i. Innovation
ii. Concept design
iii. Agile in 15 minutes
iv. Teamwork

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Agenda for the afternoon, March the 25th

- 13:15  Ideas, inventions, innovation
- 13:30  Concept design and evaluation
- 13:45  Agile in 15 minutes
- 14:00  Break & teamwork: pick two or more of your team’s service ideas (or innovations!), define the assessment criteria, and do the assessment
- 15:00  Assessment results debriefing; 10 min per team
- 15:45  Open discussion around these topics
- 16:00  End of the day
Innovation
Innovation is a new way of doing things that results in positive change.

The term derives from the Latin innovationem, the noun of action from innovare. The Etymology Dictionary further explains innovare as dating back to 1540 and stemming from the Latin innovatus, pp. of innovare "to renew or change," from in- "into" + novus "new". (Wikipedia)
What was the largest American industry in 1856?
Invention
Invention is the conversion of cash into ideas.  

Innovation is the conversion of ideas into cash.
Thomas Edison and Nikola Tesla

Invention is the embodiment of something better and, as a consequence, new.

According to certain business literature, an idea or invention, a change or an improvement is only an innovation when it is put to use, is accepted by users and effectively causes a social or commercial reorganization.

In business, innovation can be easily distinguished from invention. Invention is the conversion of cash into ideas. Innovation is the conversion of ideas into cash. This is best described by comparing Thomas Edison with Nikola Tesla. **Thomas Edison was an innovator because he made money from his ideas. Nikola Tesla was an inventor. Tesla spent money to create his inventions but was unable to monetize them.** Innovators produce, market and profit from their innovations. Inventors may or may not profit from their ideas and work.
Steve Jobs’ principles of thinking different

1. **Do What You Love.** Think differently about your career. Jobs advises, “Have the courage to follow your heart and intuition. They somehow already know what you truly want to become. ...My goal wasn't to die the richest man in the cemetery. It was to go to bed at night saying, we've done something wonderful.”

2. **Put a Dent in the Universe.** Think differently about your vision. Jobs attracts like-minded people who share his vision and who help turn his ideas into world-changing innovations. Passion fuels Apple’s rocket, and Job’s vision creates destination.

3. **Kick Start Your Brain.** Think differently about how you think. Innovation does not exist without creativity, and for Steve Jobs, creativity is the act of connecting things. Jobs believes that a broad set of experiences broadens our understanding of the human experience.

4. **Sell Dreams, Not Products.** Think differently about your customers. To Jobs, people who buy Apple products are not “consumers.” They are people with dreams, hopes, and ambitions. Jobs builds products to help them fulfill their dreams. "Some people think you've got to be crazy to buy a Mac. But in that craziness, we see genius" says Jobs.

5. **Say No to 1,000 Things.** Simplify. Think differently about design. Simplicity is the ultimate sophistication, according to Jobs. From the designs of the iPod to the iPhone, from the packaging of Apple’s products to the functionality of the Apple website, innovation means eliminating the unnecessary so that the necessary may speak. Jobs: "I'm as proud of what we don't do as I am of what we do.”

6. **Create Insanely Great Experiences.** Think differently about your brand experience. Jobs has made Apple Stores the gold standard in customer service. The Apple Store has become the world’s best retailer by introducing simple innovations any business can adopt to make deep, lasting emotional connections with its customers. Use analogies or metaphors to think about a problem. By finding the similarities between two things that are unalike, your brain makes new and sometimes profound connections.

7. **Master the Message.** Think differently about your story. Jobs is the preeminent corporate storyteller, turning product launches into an art form. You can have the most innovative idea in the world, but if you cannot get people excited about it, your innovation doesn’t matter. Make your brand story consistent across all platforms: presentations, website, advertising, marketing materials, social media.

con·cept (kŏnˈsēptˌ)
con·cept (kŏnˈsĕptˌ)

1. A general idea derived or inferred from specific instances or occurrences.
2. Something formed in the mind; a thought or notion. See Synonyms at idea.
3. A scheme; a plan: “began searching for an agency to handle a new restaurant concept”.

Origin: Late Latin conceptus, from Latin, past participle of concipere, to conceive.

— The American Heritage® Dictionary of the English Language

“ajaturakennelma” — Eljas Perheentupa, founder of Linja Design
Design funnels

Elaboration
(opportunity-seeking: from singular to multiplies)

Reduction
(decision-making: from broad to specific)
Iterative design funnels: Progressive refinement

http://blog.roundarch.com/2008/11/12/deciphering-the-patterns-learning-from-over-a-billion-years-of-innovation/
Illustrating a concept

Storyboard
Illustrating a concept

UI or interaction flow sketches
Illustrating a concept

Video

Apple Knowledge Navigator (1987)
http://www.youtube.com/watch?v=_a0t2Eb7YJk
Illustrating a concept

Play
Design thinking

INNOVATION
CONSUMER VALUE
MARKET OPPORTUNITY

http://www.ideo.com/about/
From ideas to markets: industry example

- Idea Assessment
- Concept Definition
- Research And Planning
- Customer Pilot Development
- Customer Pilot

Lead Partner Management / Business Development

Go to market / Development handover

New concept Go To Market Model
Standard qualitative assessment purpose

Review ideas efficiently.

Quick filtering to dig up the ideas team should pick for closer investigation.

Use consistent criteria and taxonomy across reviewers.
## Qualitative idea assessment criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Novelty</strong></td>
<td>How unique is the idea?</td>
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<tr>
<td><strong>Appropriability</strong></td>
<td>How difficult is it to imitate the idea?</td>
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<tr>
<td></td>
<td>How strongly can we protect the idea against imitation?</td>
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<tr>
<td><strong>Complementary Asset</strong></td>
<td>How strongly does it leverage an external innovation or trend (like social media)? [emerging or existing]</td>
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<tr>
<td><strong>Organisation Fit</strong></td>
<td>How easily can the company realize the idea to innovation and support it in the future?</td>
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<tr>
<td><strong>Monetary Fit</strong></td>
<td>How likely the company will make (substantial) money with the idea? What is the business model?</td>
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<tr>
<td><strong>Attractiveness</strong></td>
<td>How appealing does the idea appear? Personal subjective feel on the idea’s potential.</td>
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<tr>
<td><strong>Existing Asset / Technology Reuse</strong></td>
<td>How strong existing assets does the company have that can be further leveraged with the proposed solution?</td>
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Example: 4 concepts analyzed and compared
Concept evaluation drivers

- Steps: comparison and decision making
- Goal: highest potential for quality service against least amount of resources
- Challenge: limited knowledge
- Absolute comparison: against defined targets or criteria
- Relative comparison: against other prospective concepts or services (similar level of abstraction)
Concept evaluation methods

- Feasibility judgement: “gut feel”, based on experience and knowledge (what-if conditional)
- Go/no-go screening: customer requirements, maturity of technologies, business strategy
- Decision matrix, weighted decision matrix

<table>
<thead>
<tr>
<th>Decision Matrix</th>
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<tbody>
<tr>
<td>Selection Criteria</td>
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<tr>
<td>Comfort (for patient)</td>
</tr>
<tr>
<td>Convenience (for employees)</td>
</tr>
<tr>
<td>Aesthetics</td>
</tr>
<tr>
<td>Flexibility</td>
</tr>
<tr>
<td>Ease of Use</td>
</tr>
<tr>
<td>Comfort (for visitor)</td>
</tr>
<tr>
<td>Total</td>
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<tr>
<td>Rank</td>
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<tr>
<td>Continue?</td>
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Concept evaluation with infinite resources

- Large companies can further develop concepts into more concrete designs or prototypes to be evaluated:
  - Apple often develops 10 high-fidelity concept alternatives before decision making
  - Nokia developed 5 alternative high-fidelity interactive design concept prototypes for the S40 UI in 1995 that were user tested globally
  - Nokia developed 3 different UI concepts for the “Navi-key” phone UI in 1996 that were developed into working prototype phones and field tested with a group of users over several weeks
Agile in 15 minutes

Misconception!
What’s wrong with the classic waterfall model

“Many of the [system's] details only become known to us as we progress in the [system's] implementation. Some of the things that we learn invalidate our design and we must backtrack.”

— David Parnas, in A Rational Design Process: How and Why to Fake It

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.
Scrum, an iterative and incremental methodology often seen in agile product development

A. Split your organization into small, cross-functional, self-organizing teams.

B. Split your work into a list of small, concrete deliverables. Sort the list by priority and estimate the relative effort of each item.

C. Split time into short fixed-length iterations (1 – 4 weeks), with potentially shippable code demo’ed after each iteration.

D. Optimize the release plan and update priorities in collaboration with the customer, based on insights gained by inspecting the release after each iteration.

E. Optimize the process by having a retrospective after each iteration. So instead of a large group spending a long time building a big thing, we have a small team spending a short time building a small thing. But integrating regularly to see the whole.

http://www.infoq.com/minibooks/kanban-scrum-minibook
Bridging agile SW development and UX design

Learnings from building an agile product creation process in Nokia Maemo/MeeGo in 2008-2010

1. Assign UX designers to work in agile Scrum teams
2. Treat UX design like SW architecture development
3. Establish a continuous user testing and feedback loop mechanism
4. User stories and tasks build UX quality
5. Use appropriate levels of UX prototyping fidelity
6. Definition of Done to acknowledge UX
7. Designers are not users, developers are neither, vice presidents absolutely not
Using Scrum in web development

Product Backlog
- Client prioritized product features

Sprint Backlog
- Features assigned to Sprint
- Estimated by team
- Team Commitment

Working Code Ready for Deployment

Time-boxed Test/Develop

Backlog tasks

Sprint Planning Meeting
- Review Product Backlog
- Estimate Sprint Backlog
- Commit

Daily Scrum Meetings
- Done since last meeting
- Plan for today
- Roadblocks/Accelerators?

Sprint Review Meeting
- Demo features to all
- Retrospective on the Sprint Adjustments

Break and teamwork

1. Take two or more of your service concept ideas
2. Define the assessment criteria
3. Do the assessment
4. Debrief

Availability of talent
Possibility for limited 1\textsuperscript{st} release
Design innovation
Technology risk/availability
Ecosystem
Scalability
Business model
Produced, curated or crowdsourced
Team members’ values; sustainable and ecological consumption, etc.
…
Thank you :-)  

... time for discussion 

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Appendix
Some takeaways from service design:

1. **Poor value proposition >> you are likely to go down the drain**

1. **Market**: for which market (people/users/consumers/customers) is the value proposition being created?

2. Value experience or **customer experience**: what does the market value most? The effectiveness of the value proposition depends on gathering real customer, prospect or employee feedback.

3. **Offering**: which products or services are being offered?

4. **Benefits**: what are the benefits the market will derive from the product or service?

5. Alternatives and **differentiation**: what alternative options does the market have to the product or service?

6. **Proof**: what evidence is there to substantiate your value proposition?

- Value = Benefits - Cost
Some takeaways from service design:

2. Design guidelines help. Especially if they are good.

1. Focus on people — their lives, their work, their dreams.
2. Every millisecond counts.
3. Simplicity is powerful.
4. Engage beginners and attract experts.
5. Dare to innovate.
6. Design for the world.
7. Plan for today’s and tomorrow’s business.
8. Delight the eye without distracting the mind.
9. Be worthy of people’s trust.
10. Add a human touch.

• http://www.google.com/corporate/ux.html
Some takeaways from service design:
3. **Collaborate, prototype, iterate, improve.**

1. Get marketers, designers, and coders to work together, sit together
2. Design, prototype, evaluate, improve, be ready to kill your darlings
3. Learn from other services, domains, competitors, disciplines, have an open mind
4. If it’s complicated to build, it is likely to be complicated to use. And to sell.
5. Build on top of something that is already out there (but don’t steal!)
6. Listen to the early adopters, late adopters, and rejecters of your service
7. Don’t forget the support, people with disabilities, users with mobile devices
8. Have fun!

FYI: **Axure** is a rapid prototyping tool for design wireframing, interaction flow design, HTML generation