Features of effective Sketch Model Review presentations

The Sketch Model Review is a formal presentation event during which each section of a 2.009 team presents three design concept alternatives reflecting the team’s focus area. Presenters should assume the audience has at least the same level of technical knowledge as the presenters themselves; they should also be prepared for questions. Details are on the course site: http://web.mit.edu/2.009/www/assignments/SketchModelReview.html

While your 3-Ideas pitch aimed to provoke an audience’s interest in a new product idea, a Sketch Model presentation sustains audience attention on a more analytical look at a concept that your team is developing. In the Sketch Model presentations, you must emphasize that you identified meaningful problems to investigate and learned something from your tests that will be critical in the development of the product concept. Research into the focused market, customer needs, and benchmark data and products should situate your product and help the audience understand it.

We have isolated some important features of sketch model presentations and provide examples of them from the 2.009 Gallery. Note: for each link below, choose the “Sketch Models” tab.

1. Start the presentation with a clear description of your product concept, which may be connected to a description of a problem.

Examples: 2014/Koach/Section B-1: KOACH
http://designed.mit.edu/gallery/view-2014-KOACH.html
The opening of the presentation describes the rationale for the product, and from there the product is clearly defined. The key features of the device are simply yet comprehensively enumerated.

2011/Ascent/Section B-1: Chair Force One
http://designed.mit.edu/gallery/view-2011-ascent.html
The presentation begins with a very clearly articulated statement of the problem. That description is used to explore the reasoning that underlies the design strategy. The technical approach is made visual for the audience by a clear, quite specific, graphic.

2. Convey motivation for the product concept, through description of customer or user problem and/or limitations of current products.

Examples: 2014/Sunflower/Section B-3: Sunflower
The opening of the presentation clearly defines the problem to be solved by the device as well as articulating its urgency. That description sets up the specific customer needs that inform the design.

2010/Happy Egg/Section A-1: Souper Cooler
http://designed.mit.edu/gallery/view-2010-happyEgg.html
Problem area is defined specifically (number of soup kitchens; FDA regulations; problems with current soup-cooling methods) and visually (image of soup vats).
3. **Design and present meaningful tests around critical problems, and communicate the results, or what you learned.** Results from both productive tests and failed ones add meaningfully to knowledge about your concept and inform direction for moving forward on the design.

**Examples:**

2013/San-X/Section A-2: Handy Hippo
http://designed.mit.edu/gallery/view-2013-San-X.html
The question investigated for this stage of testing, “What is the best spraying mechanism?” logically emerges from the problem statement conveyed at the beginning. The team tried two mechanisms and informatively presented findings.

2012/Sky Beacon/Section B-2: Sky Beacon
http://designed.mit.edu/gallery/view-2012-SkyBeacon.html
The results of two relevant tests were presented: one devised a model that tested the interaction of balloon, helium canister, and valve, and the other test compared the visibility of a one-foot diameter balloon with a three-foot diameter one.

2011/Phil/Section B-1: Ultra Clean
http://designed.mit.edu/gallery/view-2011-phil.html
A big element in the presentation was the testing of an existing technology (ultrasonic jewelry cleaner) for a new product idea (pot scrubber/cleaner) that the team documented with photos and demonstrated proof-of-concept.

2010/GroceryMate/Section A-1: The Eye Pot
http://designed.mit.edu/gallery/view-2010-groceryMate.html
The presentation clearly emphasizes the team’s well-designed tests, in which blindfolded testers tried the sketch models, and the informative results.

4. **Determine and present relevant ways to benchmark your product concept, or compare it to a standard.** An existing, related product may serve as a benchmark, or you may establish a standard through industry data, specifications, or your own observations of a use situation.

**Examples:**

2009/Ascent/Section B-1: Damped Stretcher
http://designed.mit.edu/gallery/view-2009-ascent.html
Concept for a damped stretcher is benchmarked against a foldable, but undamped stretcher, a very complex damped model and a simple, but undamped common litter.

see also (above): 2011/Phil/Section B-1: Ultra Clean

5. **Be specific and realistic in your estimation of market size.** What you discover from library research and convey about the market and its size should be directly relevant to product concept.

**Examples:**

2010/ Happy Egg/Section B-1: Happy Egg Washer
http://designed.mit.edu/gallery/view-2010-happyEgg.html
Market info on small to medium scale egg farmers is linked to customer needs on slides 2 and 3, with numbers that seem both realistic and informative.

2010/True Tournée/Section B-2: Easy Tournée
http://designed.mit.edu/gallery/view-2010-trueTourne.html
Slides 4 and 5 creatively display the French restaurant market, in Boston and across the U.S. – 22,832 French restaurants. Market data are as focused as concept.