

SMART AQUA

Waste water treatment management with the data

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Lahti Aqua Group

Regional water
supply company

Takes care of
140 000
inhabitants water
supply

#1 in customer
satisfaction
(Taloustutkimus)

Total sales 41 M€

Personnel
96

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Fresh ground
water as a raw
material

Network over
2 500 km

Biogas production
(heat) 13 GWh

Annually treated
wastewater
12 Mm³

Environmental
actor

Content

- Smart Aqua
- Sources of data
- Leading with data



There's more and more data available every minute. How do you exploit it?



142,361,111
Emails sent
and received



347,222
Tweets
posted



50,200
Mobile apps
downloaded



2.4 Million
Google searches
made



2,083,333
Minutes used
on Skype calls



\$203,579
In Amazon sales
generated



400
Hours of video
uploaded on YouTube



216,000
Photos posted
to Instagram



1,389
Uber rides
taken



120
LinkedIn
accounts created

Source: arbornetworks.com, VidCon
2015



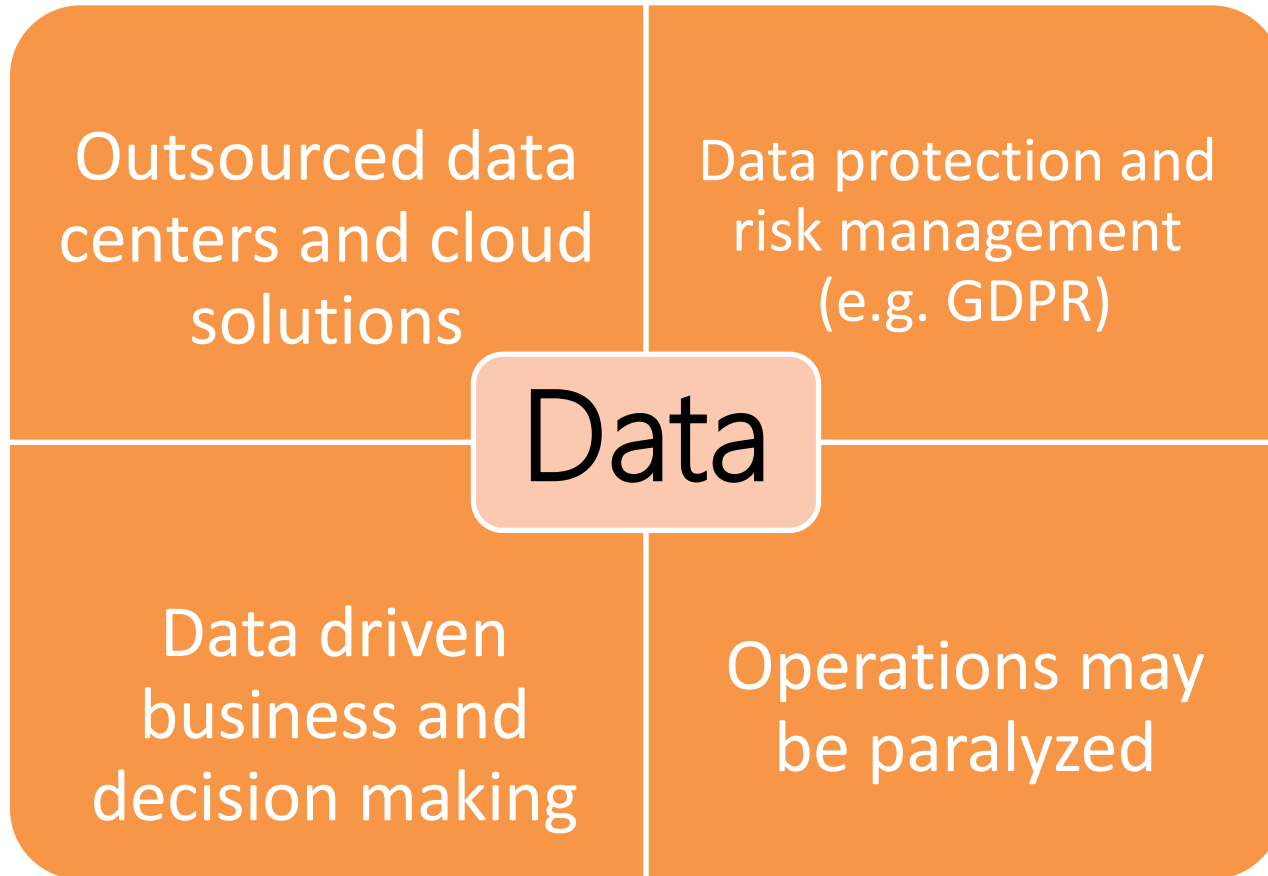
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IWAMA
Interactive Water Management

Data is everything





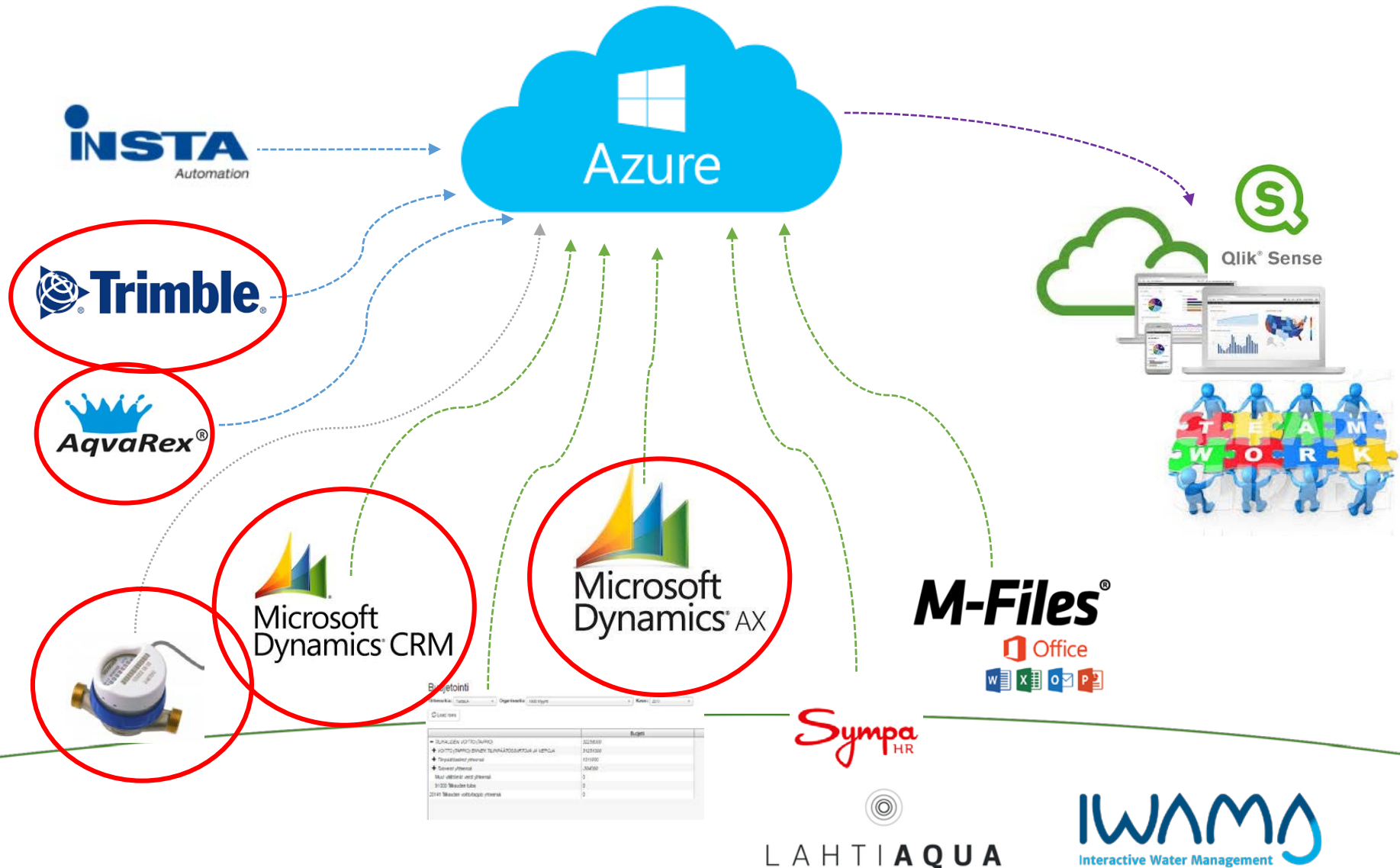
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Sources of data



Source of Data



Leading with data



Leading with Data

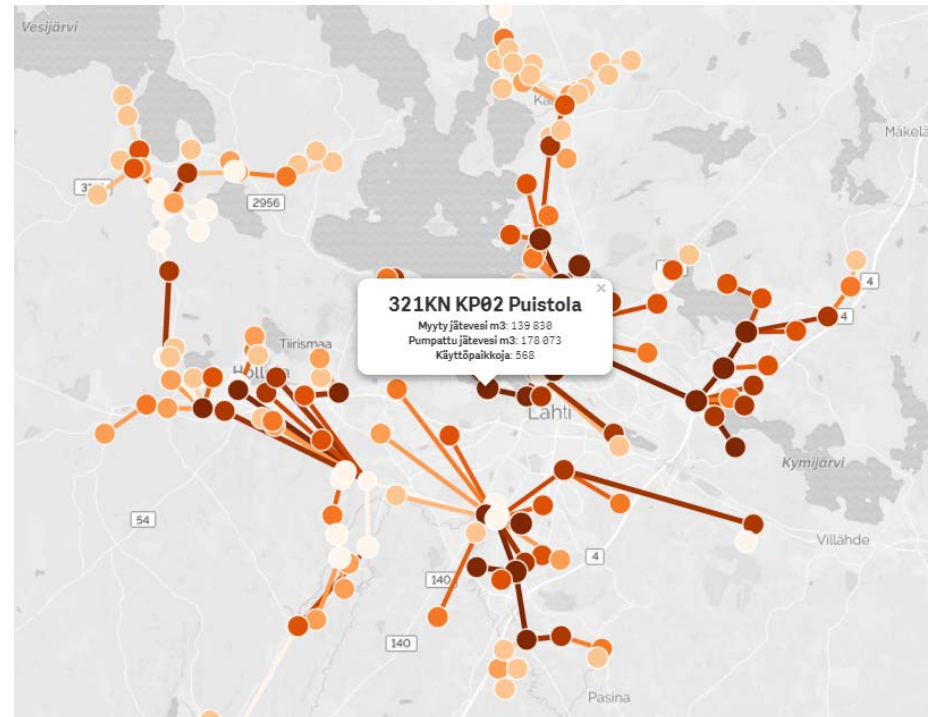
- Real time
- Transparent
- Solid data
- Access for everyone and everywhere
- Leading with numbers, not by intuition
- One input principle
- End user has an extended self analysis opportunities

Waste water treatment management with the data



Waste water pipelines in Lahti (560 km)

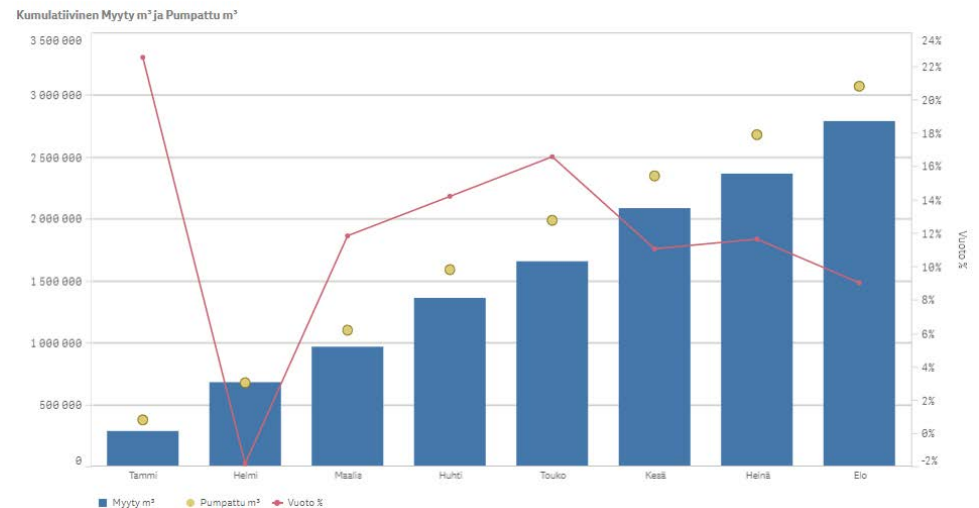
- Sold vs pumped waste water = leakage-%
- Still data is a rough estimate as billing is not based on real-time consumption
 - Every second month sales volume pretty liable
- Master data validation and harmonization also continues
- Pilot for remote reading started



Leakage-%

- Management actions
- Comparison can be made by area >>
- Data must be combined with maintenance information, pipe's age and material, customer feedback e.g. >>
- Helps investment decision making???

Kariniemi sewage treatment plant



Summary

- Data is available but matters only when used comprehensive across the business
- Analytics to support decision making
- Possibilities with IoT?

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