edu/newsoffice/images/kauffman.pdf

Chart 1 MIT-RELATED COMPANIES
by Decade Founded

Phases of Innovation @ MIT

The MIT Innovation Pipeline

| Basic+Applied Research | Commercial Promise & Viability | University Spin-Off | Emerging Growth | Established Company |

Our MIT Internal Ecosystem

The MIT Innovation Pipeline

| Basic+Applied Research | Commercial Promise & Viability | University Spin-Off | Emerging Growth | Established Company |

Academic / Research Offices

Support / Alum Offices:

Student / Informal Organizations

MIT 100K Entrepreneurship Competition

$100K

One Hundred Thousand Dollars

Robert P. Goldberg Grand Prize

SANERGY
Building Sustainable Sanitation in Urban Slums
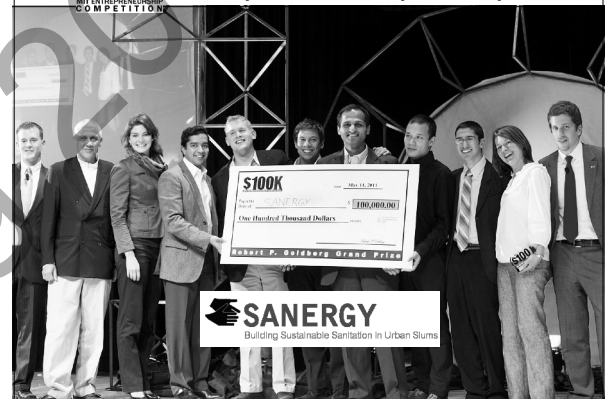
MIT $100K Alumni Companies
MIT ENTREPRENEURSHIP COMPETITION
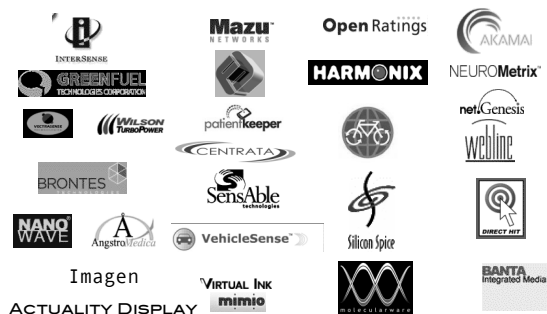
Technology Transfer via MIT TLO
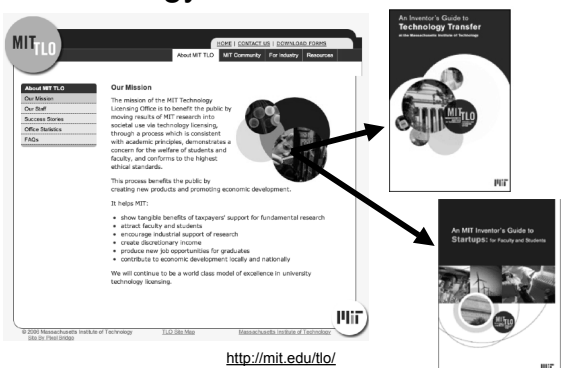
http://mit.edu/tlo/

Slide 1: MIT Licenses to Start-ups

MIT Licenses to Start-ups

Bar chart — Companies vs Fiscal Year:
- 1999: 24
- 2000: 30
- 2001: 26
- 2002: 23
- 2003: 17
- 2004: 20
- 2005: 20
- 2006: 23
- 2007: 24
- 2008: 20
- 2009: 21
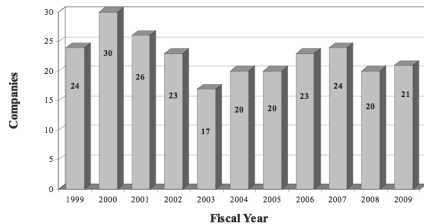
Source: Jack Turner, Associate Director, M.I.T. Technology Licensing Office

Slide 2: IP Considerations

IP Considerations

- Understand status of your intellectual property (IP) -- i.e. yours, MIT's, someone else's
- For our class and IdeaPitches, describe *What* and *Why*, but avoid deep detail on *How*
- Visit TLO website
  - http://web.mit.edu/tlo/www/
- Lemelson-MIT Inventors Handbook
  - http://web.mit.edu/invent/h-main.html
- Joe Hadzima from IPVision
  - http://www.see-the-forest.com/

Slide 3: Media Lab-Related Ventures

MIT Media Lab

Media Lab-Related Ventures
Key Historic Examples Include…

http://www.media.mit.edu/sponsorship/spin-offs

Slide 4: From Ideas to Demos to Impact

MIT Media Lab

From *Ideas* to *Demos* to *Impact*

DRAFT

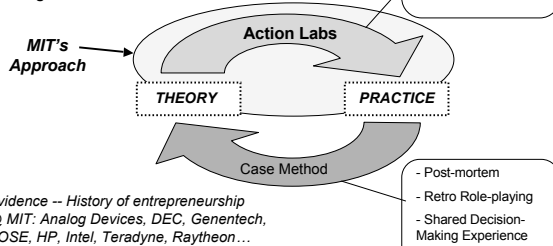|	Concepts & Ideation	Proto-Crafting & Iteration	Working Demos	Proto-Scaling & Testbeds	Spin Out via Intra / Entre
Number *New* per Year Lab-wide	100s to 1,000s	Classic Media Lab *Demo or Die* 100s	Dozens	Now More Living Labs 5-15	Impact or Irrelevant 3-8
Historical & Current *Examples*	Too Many to List!	1-3 Dozen per Group per Year	LuminAR, DxMirror, Fabro, Femtocam, Cyberbullying, PlacePulse…	FunF, Netra, Barter, Scratch, Doppelab…	sourcemap, GIGFR.in, affectiva, Sifteo bluefin, mindstorms, Intuitive Automata luminoso, sociometric solutions
New Mechanisms, Classes, Support	ThinkerTools, Drinks'n'Thinks …	Hackathons, Cross-Group Projects, SIGs…	Festivals (FoL), OpenHouse (RR), Workshops…	Scaling Funds, Field Tests, DevKits, Fab Support…	ML Runway, Venture Post-Grad, Incubation Funds, Startup Network…
		Academic, Pre-Commercial			*Commercial*

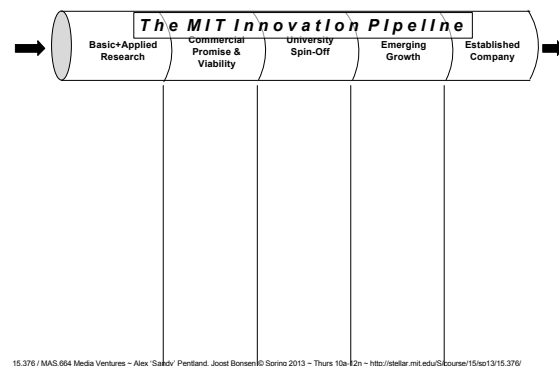## Slide 5: MIT Action Labs

MIT Action Labs
Inspired by "*Mens et Manus*"

Action Lab Team-based Action Learning -- Combined with reflective analysis, an essentially MIT-style of learning

Practice with the MIT Innovation Pipeline as our Living Lab

- Forward looking
- "Learning by Doing" in real world
- Putting theory to practice

MIT's Approach →

Action Labs — THEORY / PRACTICE / Case Method

- Post-mortem
- Retro Role-playing
- Shared Decision-Making Experience

Evidence -- History of entrepreneurship @ MIT: Analog Devices, DEC, Genentech, BOSE, HP, Intel, Teradyne, Raytheon…

Slide 6: Phases of Innovation @ MIT

Phases of Innovation @ MIT

The MIT Innovation Pipeline

Basic+Applied Research	Commercial Promise & Viability	University Spin-Off	Emerging Growth	Established Company

Spring 2013

Slide 1: Action Labs @ MIT

Action Labs @ MIT
Both For-Credit Curricular & Non-Credit Extracurricular Offerings

The MIT Innovation Pipeline

Basic+Applied Research	Commercial Promise & Viability	University Spin-Off	Emerging Growth	Established Company

Tech Testbeds   MIT VentureShips   MarketLabs

15.399 Entrepreneurship Lab

i-Teams

New Enterprises   **Tiger Teams**

Global Entrepreneurship Lab
MIT MBA Teams Delivering Value Globally

D-Lab Energy, ICT, Health, Cycles, Design...

D-Lab Development Ventures, Dissemination

Africa Health Delivery Lab
India Lab
China Lab

Media Ventures

Imaging & Fabrication Ventures
Neuro Ventures
VentureSIGs

S-Lab

Leadership Lab

15.376 / MAS.664 Media Ventures ~ Alex 'Sandy' Pentland, Joost Bonsen © Spring 2013 ~ Thurs 10a-12n ~ http://stellar.mit.edu/S/course/15/sp13/15.376/

Slide 2: Imaging & Fabrication Ventures

Imaging & Fabrication Ventures
MAS.533

Cameras & Displays, Hardware & Hybrids, Analytics & Apps

Spring 2013
Wed 10am-12noon
Media Lab E14-633

Ramesh Raskar, Joe Jacobson
Doug Hart, Joost Bonsen

First Class -->
Wed Feb 6th 10am

http://stellar.mit.edu/S/course/MAS/sp13/MAS.533/index.html

Slide 3: Media Ventures

Media Ventures
MAS.664J / 15.376J

Exploring Media Lab Entrepreneurship & Digital Innovations

Spring 2013
Thurs! 10am-12noon
Media Lab E14-633

Professor Sandy Pentland
Joost Bonsen

First Class -->
Thurs Feb 7th 10am

http://stellar.mit.edu/S/course/15/sp13/15.376/

Slide 4: Alumcos From Media Lab Family of *Ventures* Classes *include…*

These Media Lab Ventures Classes spin-offs are already serving millions around the world

http://www.dimagi.com
http://www.unitedvillages.com
http://www.waysystems.com
http://www.blueenergygroup.org
http://www.cellbazaar.com
http://www.peertransfer.com/
http://saner.gy
http://assuredlabor.com

15.376 / MAS.664 Media Ventures ~ Alex 'Sandy' Pentland, Joost Bonsen © Spring 2013 ~ Thurs 10a-12n ~ http://stellar.mit.edu/S/course/15/sp13/15.376/

Slide 5: Media Ventures (MV)

Media Ventures (MV)
is centrally about

1. *Emergent Tech Innovations*
2. *Live-Case Studies*
3. ***Hands-On Action Projects***

"Mens, Manus et Media"

15.376 / MAS.664 Media Ventures ~ Alex 'Sandy' Pentland, Joost Bonsen © Spring 2013 ~ Thurs 10a-12n ~ http://stellar.mit.edu/S/course/15/sp13/15.376/

Slide 6: Media Ventures Core Deliverable

Media Ventures Core Deliverable

Pick One of Three Options…

(1) Business Plan for either an entre- or intrapreneurial venture for commercializing a compelling emerging media opportunity;

(2) Strategic Analysis looking at how an established firm can best commercialize or respond to the emergent media or industry changes; or

(3) Technology Roadmap looking at the big picture of technology and industry trends and analyzing the dominant dynamic drivers of innovation.

15.376 / MAS.664 Media Ventures ~ Alex 'Sandy' Pentland, Joost Bonsen © Spring 2013 ~ Thurs 10a-12n ~ http://stellar.mit.edu/S/course/15/sp13/15.376/

Media Ventures Alum
(1) Business Plan

- **StoopSwap** ~ Community Rental Network
- **everauthor** ~ Social Reading, Shared Comments
- **Mi Clinica** ~ Affordable Care Clinics (Mexico)
- **FitFriends** ~ Health Club Engagement Tools *everyfit*
- **HotSpot** ~ Parking Spot Market
- **Imprezo** ~ Presentation Coachware *Poll Everywhere*
- **MyDateMistake** ~ Dating Stories Site

- **peerTransfer** ~ International Money Movement *peerTransfer International Money Transfer & Payments*
- **PerfectSight** ~ Mobile Eye Prescription App *EYENETRA Eye care for 2.4 billion*
- **PickUp** ~ Social Game for Dating
- **Red Ink** ~ Personal Analytics Tools *Ginger.io*
- **WiseArrow** ~ Not Creepy Dating Site
- **Zocalo** ~ Community Food Marketplace *PLOVGH*

Media Ventures Alum
(2) Strategic Analysis

- **Comcast** Response to Online Video
- **Philips** Media for Creative Lifestyles
- Social Analytics at **Lockheed Martin**
- **Cisco** Prototype Testbeds
- **Natura** Prioritizing ML Engagement

Media Ventures Alum
(3) Innovation Roadmap

- **Mobile Claims** Assistance
- **Keep It Real** ~ Financial Purchase Advisor
- Future of **Online TV**
- Democratizing **Telemedicine**
- **Education** Platform 2015
- **Sound Matters** ~ Future of Digital Audio Technology
- **Tecos** ~ Tween Ecosystem
- **Quantified Self** ~ Evaluating All Measuring Tools

- Evolution of **Radio on Demand**
- **Brazilian Mobiles** Industry
- **Promise of Sleep** ~ Monitoring & Education for Insomnia
- **Sociometers** for Recruiting & Training
- Future of **Augmented Reality**
- **One World** ~ A Journalism Roadmap

The MIT $100K Entrepreneurship & MIT IDEAS Global Challenge

- ***Elevator Pitch Competition -- October***
  - *1 minute, $1000 (October)*
- ***Executive Summary ACCELERATE Competition -- November***
  - *2 pages, $1000 + Prototyping*
  - Announced Tues 2/19, Location TBA

- **Business Plan Competition -- Spring 2013**
  - 2 page executive summary + 12 slide deck DUE 3/22!
  - $100k Grand Prize + Track Prizes
    - http://www.mit100k.org/

- **IDEAS Global Challenge**
  - Mid-Month Rolling Submission; Grant Funds
    - http://web.mit.edu/ideas

Calendar of Assignments

- **Instructor Meeting** -- Next Few Weeks
  - Mon, Tue Media Lab office hours + Thurs, Fri Muddy "office hours"
  - jpbonsen@alum.mit.edu
- **IdeaPitch PPT** -- Next Few Weeks
  - In Class, over time
  - At least one per person, even if on team
- **Teambuilding** -- Next Few Weeks
  - Stellar Interest List, Facebook group, $100K Mixers, IDEAS Generator, etc
- **ExecSummary Doc & Core PPTs**
  - Rough First Draft -- Thurs 2/28
  - Get Our Feedback & Enter MIT $100K Fri 3/22
- **Re-Drafts & Section Docs** -- Every Two Weeks
- **Finale Presentation PPT & Doc** -- Thurs 5/16

IdeaPitch Template

- Over coming weeks, use simple template to summarize What, Why, How, Who of your idea.
- One Slide for One *IdeaPitch!*
- Everyone does at least One *IdeaPitch*, but more are welcome.
- We encourage you to team up.

Spring 2013

ProjectName

IdeaPitch Template

1. TYPE = Venture Plan, Strategic Analysis, or Roadmap
2. WHAT = Short general description; minimalist "elevator pitch"; specify what you do and approach you'll take;
3. WHY = Quantify the size of the problem; how many people need solutions; what does it cost them in time or money today;
4. HOW = What technologies or solutions will you or might you bring to bear on solving the problem;
5. OPEN = State your uncertainties; what do you need help on; what team members are you seeking…
6. WHO = First & Last Names, Institution & Program Affiliations, email addresses

February 2013 * Project website (if you have one) * Media Ventures 2013

Key Class Sites

- Stellar -- https://stellar.mit.edu/S/course/15/sp13/15.376/index.html
- FB -- https://www.facebook.com/groups/378157115616640/
- Truonex -- http://www.truonex.com/

Top Innovation Event Listings

- MIT Events
  - http://events.mit.edu/
- Fred Hapgood's Boston Science Lectures
  - http://www.BostonScienceLectures.com
- Xconomy Boston
  - http://www.xconomy.com/boston/
- Harvard Events
  - http://events.college.harvard.edu/
- Etc…

Next Steps

See you tonight?
Thur 2/7 Muddy 6-7pm *(Optional)*
(21+)

Tue 2/12 Muddy 6-7pm *(Optional)*
(21+)

Next Class Thurs 2/14, E14-633

Instructor Meetings by Appointment
jpbonsen@alum.mit.edu

Market Sectoral SIGs

Addressing Giga-Challenges

1. Health & Wellness
2. Cities, Energy & Sustainability
3. Creativity, Learning & Entertainment
4. Commerce & Financial Services
5. Civic, Social & Political

   Other?

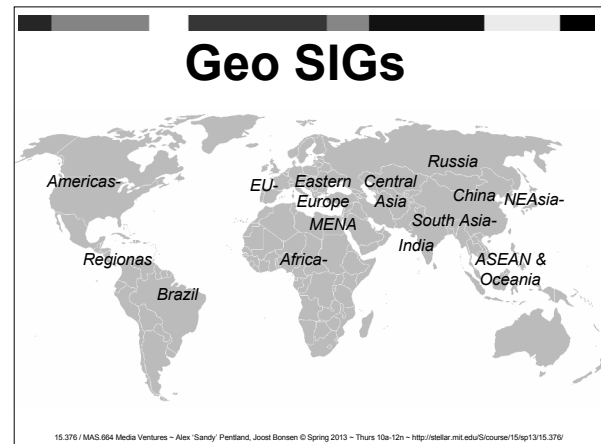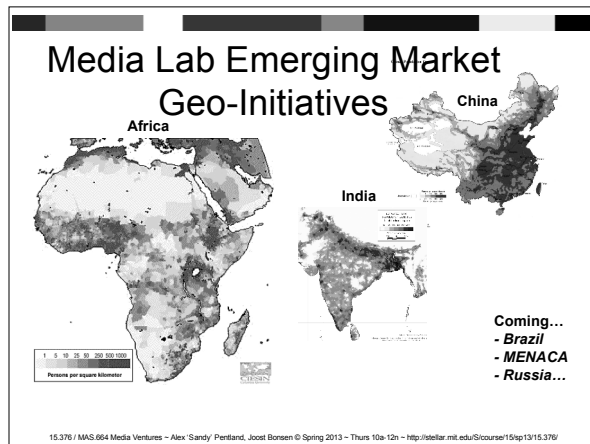***Special-Sectoral Interest Groups out of Media Ventures***

Tech Sectoral SIGs

Exploring the Commercialization Prospects of Emerging Technologies

- Mobiles & Wearables
- UX/UI
- Apps & Appstores
- Big Data & Analytics
- Visualization
- …

- Physiometrics & Quant Self
- Sociometrics & Social Sensing
- Urban Informatics
- Mass Customization
- Creativity Tools
- …

Special-Sectoral Interest Groups out of Media Ventures

Spring 2013

Media Lab Emerging Market Geo-Initiatives

Africa

China

India

Coming...
- *Brazil*
- *MENACA*
- *Russia...*

Geo SIGs

Americas-

EU-

Eastern Europe

Central Asia

Russia

China

NEAsia-

MENA

Regionas

Africa-

South Asia- India

Brazil

ASEAN & Oceania

Summary MV Goals

1. **Connections**
2. **Awareness** of new Media Innovations
3. **Lessons-Learned** from Live-Cases
4. **Useful Deliverable**(s) & **Skills**
5. **Global Perspective**

Fin

Spring 2013