

Analytics as a Service



Analytics as a Service (AaaS) by B3 provides a cloud-based start-up solution for your company's analytical needs. It helps businesses transform their data into actionable insights and use their information to make intelligent business decisions. The result is more efficient and thorough analysis at a lower cost. It is easy to get started and get professional results quickly, making it a great tool for companies looking to strengthen their BI analytics and make data driven decisions throughout the organisation.

Benefit from a cloud solution and data lake

The setup is based in Azure and utilises powerful dedicated analytical tools such as Power BI. You can also integrate with statistical programming in Sas or R or connect using Azure Machine Learning and Python. A cloud platform holds numerous advantages over on-premises solutions:

- The cost of setting up and maintaining servers is eliminated.
- Servers can be created in minutes and your company can be up and running in no time.
- Scaling is immediate: costs vary only according to processing power and memory size.
- Licensing costs are included and Azure ensures you are always on the latest versions.
- Backup data is stored in a separate physical location in the need of disaster recovery.
- Easy to Opt-In and also Opt-Out if needed to move to other platforms in the future.

In addition, our setup benefits from the use of a data lake, resulting in much higher flexibility with or without a Data Warehouse. A data lake lets your company store all types of structured, semi-structured and unstructured data, from CRM data to social media posts. It is the best way to address great data volumes and varieties. It also enables analysis on a higher level, like how to understand the customer journey, and creates possibilities to meet higher expectations from end users. Overall, you can build a more secure and accessible data asset management, for a more agile organisation and a successful digital transformation.

Build a smarter business

Using our setup, you can minimise the time spent on ETL and data preparation. It allows you to create powerful real-time visualisations on all operational activities, enabling faster and improved decision making. Just as easy you can perform external reporting or create dashboards that facilitate internal governance. Or make predictive analysis that enables your company's growth. Ultimately, AaaS will let your company take the step from reacting to information to predicting what is going to happen and realising desired outcomes.

AaaS helps your company to optimise logistics and distribution, resulting in time saved and improved inventory turnover. It supports a more connected organisation, with streamlined processes and maximal productivity. You can create a more personalised customer experience through dynamic promotions and pricing, as well as enhance customer service, yielding a competitive advantage.

The solution also covers financial reporting. Power BI is an excellent tool for creating income statements, balance sheets and cash flow statements. The reports are interactive, dynamic and highly visual. Another powerful tool in Power BI is the trend analysis of key performance indicators. It is also possible to perform budget planning and financial forecasting, making it possible to see where your company is headed.

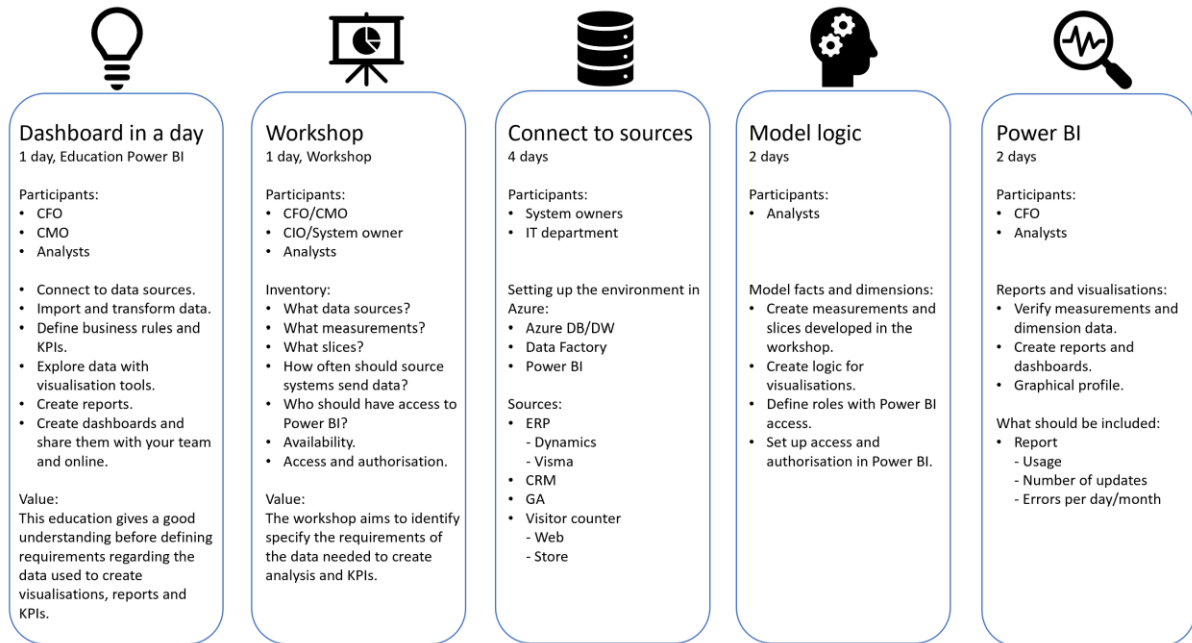
Machine Learning & Artificial Intelligence

Getting started with and getting access to the power and automation of machine learning and AI has never been easier. With AaaS you can use data mining to analyse business data to find and confirm unknown relationships. The analysis leverages statistical models and algorithms to better understand previous events and make better predictions about the future. The pinnacle of data analysis is a synergy between business, data and mathematics to define the best course of action. AaaS gets your company started with standardised machine learning algorithms and pretrained models.

Subsequently, you can build customised machine learning algorithms that fit your unique business case. Azure Machine Learning Studio supports neural networks, regression, decision trees and other supervised learning. Some of the tools include text analytics and image recognition. It also has modules for unsupervised learning in the form of clustering with K-means. In Studio, users can quickly create predictive models with drag and drop. More advanced users can execute R or Python code within the studio. The results of the machine learning algorithm can then be visualised using Power BI. Alternatively, the calculations can be made directly in Power Bi AutoML.

Realisation

Here is an example of a two-week schedule used to implement AaaS and educate any affected personnel



In our setup, data is fed from on-premises and external source systems into a data lake in Azure Storage. Due to the benefits of using a data lake we use Azure Blob storage. The data is mapped with a file schema describing the structure of the data. The database can then be used with e.g. Power BI, Python, or R.

