



The Data Engineers help you to manage complex business challenges with data technologies, algorithms as well as the right mindset. We support you to autonomously and efficiently master high-volume, digital business processes using data mining and machine learning and thereby empower your organization to actively shape your data transformation. With data science technologies we provide the basis for increasing sales and customer retention.

## DATA CONSULTING

### Data Vision

Defining your data vision marks the first step: Together with you, we define where your data transformation is supposed to take you. This big picture will serve as the guideline for your organization during the digital change process and facilitate your communication on all company levels.

### Data Strategy

#### Status Quo And Requirement Assessment

During the status quo and requirement assessment, you learn the important basics of big data, machine learning, data science, data engineering and data operations. Additionally, we identify your current state of knowledge, abilities and your data architecture. Like this we build the basis of your data transformation.

#### From the Use Case Pipeline to the Roadmap

We translate your business processes into data-driven questions and fill your use case pipeline. The use cases will be prioritized and inserted into the data transformation roadmap. Like this we create a precise implementation plan when we want to implement what and how the organization will keep pace with the data transformation.

#### Data Operating Model

In the data operating model we define the basis for an appropriate organizational structure, we identify involved processes and roles, compose your data governance, create a data security concept, and create a blueprint of your future IT landscape.

### Data Transformation

We support your organization during the digital change. Our toolbox includes: creating an appropriate communication strategy and its implementation, hackathons, workshops, roadshows, challenges and data science trainings. We raise the necessary awareness on all company levels in order to facilitate your data transformation.

# DATA LAB

## From Concept To Prototype

Tailor-made, robust data mining and machine learning prototypes are developed in the data lab. These prototypes can later be transferred into business operations.

At first, we define hypotheses for your use case and then analyze your data. Based on your business-process-driven use case we develop a data-analytical concept. Then we set up a test environment with your data and investigate your use case. At this point, workshops and hackathons are the established means during which we find out if your use case can be realized. We implement – depending on the need – AI, deep/machine learning, real-time/predictive analytics. Like this you receive a proof of concept as well as validated data.

After that we implement the first version of your big data app in a test environment. We work with your data and you will receive realistic results. In the end we will have implemented a validated Data Mining/Machine Learning Prototype that generates first benefits for your users.

# DATA OPERATIONS

## From Prototype To Data Mining/Machine Learning Product

We leave the data lab and transfer the new applications into a productive business environment. We implement the prototype in your organization, industrialize the app and make it available to a broad user community.

It works best to start with a pilot and to implement a minimal viable product. We scale up the application to more and more users and data and transfer it to an appropriate IT platform that guarantees stability, availability, data security and performance.

Working with DevOps, we connect operations and further development, and implement a continuous delivery pipeline that, based on user feedback, constantly improves your data product. Hence, a stable and robust data mining/machine learning product are implemented granting smooth operations and long-lasting business success.

# DATA INFRASTRUCTURE

When setting up your data infrastructure, we support you with installation, configuration, maintenance and operations – including the analysis of errors and trouble-shooting. We advise you which product would be the most reasonable for your organization. Of course, this includes hardware sizing recommendations, as well as consulting services for the configuration of your ETL and data warehouse solution. We design security concepts and implement them into your IT system landscape and conduct data and server migrations of legacy systems.

We support you with the following technologies:

- Environments: public cloud, private cloud and data center
- Operating system / backend: Linux (Debian, Ubuntu LTS, RHEL, CentOS, ...), Windows Server (starting with 2008)
- Data bases: all common data base systems (Oracle, SQL Server, PostgreSQL, MongoDB, MariaDB, Elasticsearch, ...)
- Big Data technologies: best practice solutions, like Apache Hadoop / Spark / Hive, Cloudera, ...
- Security: data encryption on all storage mediums (state-of-the-art technologies) and during the data transfer (in L2TP (over), IPsec, VPN)
- Firewalls: vendor independent consulting regarding the selection and configuration of your firewall

# Our Toolbox



# We support you in your Data Transformation!



DATA  
CONSULTING



DATA  
LAB



DATA  
OPERATIONS



DATA  
INFRASTRUCTURE

## DATA TRANSFORMATION