Ice Breaker: Lessons learned from engineering design class
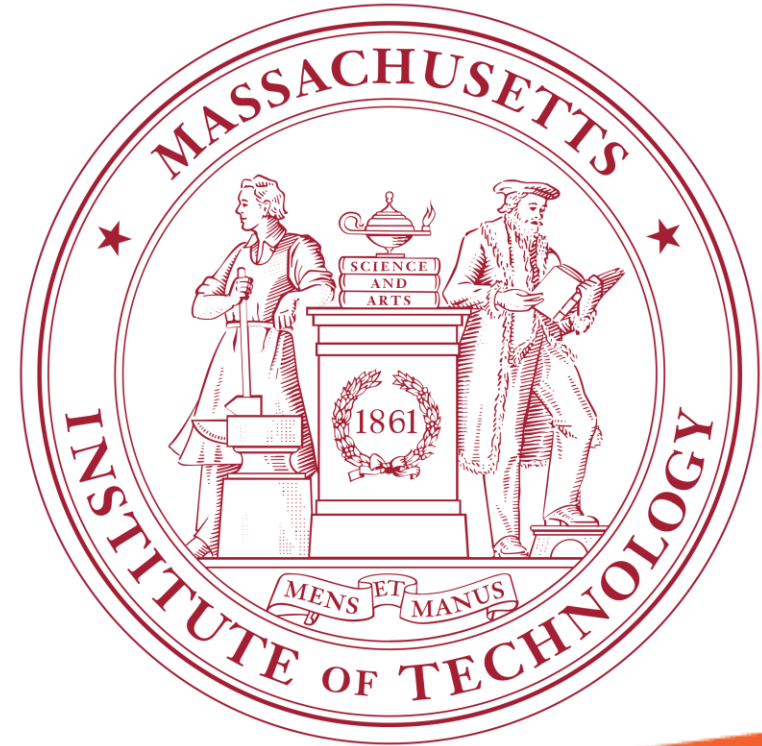
Ice Breaker:
MIT 2.007 Design and Manufacturing I

The history of 2.007 | 2.007 : Design and Manufacturing I (mit.edu)

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Preliminary lab assignment:

- Design a machine that can travel 10 feet on the floor the fastest. Must use at least ten parts and must propel itself using stored energy.

- The next slide shows the parts you can use (along with fasteners or glue)

Ice Breaker:
MIT 2.007 Design and Manufacturing I

Lesson learned:

Life is fair. You just need to understand the rules!

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Future-Focused:
Develop a Future-Focused Mindset

Goals:

1. Keep pace with change in the industry

2. Disrupt ourselves and compete like a challenger

3. Identify and effectively manage risks

4. Identify and utilize benchmarks to drive performance

5. Partner and collaborate for expertise, efficiency, and scale

Why is Future-Focused a Priority?

Future-Focused is embedded in our guiding statements

- Vision:
  - **To be** and be recognized as **the leader** in providing **superior service** and **innovative energy solutions** to communities and customers in our region

- Purpose:
  - **Deliver value** to our communities and customers through **collective strength, knowledge, and action** while promoting a **successful future**

Why is Future-Focused a Priority?

SWOT (Strengths, Weaknesses, Opportunities, Threats) Analysis

- Strengths:
    - Local ownership and control
    - Strong fundamentals: low cost and reliability
- Threats:
    - Adverse legislation and/or new regulations
    - More demanding customer expectations
    - Private equity and non-traditional competitors

Why is Future-Focused a Priority?

- Weaknesses:
  - Lack of long-term vision and leadership (willingness to change; and annual budget-focused)
  - Keeping up with industry trends
  - "Missing the glue", members are not cohesive
  - Lack of urgency, and the ability to move quickly
  - Scalability and viability of some individual members

- Opportunities:
  - Forward facing – be the provider and employer of choice

Goal 1: Keep pace with change in the industry

- Make it somebody's job to <u>really understand</u> the industry
  - Ensure that this job is a priority, and it is appropriately staffed

- Use data to understand your position relative to industry trends

- Set appropriate goals with long-term planning

- Fund your plan and Staff your plan

- Make it somebody's job to achieve the plan's objectives

Goal 1: Keep pace with change in the industry

Goal 2: Disrupt ourselves and compete like a challenger

- Adopt a competitive mindset
  - Behave as if you do not have a monopoly

- Separate Operations and Development and require cross-training

- Allow for risk-taking and failure

- Empower employees to identify and enact improvements

- Innovation should counterbalance risk management

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Goal 2: Disrupt ourselves and compete like a challenger

Goal 3: Identify and effectively manage risks

- Identify and rank risks that may impact you

- Establish simple/efficient risk management processes

- Effective risk management should not prevent the enablement of new ideas

- Understand that avoiding change or not acting is a risk

- Place a higher value on good judgement over adherence to rote procedures

- Risk management should counterbalance innovation

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Goal 3: Identify and effectively manage risks

Goal 4: Identify and utilize benchmarks to drive performance

"If you are not keeping score, you're just practicing."
-Vince Lombardi

- Identify a small number (<10) of key measurements

- Measure yourself against an appropriate benchmark
  - Don't just compare yourself with other public power utilities

- Understand the differences
  - Look for the story behind the number
  - Use data and perform analyses

- Set corrective action plans

Goal 4: Identify and utilize benchmarks to drive performance

Goal 5: Partner and collaborate for expertise, efficiency, and scale

- Ties to the Value of Collaboration

- Understand your limitations based on your situation

- Compare notes and look for best practices

- Pool resources

- Utilize third parties, including ElectriCities

- Be humble, check your ego at the door

Goal 5: Partner and collaborate for expertise, efficiency, and scale

How Your Utility Can Get Started

- Understanding the industry and performing your own SWOT
  - ElectriCities "State of Play Presentation" and research
  - Retail customer survey
  - Utility assessment
  - Economic Benefit Study
  - RP3 data
  - APPA Smart Energy Provider Program
  - Other datasets

- Long-term Planning
  - Hometown Connections
  - Other consultants

How Your Utility Can Get Started

- Innovation and prudent risk taking
  - ElectriCities technology services
  - Third party consultants
  - Catapult – organizational development training and consulting
  - Neuro Leadership Institute – innovation and developing a growth mindset
- Collaboration
  - Participation on various ElectriCities committees
  - APPA
  - NCAMES

How Your Utility Can Get Started

- Other organizations you can access through ElectriCities
  - Large Public Power Council (LPPC)
  - Smart Energy Consumer Collaborative (SECC)
  - Smart Energy Provider Alliance (SEPA)
  - Utility Analytics Institute (UAI)
  - E4 Carolinas
  - Research Triangle Cleantech Cluster (RTCC)
  - NC Chamber

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Questions and Discussion