Karl Albrecht, 1920 - 2014:
10th wealthiest person in the world (2012)

if you are not serving the customer...
you’d better be serving someone who is

2.009 Product engineering processes
HAPPY BIRTHDAY NENYE!!!!!!

PINK TEAM
why the bunny rabbit?
who is the customer?

there are many “customers”
Client
The person, firm or agency that hires a designer or product design firm to develop a product. (In 2.009, ideas fair or ones found by teams).

User
The person(s) the product is designed for. It could be the primary user or anyone else that interacts with the product during its life cycle. The product meets their needs.

Customer
The actual purchaser of the product. They may also be a user.
Identifying and understanding users this Thursday at 5 PM! (Sept 28)
and now
a mini quiz! More estimation

name on index card, 4 minutes

i) what is energy and what are its units?
ii) define mechanical horsepower.
iii) how much power can you (personally) output, continuously, for 30 minutes?
iv) what is the power of a small bird flying?
Sketch model review
Thursday, October 5
Sketch model review

a formal presentation

Each section presents three well-prepared design concept alternatives. Relevant technical, market/benchmarking, and customer needs information.

Each section will have 6 minutes for their presentation and 2 minutes of questions. Each section has a single set of slides (loaded on presentation computer).
Sketch model review
next Thursday! (October 5)

important review aspects:
appropriateness of the sketches, sketch models, CAD models, calculations
clarity and quality of the design alternatives/design exploration
quality of technical, market/benchmarking, and customer data

hunch → knowing

Why?
Seating doesn’t provide place for food
Foldable furniture is not appropriate

Competitors

<table>
<thead>
<tr>
<th>e-pill: Manufacturer and distributor of electronic medication reminders</th>
<th>MedCenter Systems: Manufacturer of monthly planners and organizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Pill Dispenser Organizer</td>
<td>31 day monthly pill organizer</td>
</tr>
<tr>
<td><img src="image" alt="e-pill Automatic Dispenser" /></td>
<td><img src="image" alt="MedCenter Systems" /></td>
</tr>
<tr>
<td>$289.95</td>
<td>$69.95</td>
</tr>
</tbody>
</table>
Patent search tutorial
Today! Wednesday at 5 PM.

technical and benchmarking data
secondary research

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Automatic Pill Dispenser Organizer
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31 day monthly pill organizer
$69.95
Information gathering session
next Monday at 7 PM (Oct 2)

come with questions about...
secondary research: technical, market/benchmarking, and customer data
until now: opportunity exploration
practice in problem identification rather than solving a specified problem
embodiments are proxies representing a problem or need
 synthesis warmup
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practice in problem identification rather than solving a specified problem
embodiments are proxies representing a problem or need
synthesis warmup

sketch model phase: from needs to product ideas/concepts
sub-theme is viewpoint to reframe and explore classes of needs/capabilities
add more ideas to the pool, and pick 6 interesting needs
ideate -> model -> test! Learn and improve

think about your 6 directions and risk portfolio
super !
3-ideas presentation
discussion

went well? **yes!**

could every one of the presentations be improved?

“practice is the best of all instructors”
Publilius Syrus, Author, 1 B.C.
3-ideas presentation tips

how to improve?

practice is the best of all instructors
Publilius Syrus, Author, 1 B.C.
3-ideas presentation tips

practice is the best of all instructors
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look at audience!
interact with poster
tell a story
get the problem out fast
3-ideas presentation
presentation revisit
what worked well?
3-ideas presentation

presentation revisit

what worked well?
3-ideas presentation
presentation revisit
what worked well?
3-ideas presentation

tips

how to improve?

*practice is the best of all instructors*

Publilius Syrus, Author, 1 B.C.

message at a glance

readable at 50 feet
3-ideas presentation tips

how to improve?

Practise is the best of all instructors
Publilius Syrus, Author, 1 B.C.

Feel the experience
3-ideas presentation tips

how to improve?

practice is the best of all instructors
Publilius Syrus, Author, 1 B.C.
responding to instructor

the least useful comment is “good job”

we received comments that were unfair

we received conflicting advice

informed decisions vs. emotions vs. organizational politics

best product! take some risks exploring
now, even more exciting
it’s time for timesheets! schedule/timesheets

submit after each milestone

typically day after each milestone

send reminders Friday

for your reflection, reflect professional practice
and finally
this week!

notebooks in lab this week
notebook images 10 PM Thursday

ideas timesheets

patent search 101! Today at 5 PM in 14N-132

designy! consent form

class next Monday: close toe shoes
happy career fair!
instagram

follow 009mit

when you take a fun/interesting 2.009 picture tag 009mit #009yourColor