

*um DataLake Service



A data lake is the fundament of data-driven decision making, enables the democratization of your data and generates intelligent business insights in realtime.

The Problem



- Scalability of given systems
- Data silos / diverse data sets
- Managing data access
- Unused potential of the data / cross-data synergy effects

Our Solution



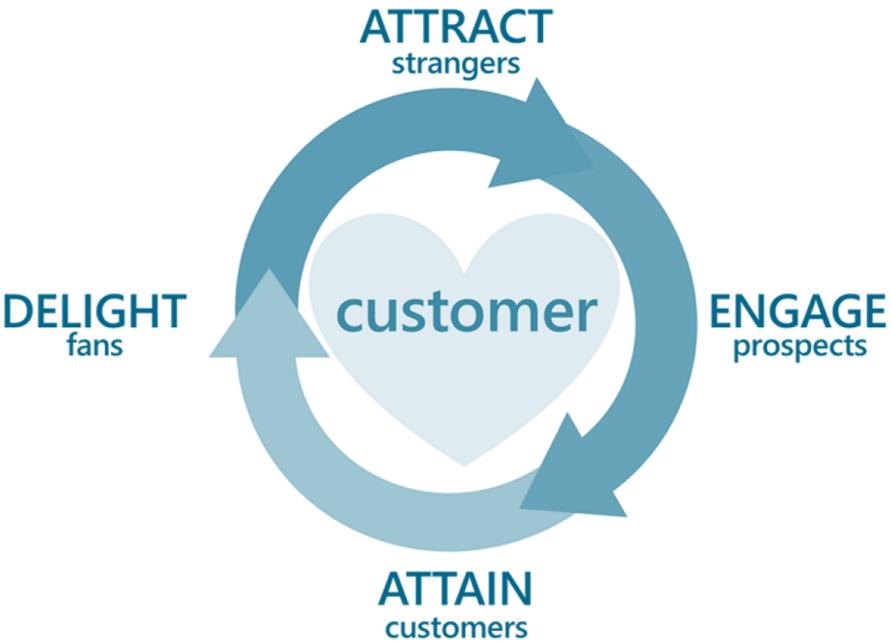
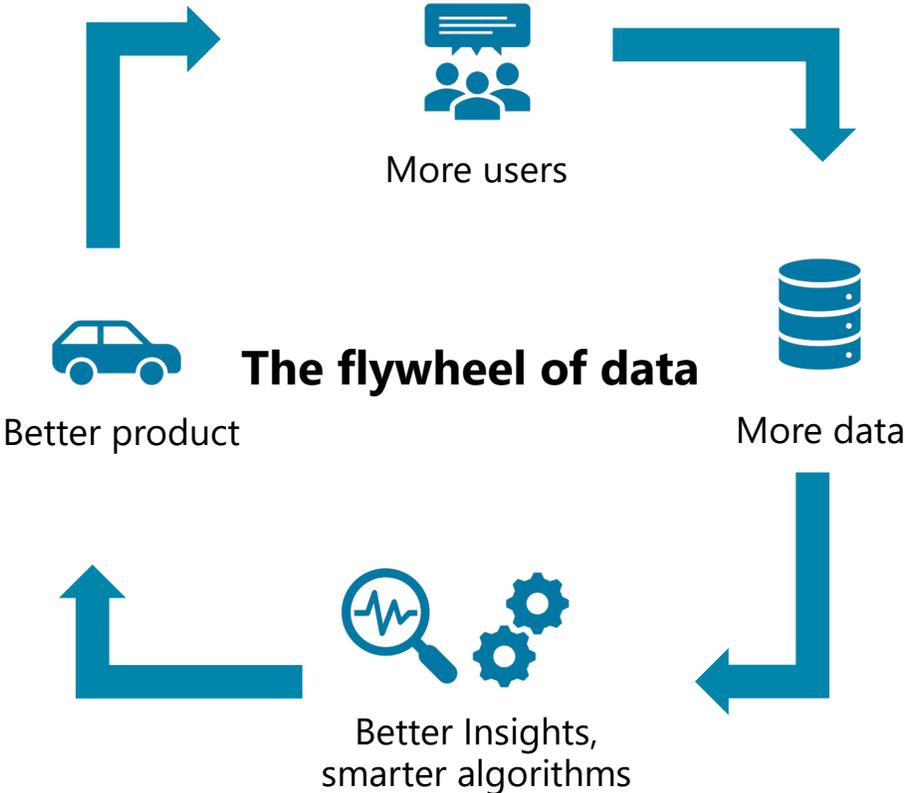
- Reliable ingestion of all kinds of data sources
- Scalable data processing
- centralized data access / governance
- Maturity model
- Self service approach
- Security by design

The Result



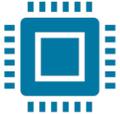
- New use cases, e.g.
 - Advanced analytics
 - Predictive maintenance
 - Real-time monitoring
- Cost control
- Scalability
- Democratized data
- Data-driven decisions

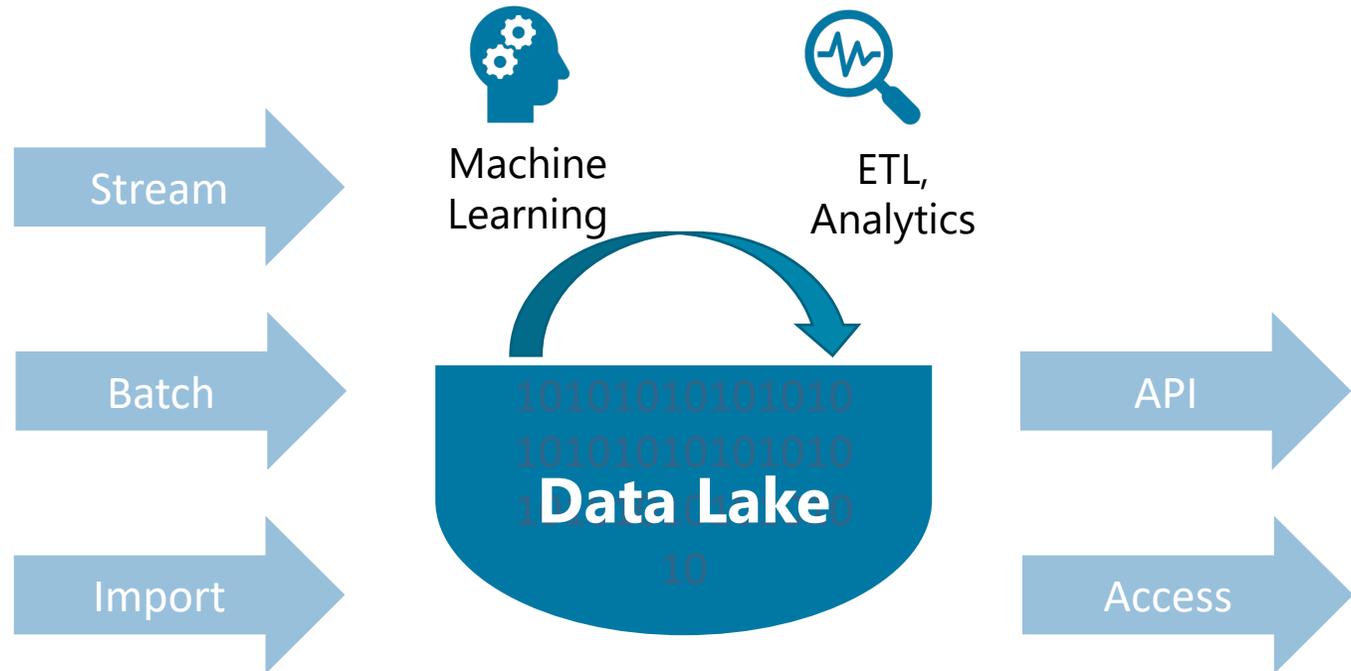
FINDING VALUE IN DATA IS AN EXCITING JOURNEY



DATA LAKE AS A CENTRAL DATA REPOSITORY



-  
 - Production
 - Control Devices
 - 5G
-  
 - IoT Sensors
 - Connected Cars
-  
 - Web-Sites, 3rd Party
 - CRM
-  
 - Historical data
 - Traditional databases



-  • Real Time Reporting
-  • Dashboards
-  • Quality control
-  • Custom Apps
-  • New business

DATA LAKE – BENEFITS!

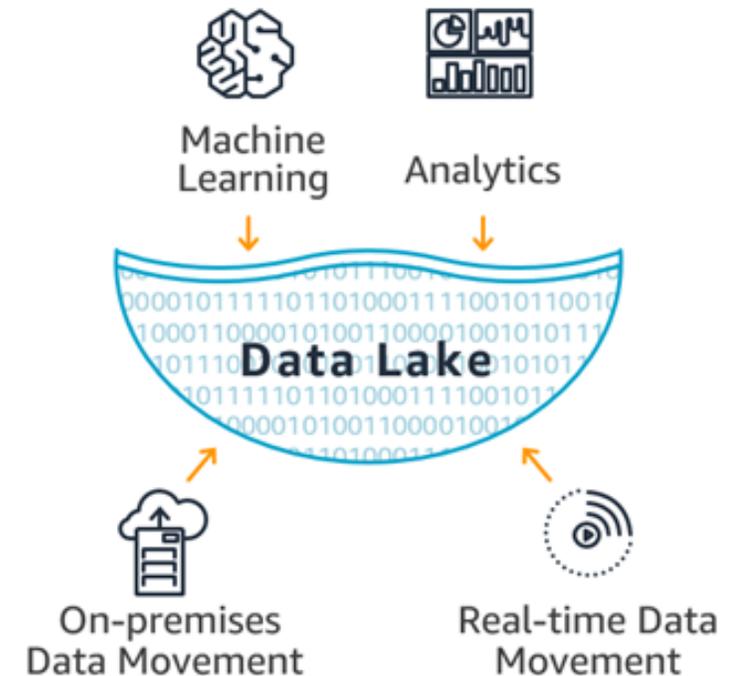


BUSINESS BENEFITS

- ✓ Improve customer experience
- ✓ Improve R&D capabilities
- ✓ Increase operational efficiency
- ✓ Scale on-demand
- ✓ Pay per-use

TECHNICAL BENEFITS

- ✓ Scalability (infinite) whilst keeping low latency and low costs per GB
- ✓ Optimized for analytics
- ✓ Data encryption at rest
- ✓ Regional and/or global deployments



Full Service for the full Data Lifecycle



DATA THINKING



DATA-DRIVEN BUSINESS CONSULTING

- Vision & Roadmap for Digital Transformation
- Requirement & Readiness Assessment
- Development of Minimum Viable Products (MVP)

DATA SCIENCE



MACHINE LEARNING / AI SOLUTIONS

- Development of Algorithms and Analysis Models for Big Data Applications
- Predictive Maintenance & Anomaly Detection
- Recommendation Engines, Natural Language Processing, Deep Learning

DATA ENGINEERING



BIG DATA MANAGEMENT

- Data Lakes & Data Pipes: architecture, development & consulting
- IoT Platforms, BI to Big Data migration
- Hadoop ecosystem, NoSQL solutions

DATA OPERATIONS



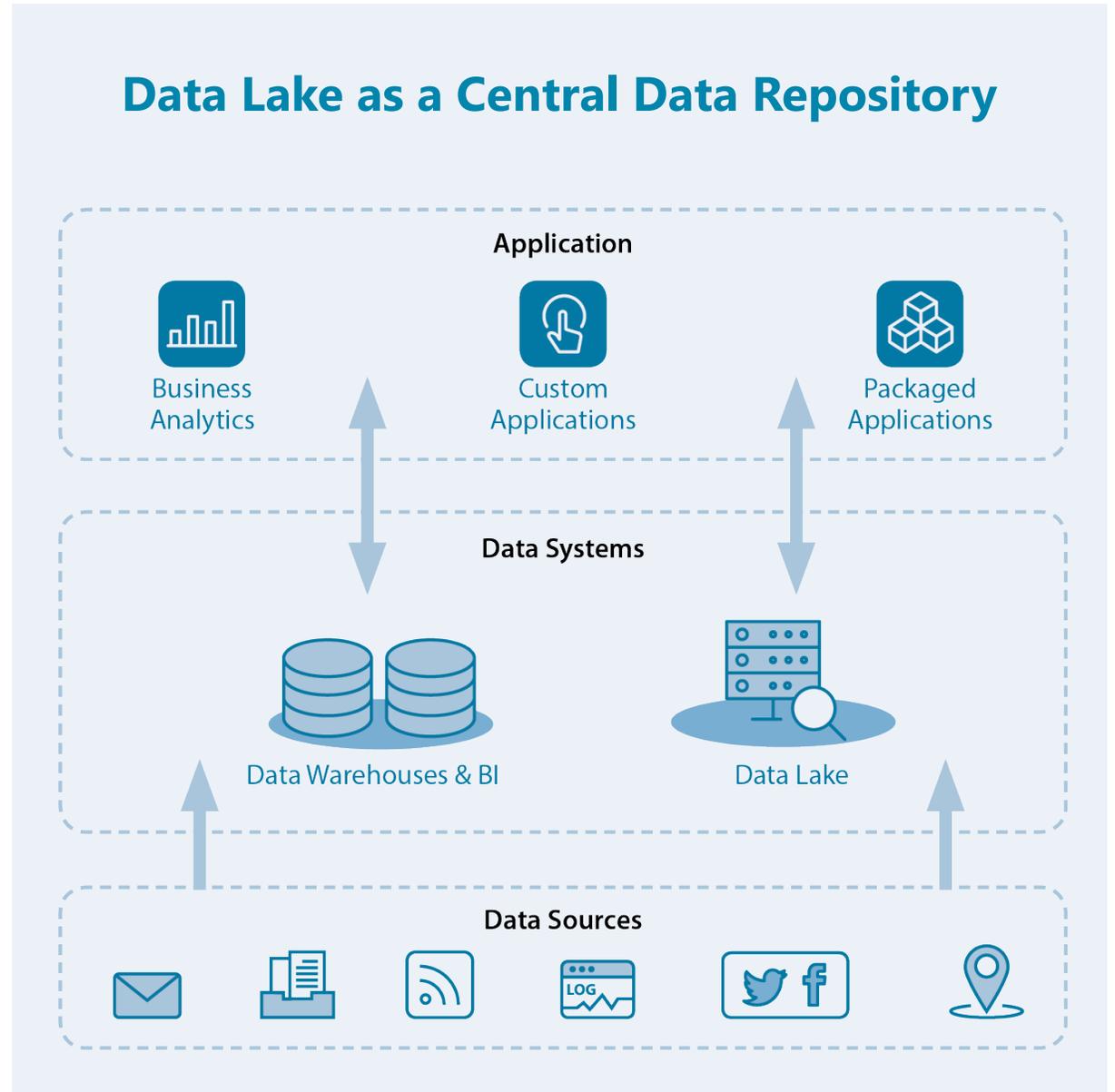
MANAGED CLOUD SERVICES

- Managed Services for AWS, Azure, Google Cloud
- Managed Hosting Services on Dedicated and Hybrid Infrastructure
- DevOps, Bimodal IT Operations & Application Management

Data Engineering

Architecture, Development and Consulting for Big Data ecosystems

- Architecture, implementation and operation of data lakes to store, process and roll out data
- Creating software solutions in close cooperation with our Data Science teams, setting up data infrastructures
- Working with traditional or agile software development methods, quality assurance, security concepts, testing and implementation



Phase-wise agile procedure – 4 STEP APPROACH



FOUNDATION



In this phase, the "stable foundation" for the future platform is laid - in its functional and non-functional requirements, in vision, goal setting and performance measurement, in the form of concrete potentials ("use cases"), which are inherent in the diverse and intelligent analysis and use of data.

SCENARIO DEVELOPMENT



Based on the requirements and objectives, 2-3 potential scenarios of a big data platform are developed and compared: System & application architecture, tool selection, options and recommendations, development perspectives & dimensions along essential key requirements (e. g. scalability), integration/interfacing with inventory systems and processes as well as identification of first candidates for a gradual migration, migration planning, evaluation/recommendation of cloud vs. hybrid vs. dedicated systems

IDENTIFICATION & DETAILING MVP



On the basis of phase 1 and 2, a first version of the Big Data Platform (MVP) will be elaborated and described in a compact form (e. g. in the form of stories for an MVP backlog)

DEVELOPMENT OF MVP



Agile implementation of the first version of the Big Data platform, visibility and measurability of first relevant added value (e. g. elimination of 1-2 significant pain points plus realization of a first new use case as a "lighthouse" application to make new potentials in the area of data & artificial intelligence visible)