# **Lightweight DWH Data Analysis for SMEs**

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## **Outline**

- Motivation
- Methodology
- DWH Needs for SMEs
- Review of DWH Services
- Interim results

### **Motivation**

- Increasing digitisation results in collection of more data
- SMEs are more commonly using digital systems
- They therefore need a proper way to organise their data

# Methodology

- Determine the specific needs for a DWH
- Summarise key factors and challenges

# Methodology

- Research for different DWH solutions targeted at SMEs
- Comparison and classification of those systems
- Check of suitability for SMEs

### **DWH Needs for SMEs**

## • Heavy reliance on spreadsheets

• growing number of spreadsheets across multiple departments is unmanageable combining them all together

# Overwhelming spreadsheets

• spreadsheets can reach the point where no data can be added anymore

#### Takes too much time to wait

• one spreadsheet per department means other employees have to wait for the newest version

# **DWH Needs for SMEs (contd.)**

### • Discrepancies on data and reports

 different third party information in every department's spreadsheet could lead to data discrepancies after combining all together

## Too much time invested in creating reports

 auto update the DWH System after data in sources changes – departments can rely on always correct up to date Data

### **Review of DWH Services**

- Software as a Service (SaaS) / Data Warehouse as a Service (DWaaS)
  - · cost-effective pay-as-you-go model
  - straightforward setup
  - no hardware necessary, can be deployed instantly
- Review & Comparison of DWaaS Products
  - What do they have in common?
  - · How do they differ?
  - Are they suitable for small businesses?

### **Interim Results: DWH Services**

#### Services we found so far:

- Bime Analytics
- Panoply
- Stitch
- Vertica
- Segment
- Xplenty

- Tableau
- Snowflake
- AWS Redshift
- Google BigQuery
- IBM DB2