Applied value creation from IoT

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Kapacity



90 employees: Approx. 80 consultants

+300 customers Across branches & industries

3 partners: Microsoft, IBM &TARGIT quality integrity kapacity



- > Microsoft Data & Analytics Partner 2017 and 2019
- > Business Intelligence Partner 2015
- > Børsen Gazelle virksomhed 2014, 2015, 2016



Use case Detecting water leakage with AI

Ригроѕе

- Detect leakages in the distribution network
- Send early warnings



Example of early warning





What did we focus on?

- Tailored business tool for decision support on early warnings
- > Conduct statistical data analysis using SCADA time series data
- > Utilize and experiment with Azure cloud architecture and services for
 - > Lifting IoT-data to the cloud
 - Deploying statistical data models in the cloud
- > Visual insights on time series data



From 4 to 79

- > PoC utilized data for 4 areas in the network
- > Methodology scaled and deployed to all 79 areas
- > Areas are not identical
 - > Residential neighborhoods vary from business districts
 - > Configuration setup for manual adjustments



Insights gained



Understand business context and value creation





Potential risks of analytics solutions ... from the business side

- > Designed to replace current solution
- > Considered black box
- > Require knowledge of certain tools and software
- > Not designed properly to end users





Begin experimenting ... building solutions with IoT data

- > Identify business areas with high impact
- > Quickly explore business potentials from proof of concepts
- Support by flexible data platform facilitating experiments and scalability
 - > Integrated services
 - > Minimize time to market
- > Design solutions to provide additional insights





Data: Collect and process

> Sensor data

- > Timestamps, geotags
- > Consistency and data quality assessment

> Important business data

- > Business data on repairs and maintenance, alarms and break downs, service logs
- > Huge volumes of data
 - > How to process?
 - > Aggregation strategies



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Checklist – how to get started



