

## Why data quality is important

### According to several studies:

- Bad data costs companies an estimated 15% of their turnover
- Nearly a third of data analysts spend more than 40% of their working time verifying and validating the data used in analysis
- Knowledge workers waste 50% of their time hunting for information, finding and correcting errors, and finding confirmatory data sources to replace those they don't trust
- It is estimated that up to 20-30% of operational costs arise from bad data

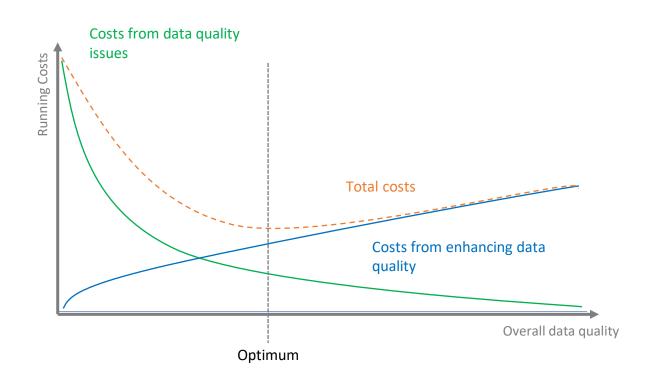
https://dataladder.com/what-is-data-accuracy/



## Optimum for data quality effort

### 100 % quality is not achievable

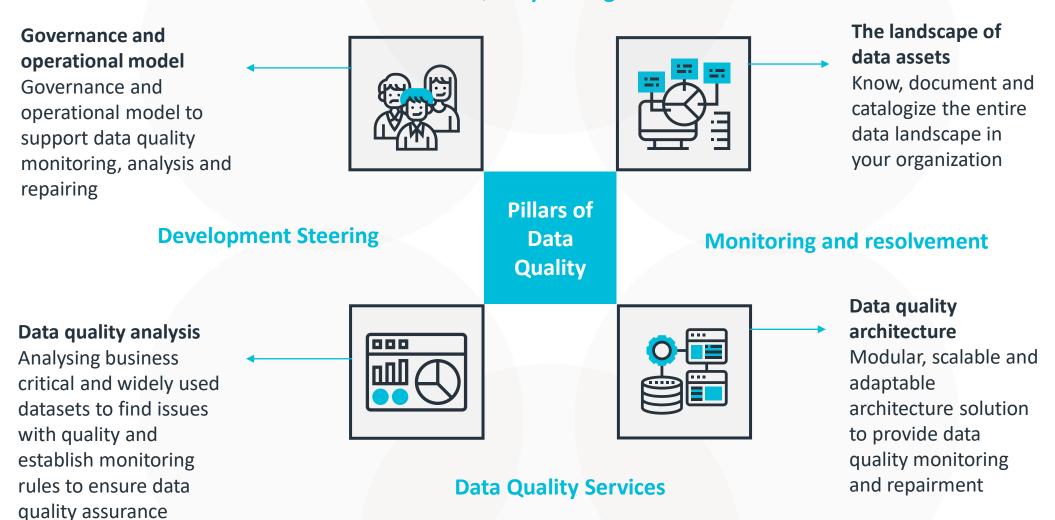
- Data is always changing and always flowing
- Fixing old errors do not make new data batches correct
- 100% quality 100% of the time is not possible
- Optimum can be found balancing costs from data quality and costs generating quality assurance





### Cloud 1 Pillars of Data Quality

### **Data Quality Management**



### Framework

### How should you proceed with improving data quality?

Data quality analysis delves into the quality of data sets guided by business vision and information. Data quality analysis should be performed in close collaboration with business experts, utilizing the latest analysis tools.

The most important thing for the success of the analysis is to set clear boundaries Implementation of data for the material to be analyzed. Scope will be defined by selecting the data assets Data quality analysis quality analysis - mapping that presents the business process to be analysed. In addition, it must be clarified of the quality of a new or what the main uses cases and assumptions are for the selected data sets. existing data set for different quality definition criteria. Integrity rules **Business rules Data Quality** Processes and Technical Measuring, improving and monitoring data quality (if architecture Assessment strategy nothing is done about quality, there is no point Validation and in monitoring it). status reports

CLOUD<sub>1</sub>



### Data quality analysis

- Much too often reporting projects gets into trouble because the state
  of the data. Undocumented and undiscovered problems in the data
  sets keeps them from deploying promised business values. And this
  is only the best-case scenario. In other case the data leaves the data
  platform and ends up to be used. Users then questions the data's
  precision and reliability. Erroneous data contributes to flawed
  decisions.
- To tackle this problem a preliminary data quality analyses for new systems and business critical data assets should be performed. Before accepting a new ERP, logistic, ordering or similar module into production the end result, data, needs to be validated. This is rarely done and system changes and updates or even entire new systems goes into production without any standardize data quality checks.
- Data quality rules also doesn't come from a thin air. Investigation
  work needs to be done to verify what can and should be measured
  and monitored. A data analysis is a perfect way to establish the rules
  and gain needed information of new data assets for data
  stewardship.

CLOUD<sub>1</sub>

## Steps of data quality analysis

Data quality analysis Dataset identification Scope validation **Rules definitions** and selection Integrity testing Dataset evaluation Technical rule Rule analysis implementation End report

- Data analysis delves into the quality of the data sets, supported by perspective provided from use cases. It is performed in tight collaboration with business experts utilizing modern analysis tools.
- In order to make the data analysis to be possible, the exact scope must first be known:
  - Which data asset is to be analyzed in order to gather correct data sets
  - What are the main purposes and / or assumptions that exist for the data sets and use cases

CLOUD<sub>1</sub>

# Cloud1 Data Quality Analysis

#### Why

In the cloud, the amount of data has multiplied and the pace of development is accelerating. At the same time, the need for data quality has increased. Avoid the high cost of poor quality data to your organization by investigating data before it hits the development phase or in the worst case production.

#### What

The agile data quality deep diving project is implemented in close collaboration with the organization's own business data experts. We combine the needs and goals of both business and IT for data quality. During the project, we will familiarize you with the data quality of your data assets, and deepen your understanding and knowledge of data quality in your organization.

#### Tools and roles needed for the project

- Access to the data for the analysis (Preferred: SQL or Data Lake)
- Azure tools to be available (Databricks, Power BI, Storage Account, Key Vault)
- Roles (Project Owner, Owner(s) of selected data sets, business process expert)

#### **Project duration**

2-4 weeks

#### Methods

Workshops, analysis and final report

### What the organization gets

- Estimate of the level of data quality
- Proposals for action
- Tool suggestions
- A concrete roadmap to improve data quality

Price: 19 000€

