





Data analytics accelerator project

Aleksi Kallio 4.3.2020







Kainuun liitto





About the project

- Target is to speed-up the up-take of data analytics methods in regional companies and in the Kainuu region as whole
- Funding
 - European Regional Development Fund (ERDF), Kainuun liitto (A73798)
 - OPartner companies Loiste Oy, Herman IT Oy and Kaisanet Oy
 - City of Kajaani
- Total budget 346 000 €
- Project is implemented by CSC (coordinator) and KAMK



About the project (cont'd)

- Project duration is 1.5.2018 31.10.2020
 - Was extended by 6 months to match KAMK teaching schedule and ongoing pilot projects
- More information: https://www.csc.fi/fi/-/data-analytics-accelerator



Main tasks

- Pilot projects with partner companies (3) and City of Kajaani
- Workshops (5) with regional companies
- Customised expert support, coaching and training for companies
- Business development support for emerging solutions
- Outreach and increasing awareness about the opportunities
- Joint development of data analytics environments and competence within CSC and KAMK



Workshops

- 18.9.2018: Analytics for municipal technology
- 5.4.2019: Opportunities in data analytics
- 27.9.2019: Practical tools for data analytics
- 12.2.2020: Productising data analytics
- 19.-20.2.2020: Practical tools for deep learning
- Tools developed for the workshops: analytics maturity model, analytics project canvas



Pilot projects

- Total 4 projects
- Topics include predictive maintenance, usage trends analysis and cybersecurity
- Tools used: machine learning (random forest), clustering, big data computing (Spark), visualisation
- Details of the projects are confidential



Insights

- Data selection and re-use among the key issues.
- The "Opportunities in data analytics" workshop also discussed what are some relevant publicly available datasets that can be re-used by the companies.
- The data approach covered also data re-use, needs- as well as opportunity- based.
- A date analytics project canvas was produced, with the two main questions:
 - What is the data? Why are you doing data analytics (the problem to solve)? You should be able to answer one them to be able to proceed. If you know what problem you are solving, then it is always possible to find or produce data that is required.
 - Or the other way around, if you possess a valuable dataset, then it is always possible to find business problems that can be solved with that data.
- What we found is that business need to build capacity to address all three questions when it comes to data re-use: WHAT to collect, WHY to collect and HOW to re-use. However, it is crucial that the WHAT and WHY come first, since, to a large extent they also path out the HOW.
- It implies that considerable work is needed to address these issues comprehensively. However, such a type of capacity building is inevitable, so there should be some planning about it.