DM565 Innovation part

Innovation

Some interlinked definitions:

- Creativity = getting new ideas
- ► Innovation = creation of new products
- ► Entrepreneurship = creation of new companies

"Innovation" in DM565 means all of these, but the focus is mainly on the last two.

Why a course on innovation?

Motivation for Teaching Innovation:

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Motivation for Teaching Innovation:

- Entrepreneurship is a possible career path.
- Particularly in IT (relatively low start-up costs).
- ► SDU *requires* teaching entrepreneurship/innovation in all study programmes.
- Previous course for all of NAT did not work well.

IMADA CS solution

Assumption: Learning innovation is more fun if

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Main idea of the IMADA CS solution:

- Focus on innovation and value creation by combining public data sources.
- ► Exploit tools from DM565 (and DM566, DM550, DM505/564, ...).

Concrete tasks

- 1. Develop an idea for a product (app, web site, program,...) which creates new value by combining data from different data sources.
- 2. Present and evaluate the idea as a basis for a possible start-up company, using the nine focus points of the *Business Model Canvas* method.
- 3. Program a (proto-)prototype of the idea.

Components of the DM565 innovation part

- ► Group work (2-4 persons).
- Guest lecture on how to create start-ups: Jannek Solgaard, SDU business developer and Jørn Flemming Guldberg, IMADA alumni and IT-entrepreneur (QuasiOS).
- ▶ Workshop on idea generation: Peter Bækgaard Madsen.
- Innovation cafés (consultancy): Peter Bækgaard Madsen.
- Mid-way seminar: pitching to, and feedback from, other groups: Peter Bækgaard Madsen, Rolf Fagerberg.
- Exam: project report (max. 10 pages) and oral exam/presentation: Peter Bækgaard Madsen, Rolf Fagerberg.

Full schedule at:

https://imada.sdu.dk/~kslarsen/dm565/innovation.php

Details of mid-way seminar

Date: Wednesday and Thursday, November 30 and December 1.

Format: Three groups present/pitch to each other and give feedback.

Planning: One hour per three groups. Sign-up for the available times via Google doc (later).

Details of exam

Deadline for report: Monday, December 19, 08:00 am.

Exam date: Thursday, December 22.

Planning: Sign-up for the available times via Google doc (later).

Format: Group exam: Presentation of idea for product and business case. Demo of prototype. Questions on presentation and report.

Grading: Based on:

- ► Overall idea
- Report
- Presentation at exam
- Answers at exam

The oral exam results will be part of the final grade of DM565. The written exam (on the curriculum from the first 11 weeks) weights the highest (is normally moved at most one grade step). However, both parts (written exam and innovation part) must be above passing level.

TODO right now (this week)

- Form groups of size 2–4 (preferably 3).
- Sign up for one workshop (either Tue or Wed next week) via link in ITS.
- Check sources of data as inspiration before workshop.

Some examples of data sources

- Open Data Denmark Portal: https://www.opendata.dk/
- ► EU Open Data Portal: https://data.europa.eu/euodp/da/data/dataset?sort=views_total+desc
- OpenStreetMap: https://wiki.openstreetmap.org/wiki/Downloading_data
- Rejseplanen Labs: https://help.rejseplanen.dk/hc/da/categories/201728005
- Open Weather API: https://openweathermap.org/api
- ➤ Some public APIs: https://github.com/public-apis/public-apis
- ► Kaggle: https://www.kaggle.com/datasets
- API for computer science publication database: https://dblp.uni-trier.de/faq/13501473
- Web service for Chuck Norris jokes: https://api.chucknorris.io/

Curriculum

The curriculum is Jannek Solgaard's slides on the *Business Model Canvas* method for evaluating ideas for (products for) start-ups.

Additional descriptions of the Business Model Canvas method can be found at:

- Wikipedia: https://en.wikipedia.org/wiki/Business_Model_Canvas
- Amanda Athuraliya/Creately: https://creately.com/blog/ diagrams/business-model-canvas-explained/
- ► Alex Cowan: https://www.alexandercowan.com/business-model-canvas-templates/
- Martin Luenendonk/Cleverism: https://www.cleverism.com/ business-model-canvas-complete-guide/
- OpenLearn Create course: https: //www.open.edu/openlearncreate/course/view.php?id=2211