the mere formulation of a problem is far more often essential than its solution

Albert Einstein
1879-1955, Nobel prize in physics
a relatively smart person

abstract and presenter slides online idea fair?

athletics mat sterilizer
2.009 Product engineering processes

Today

meetings
effective and efficient

finding information
informed ideation, teamwork
2.009 BEVERAGE STATION
STAFF AND STUDENTS ONLY
VENMO $1 @MIT2009
also…
results from Monday’s mini quiz

list 4 individual creativity strategies

- look for the next right answer
- look from multiple viewpoints
- defer all judgments
- challenge assumptions

Loren Maggiore: eat candy! (get hyped)
listed all 4: Luke Hartnett, Elizabeth Pedlow, Kevin Zheng

quantity > quality
observe users

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2.009 Product Engineering Processes

Mini-quiz

Put your name on the top of an index card

i) List a mental attitude/thought that blocks creativity?

ii) List two factors that correlate with unsuccessful product development teams.
at last! **Meetings (lab time +)**
why be good at them?

roughly 25% of your professional life will be spent in meetings

meetings will have a big influence on your level of professional success
Meetings

why be good and efficient?

correlates with good performance

eye are very expensive!

$55,000/year tuition

$50,000/year in opportunity costs

100 units/year, 12 unit course, 12 weeks gives ~$80/hour/person

team meeting costs ~$1,800/hour (your time only)

~$12,000/lab

including staff, mentors, facilities, etc.

be on time!
Running a meeting

resources/running meetings

plan and prepare

clear roles, challenge ideas not individuals

set ground rules

plan for problem behaviors

dominators (assign them to be the scribe)
Running a meeting
resources/running meetings

Giving Opinions

encourage constructive behaviors
helping to keep things on track

summarize and seek closure
review the plan and disseminate (minutes, team site)
Constructive behaviors

optional tutorial: Thursday 7:00 PM, Pappalardo lab

how to be proactive and set your team up for success
(see home page)
coming up! 3-ideas milestone
during class, Monday September 23
coming up! 3-ideas milestone during class, Monday September 23

See 3-ideas presentation link under the Project menu

I<sup>deas presentation</sup>: September 23
What's happening this week?
The theme is IGNITE!

Wednesday Class
- meetings and golden secondary research. Yay!

Team assignments are posted. Everyone received

Lab information
Team mail lists are available, and you have been invited to your team site and dropbox.
You have also received an email to login and start using your timesheet.

For the start of your first lab:
- have and be using your design notebook
- read the lab 1 outline
coming up! 3-ideas milestone
during class, Monday September 23

See 3-ideas presentation link under the Project menu

3 ideas proposed by your section
idea/opportunity, feasibility, customer, market, expert/client

the team’s opportunity area chosen by panel of instructors/mentors

portrait orientation
supporting data on back
Finding information

Task at hand: 3-ideas, September 23

Your section proposes 3 feasible, viable ideas (opportunities), and identify contact resources

Informed ideas
2.009 Information treasure hunt

**informed ideas**

Become more familiar with different information resources and search techniques

Find types of background information relevant to the project and early ideation (secondary research)

Obtain initial practice in task delegation and coordination

Help your section learn how to mobilize quickly and to delegate strategically (considering skills and different schedule constraints)

*instructions are linked on course home page*
information

treasure hunt
problem statement

where will we find the answers?

how should we submit the answers?

when is this due?

who can I ask for help?
you need good information to identify, choose and develop your product.

information on *ignite*-associated products or devices”

market information (trends, competition, customers, etc.)

but a lot of important information is in the “hidden” web, not available *via* Google.
where will we find the answers?

2.009 library course page:
also under “resources/2.009 library page” on course website

http://libraries.mit.edu/2.009

you can use other resources, but teams using the library-recommended resources will score higher

you will may need to visit
how should we submit the answers?

create one answer sheet per section in MS word or pdf
include your section name on the answer sheet
answer the question

citations are required, including the source of answers
guidelines are in your instruction packet, and are linked to the home page

email answers to Nicholas
(nalbaugh@mit.edu or 2009library@mit.edu)
when is this due?

Thursday (Sept. 12) at 12 noon
who can I ask for help?
who can I ask for help?

librarians in class today
ask us! (librarians via email) http://libraries.mit.edu/ask

staff at any MIT Library

Nicholas Albaugh
nalbaugh@mit.edu, Barker Library (Wednesday)

Elizabeth Soergel
esoergel@mit.edu, Barker Library (Wednesday)
2.009 Information treasure hunt

Getting started

Make sure you are with your lab section

Distribute instruction packets
All instructions are also on the course website, except the questions

Read the instructions

Delegate tasks and decide how you will coordinate
Mailing lists are active: see information/mailing lists
Team slack site available

Take advantage of available help!

Like most treasure hunts, there is a prize!