Aalto University

BencHEIT process in Aalto University – Power BI reports

27.11.2018 Arto Malinen

Agenda

- **Introduction and background**
- **BencHEIT in Aalto: past – present – future**
  - Observations
  - Development ideas
  - IT cost dimensions
- **Power BI reports**
- **Target state for BencHEIT at Aalto**

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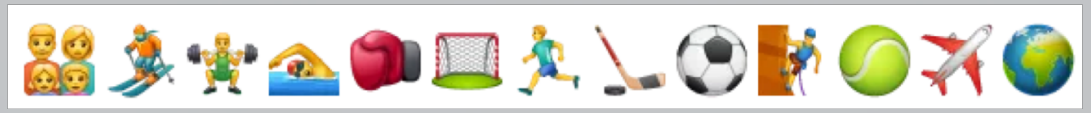

HUT Alumni, **M.Sc. Electrical engineering** 2003

Application engineering roles @ Texas Instruments, 2004-2014

Solution Architect @ Nokia Technologies, 2014-2018

Application Portfolio Manager @ Aalto University, Feb 2018

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Aalto University at a glance

About
12000
Students (FTE)

A staff of about
4000 of which
400 are professors.

37% of all
academics are
international.

Aalto University was established in 2010 as three leading Finnish universities, the Helsinki School of Economics, Helsinki University of Technology and the University of Art and Design Helsinki, were merged.

Today, Otaniemi campus is going through massive changes as schools are relocating to Otaniemi, ARTS in 2018 and BIZ in 2019.

Digital Transformation – Towards European Leadership

BencHEIT process at Aalto

Aalto has been participating in BencHEIT survey since 2011

- **In 2018, for BM2017 data collection, the core team was changed**
  - Learn process, identify painpoints and seek opportunities for automation

Observations made during the process

- Provides a **snapshot of the IT assetts** and insights on **yearly IT spend**
- Seen as **tedious** process; carried out **manually, triggers the inventory**
- Too tight schedule, **occurs during budgeting season**
- Seen as an extra work, **lack of motivation** – the benefits are not clear to people involved in the process
- **Data is spread around** (and managed manually) causing **variations in the data quality**
- Survey Excel sheet is splitted and combined too many times, manually

BencHEIT process observations

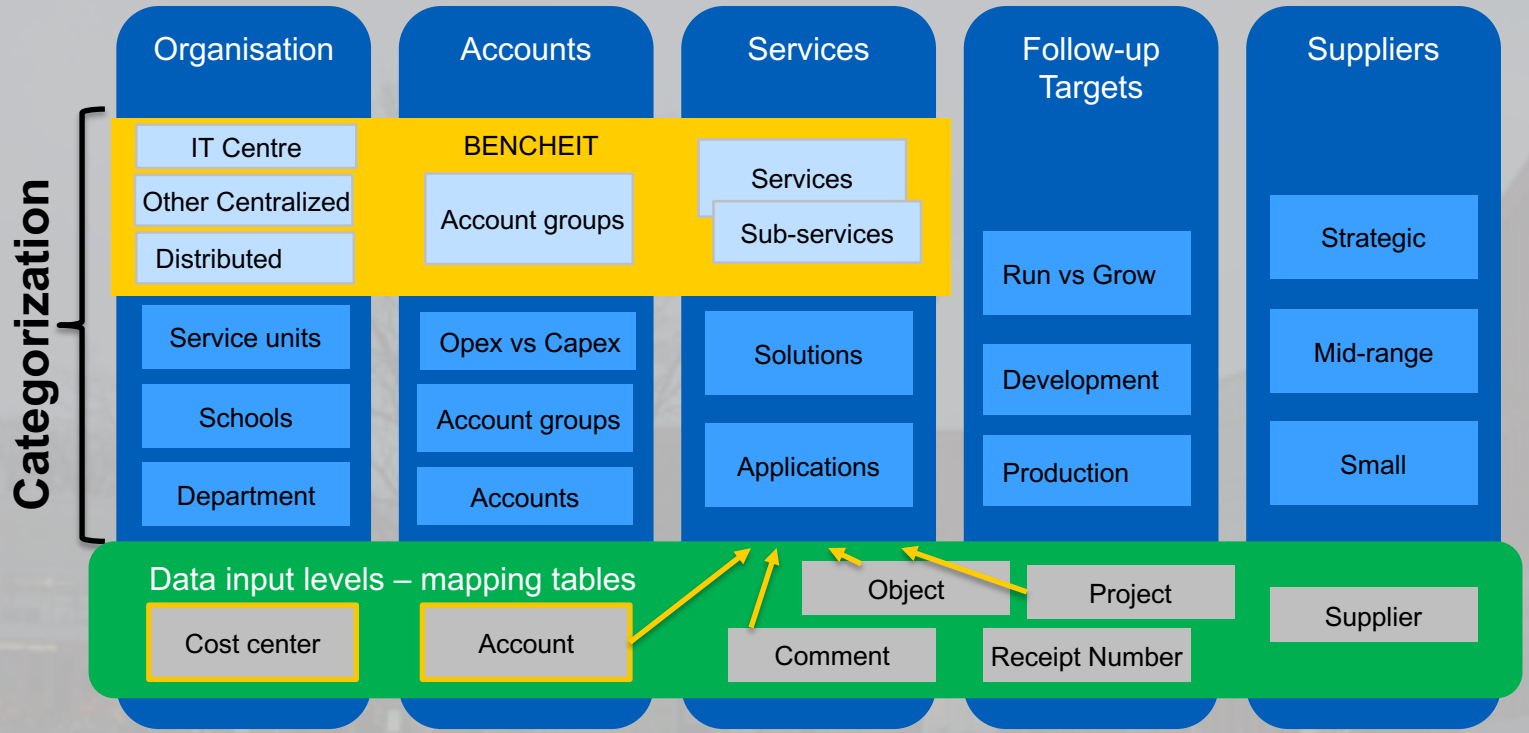
Observations made during the process

- **Service categories** are defined well enabling benchmarking on a general level, but current systems do not provide an easy way to **assign the correct category for financial/FTE data**
- **FTE definitions for IT work** are not clear
- Tracks **cash flow,** investements need attention during cost analysis
- Survey does not track **development vs maintenance** costs
- Tracks where costs occur, not who benefits/utilizes
- Does not track **the quality of the IT services**
- For some figures **headcount** would be more appropriate than FTE
- **Connection between volumes** and costs is missing
- Question/Concern: **Are we comparing apples to apples?**

Development ideas

- **Increase automatization!**
  - Data sources connected directly to our data warehouse
  - Automated Bencheit categorization with mapping tables and Machine Learning
  - Automated PowerBI reports
- **Clarify the benefits of the survey** to improve the motivation and **increase the quality of the data**
- **Define the roles and responsibilities of the virtual team**
  - **Alleviate the process** – review instead of create the data
  - Align the activities with annual clock to **optimize the workload**
- **Improve ways of working** to enable automated processes
- **Utilize results** to provide insights for budgeting

Dimensions of the IT costs



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PowerBI -reports

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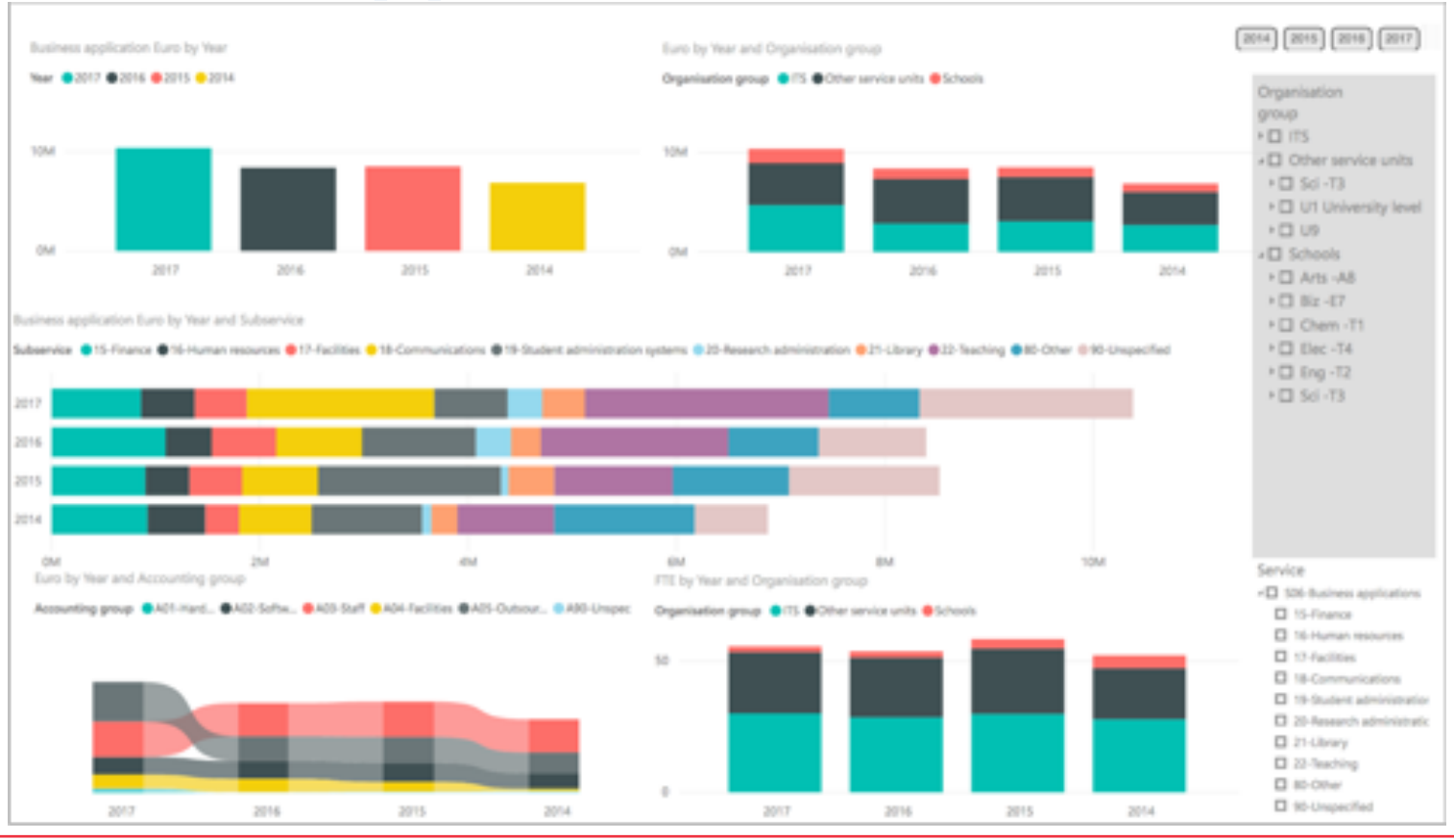
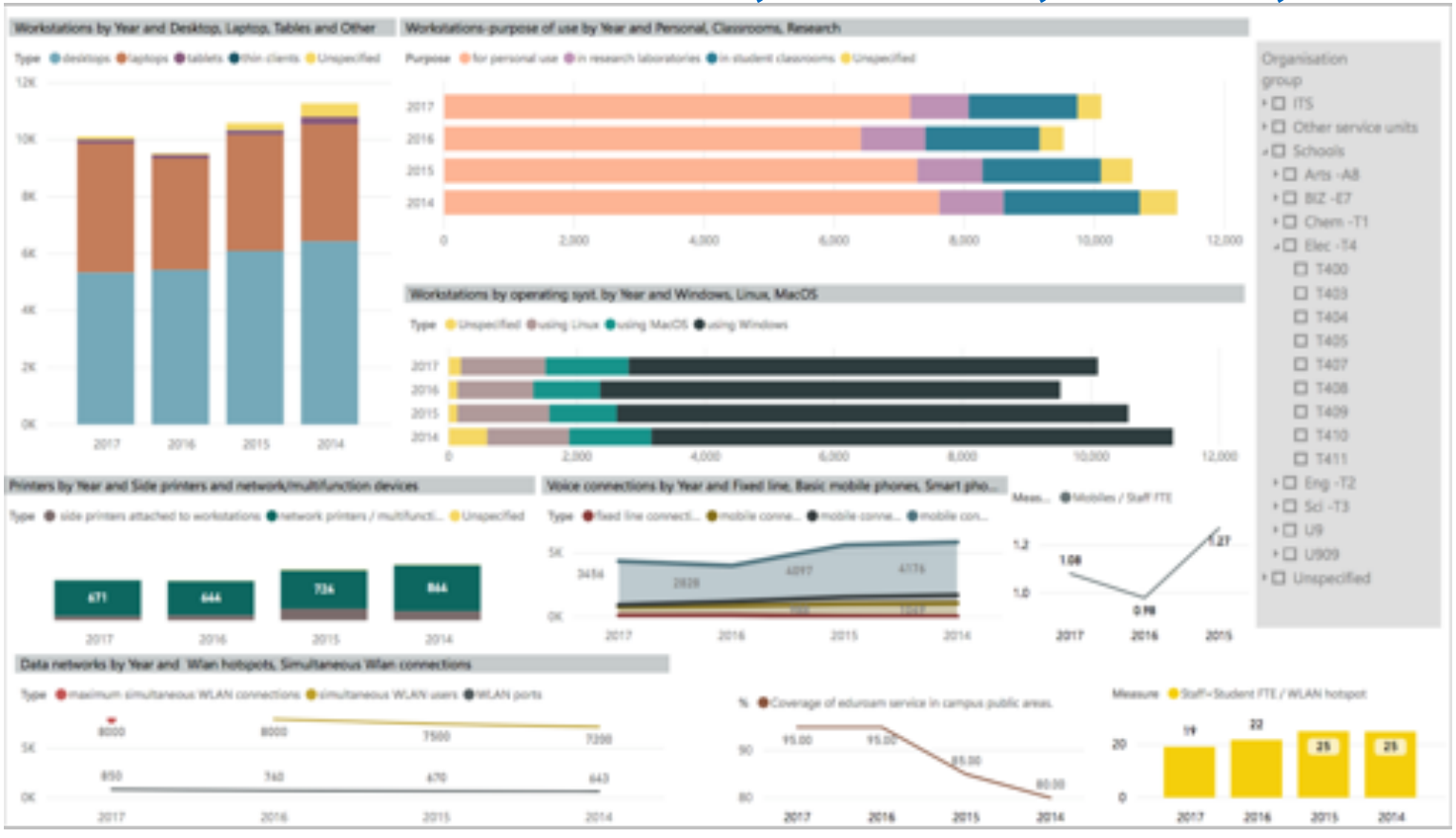
Comparing inside Aalto

Finance and FTE (high level)

Business application



Volumes – Workstation, Printers, WLAN, Voice



IT service figures

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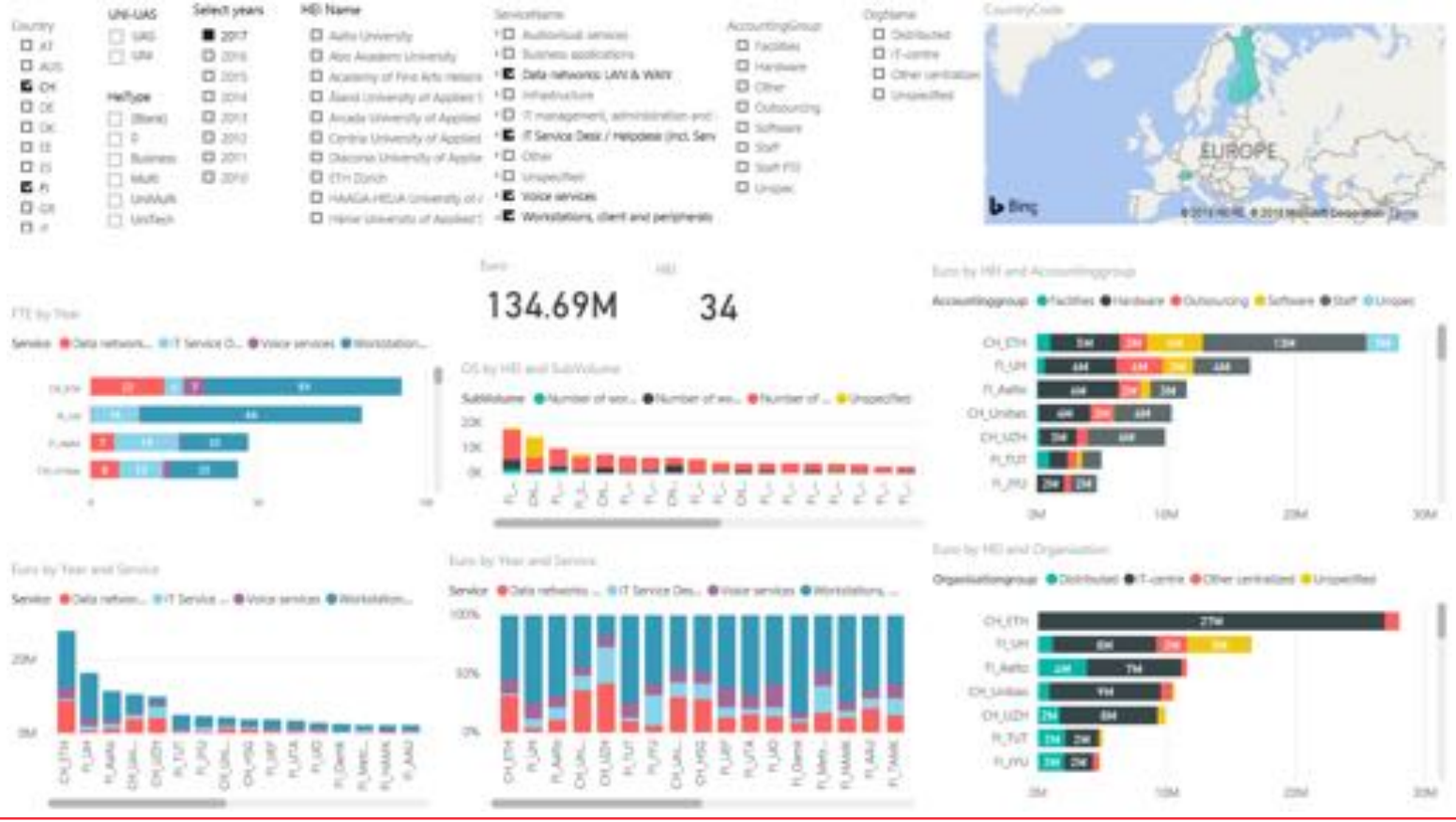
Comparing to other Higher education institutions by using PowerBI

Sample about future development

Country, year and services selected



BencHEIT growth

Target state for BencHEIT at Aalto

Data utilisers

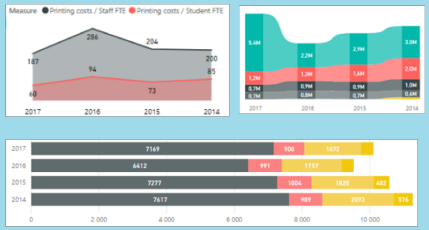
Regular meetings

Data producers

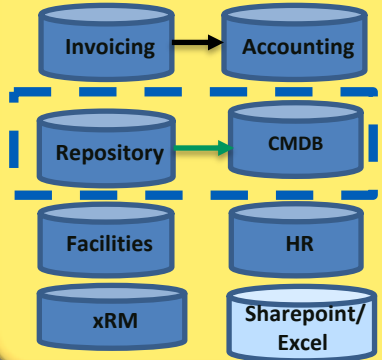
Normal operative work

Data quality

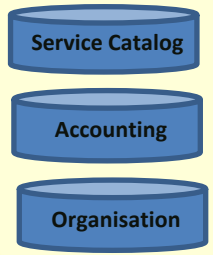
Automated reports
Self-Service

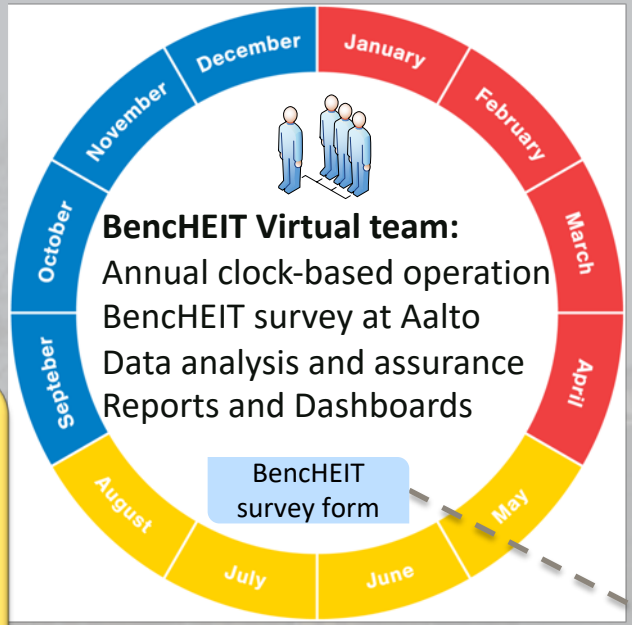


Operative information resources



Master data management





Data platform and Data warehouse

Information marts

Information processing
Categorization
Machine Learning

Raw Data R R R R

Automatized data transfers / loads