How to build a CRIS-system relevant for your institution, allowing the researchers to do research rather than administration

Jessica Lindholm
Chalmers University of Technology, Sweden
How to build a CRIS system relevant for your institution - or the story of why we chose to develop a CRIS in-house!

Jessica Lindholm
Chalmers University of Technology, Sweden
• Why develop a CRIS from scratch?
• How we did it?
• Evaluating other systems
• Agile methods
• Main motivations and driving forces

4 next steps

Jessica Lindholm
euroCRIS 2018
Assignment

Create a research information system (projects first)

for Chalmers University of Technology and possibly others as well
The team

UX expertise, librarians and systems developers
SCRUM team

Build the thing fast!
Build the right thing!
Build the thing right!

Product owner
Developers
Scrum master
Initial work

- Possible choices: Pure, Diva, SweCRIS, etc.

- Talking to stakeholders:
  Communication Officers, Researchers, Administrators, Management
Input from stakeholders
Example method for user input
Librarians’ perspective

• Publication oriented
• Integrations with ORCID
• A way to use altmetrics
• Interoperability with national data providers, discovery systems, OPACs
• Advanced search end-user interfaces
Researchers’ perspective

• Visualize all our collaborations, e.g. with the industry
• Save our time
• Support scientometric analyses
• Integration with Google Scholar, ResearchGate etc.
Aministration perspectives
Was there a system for these needs?

Not at that time!
What did you do?
We started from scratch, doing one thing at a time.
How did it go?

I’ll tell you now!
Projects

• Visualising project information, cooperations and collaborations.
• Work flow

Import Chalmers contract database → Metadata enhancement The Library → Data validation Project participants

Visible for staff.

Once validated visible on the web and via API:s etc.

* research.chalmers.se contains ~3 000 projects (2018-06-08)
Publications

• Visualising co-authoring and collaborations, loads of identifiers.
• Work flow

 Import Scopus/SciVal & Web of science

 Manually Authors

 Data enhancement The Library

 Gets email Authors

 Visible on the web and via API:s etc

* research.chalmers.se contains ~60 000 publications (2018-06-08)
User needs
Data in and out

- Automatic import of publications from Scopus and Web of Science
- Prefilled forms for local authors (based on ISBN-orders)
- Automatic classification, based on abstract and publication channel, based on a text mining tool and data learning
- Projects come in from contractual database (Eko), initially also from Cordis and SweCris
- Person data from staff database and ORCID.org

- Data is exported to CMS, reference systems, the web (Google, Baidu, Yandex, etc), metrics database etc.
User needs

Free staff from admin stuff
Management
Helping administrators

- Automatic classification of publications
- Automatic ISBN-ordering
- Tools for merging and administering duplicates
- Easy-to-use interfaces
- Less metadata fields than before
User reactions
BEFORE:

"I set aside a day and warn my colleagues before adding this years publications"

Now:

Research is "the first administrative system, which is fun to use."

"This is a goldmine."

"A leap forward in usability"
Lessons learned

✓ Let the developers choose the technology
✓ Talk to the users about what they need and show them stuff
✓ Do not plan years ahead, solve what is needed and creates value for the users now
✓ Work in iterations, i.e. release small things often
✓ Prioritise - do one thing at a time
✓ Dare to fail
Lessons learned

✓ Prepare to adapt quickly to changes, since the world is moving fast
✓ Try your hypotheses with real users
✓ Requirements come to you as you develop
✓ Every busy researcher still seem to have 15 minutes for a meeting, when asked nicely.
Open source software?
Yes, when we are done.