On-Demand and customizable Workshop

It's essential to us to get to the bottom of your company's needs and objectives. The on-demand and customizable workshop features a number of activities to set us in the right direction for the solution.

Each on-demand workshop is unique and allows us to collaboratively tailor the solution that fulfills your needs.

The workshop can be conducted either in-person or virtually.
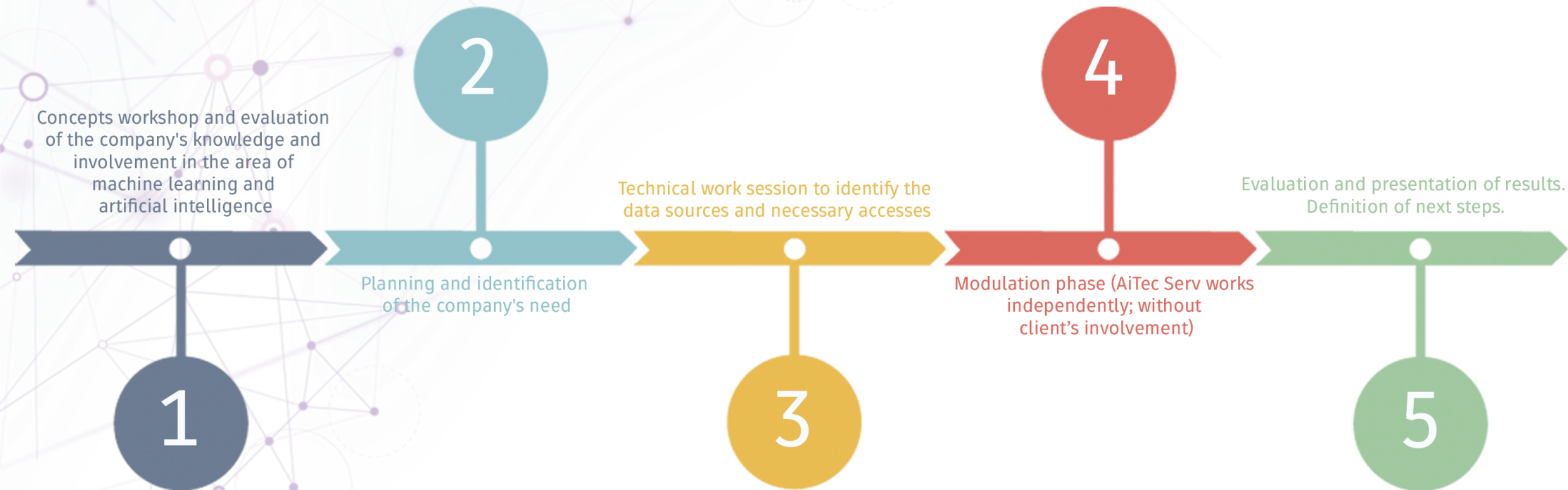
Workshop details:

- 1 to 5 workshops delivered, depending on client's needs;
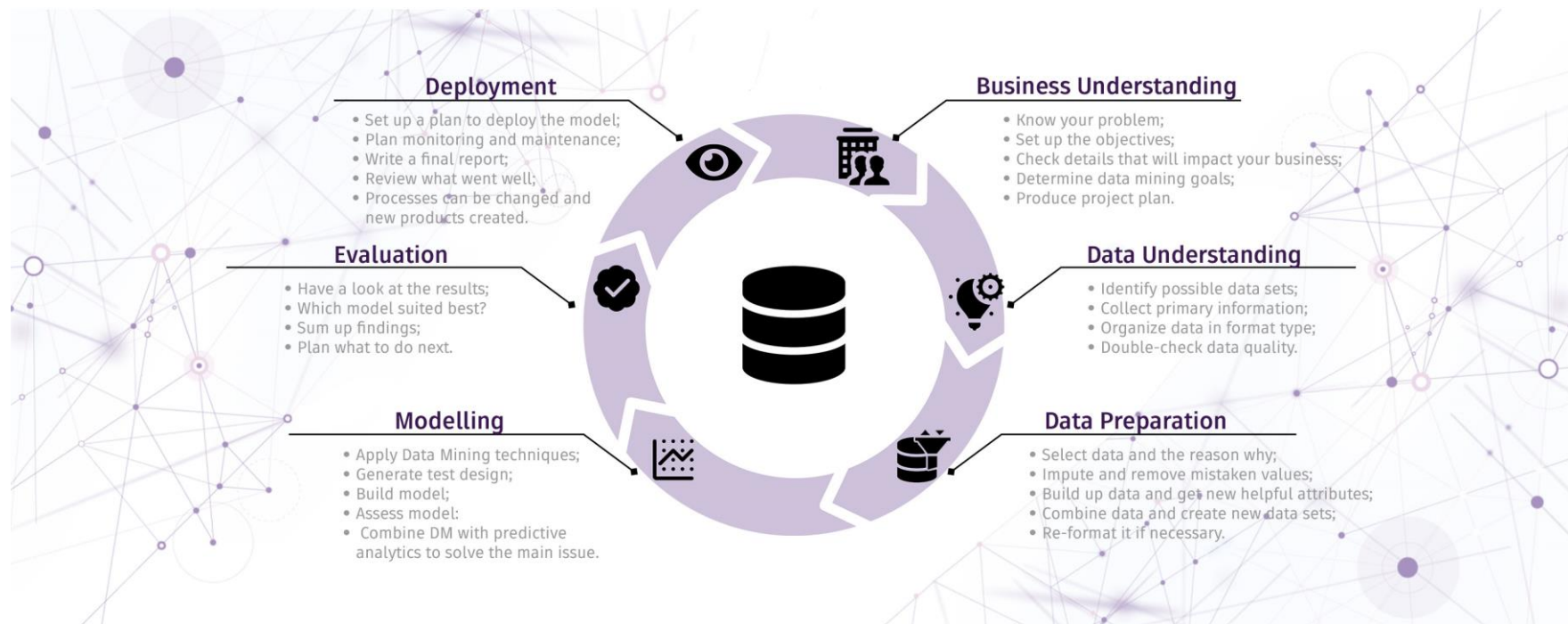- 1-2 hours duration of each workshop;
- Maximum two years duration.

During the workshop we will:

- Explain concepts of Machine learning and AI;
- Example case presentation;
- Apresentação de caso de exemplo
- Discussion and identification of priority situations for the application of machine learning.
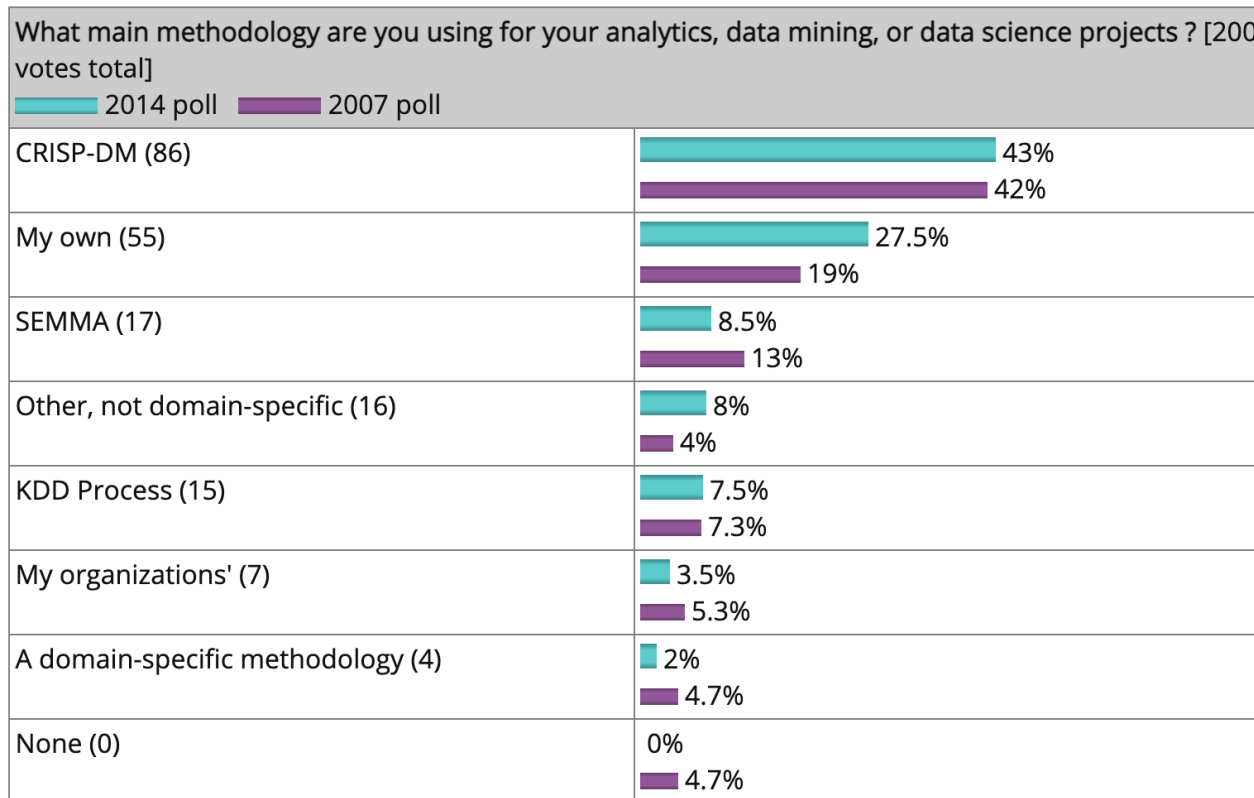
| Workshop Process and Steps

Concepts workshop and evaluation of the company's knowledge and involvement in the area of machine learning and artificial intelligence

2

Technical work session to identify the data sources and necessary accesses

4

Evaluation and presentation of results. Definition of next steps.

1

Planning and identification of the company's need

Modulation phase (AiTec Serv works independently; without client's involvement)

3

5

CRISP-DM Methodology

Our process is based on the CRISP-DM (**Cr**oss-**I**ndustry **S**tandard **P**rocess for **D**ata **M**ining) methodology, which consists of 6 steps to conceive a Data Mining project and it's capable of transforming a large number of company data in knowledge and managerial information.

CRISP-DM Methodology

CRISP-DM is one of the most used methodologies in data mining projects as we can see in this poll , conducted between 2007 and 2014

What main methodology are you using for your analytics, data mining, or data science projects ? [200 votes total] 2014 poll 2007 poll		
CRISP-DM (86)	43% (2014)	42% (2007)
My own (55)	27.5% (2014)	19% (2007)
SEMMA (17)	8.5% (2014)	13% (2007)
Other, not domain-specific (16)	8% (2014)	4% (2007)
KDD Process (15)	7.5% (2014)	7.3% (2007)
My organizations' (7)	3.5% (2014)	5.3% (2007)
A domain-specific methodology (4)	2% (2014)	4.7% (2007)
None (0)	0% (2014)	4.7% (2007)

Source: https://www.kdnuggets.com/2014/10/crisp-dm-top-methodology-analytics-data-mining-data-science-projects.html

Business Understanding Sessions

Churn Rate Reduction   Cost Reduction   Customer Loyalty

Data Science is the most recommended solution for getting reliable reports and information quickly. They transform a great data number into knowledge, management data and optimize resources. Understand what is churn, cross and upselling and using them in favor of your company is paramount. They detail data which provide new insights, increasing the possibility of more revenue from an existing customer-base, as it can offer them relevant products and services, that adhere to the right customer. It is a win-win process that can power up your company.

Analysis and Prioritization of needs

To be successful, Data Science requires two major traits: focus and prioritization. Its success requires both the IT and Line of Business leaders to focus on what's important to the business, and prioritize "important" over "urgent."

To achieve the biggest financial success in this business, have a plan and the organizational discipline to do the important things first. Then, iron out your needs to seek for solutions and consequently, a better business development.

Data Identification

Collect initial data

Get access to data

Verify data quality
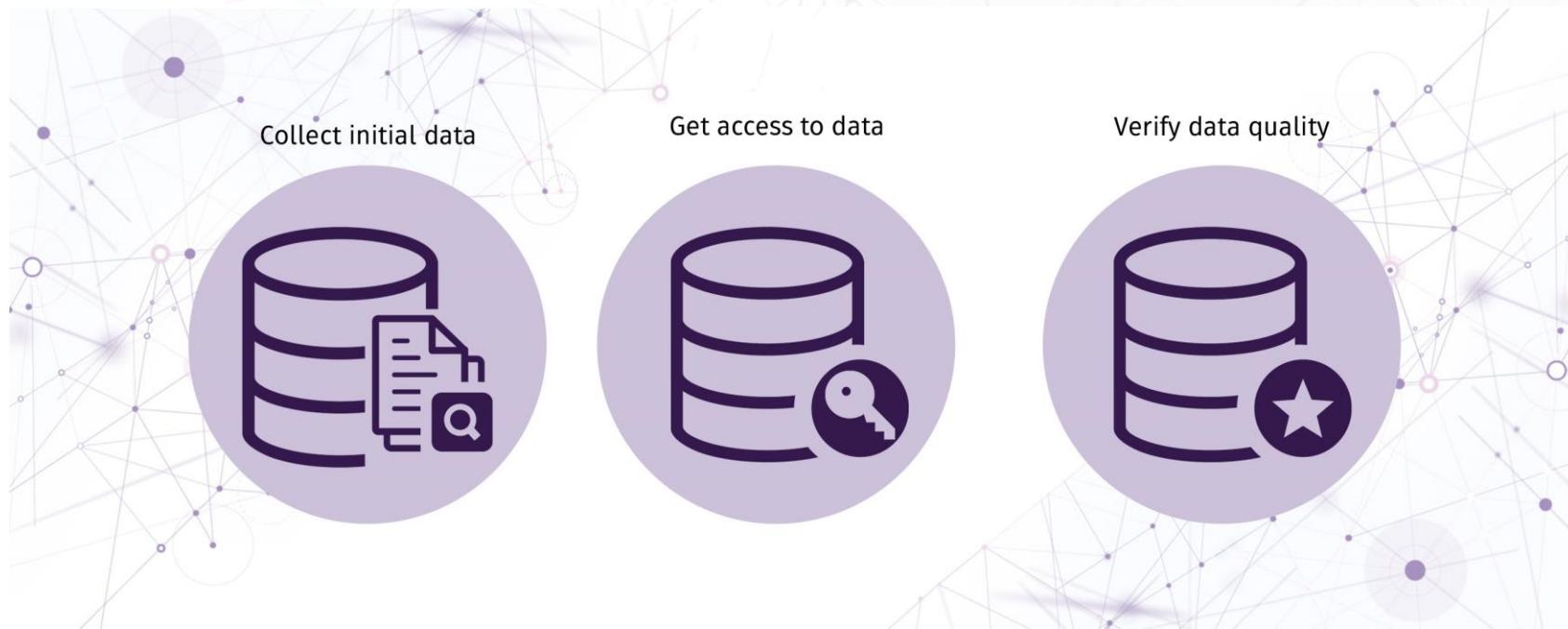
Once we have identified the business needs, we will collect data and prepare them for the next steps. We will verify the need for specific access to some data, and we will carry out an initial quality assessment.

Data collection, Cleaning and preparation
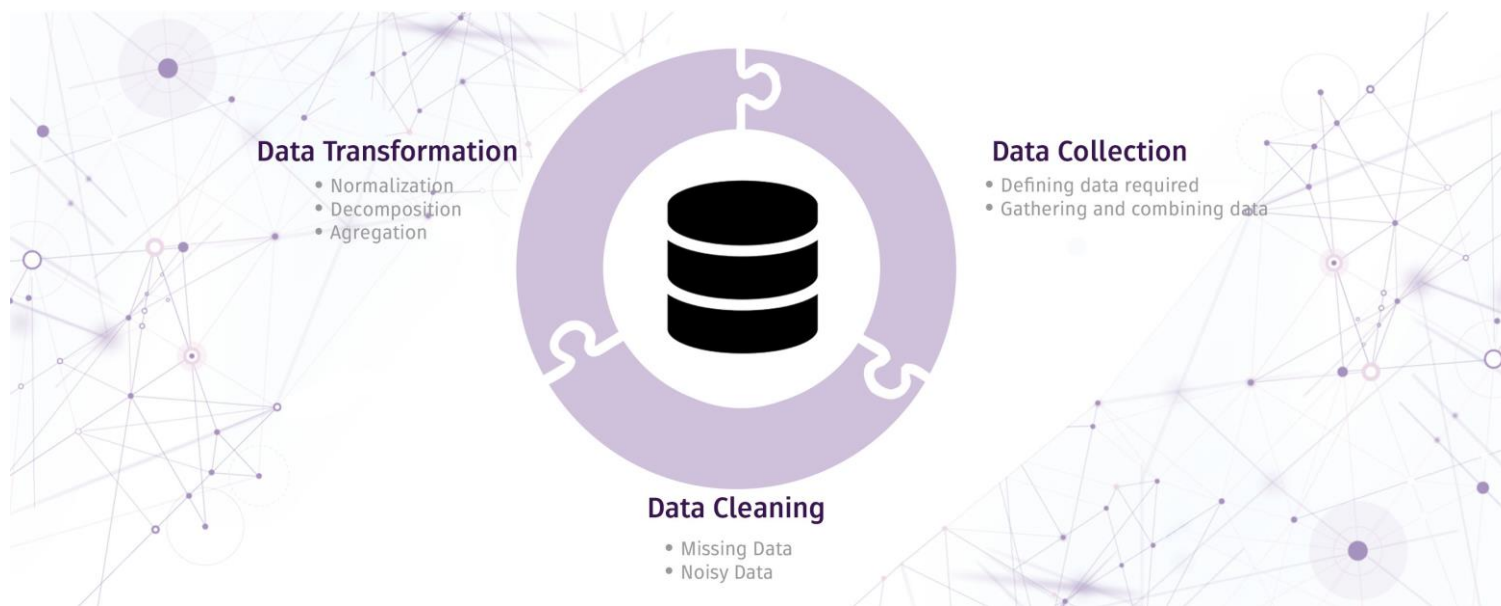
Improve business workflow and accurate data, enables market analysis, competitor analysis, pricing or cost optimization. These are some Data Collection benefits which can be time-consuming and expensive without a great team behind it.

To perform a good data analysis, it is necessary to gather qualitative and relevant information from diversified web based resources. It is done by using advanced techniques to collect voluminous quantities of data and delivering accurate analytics insights.
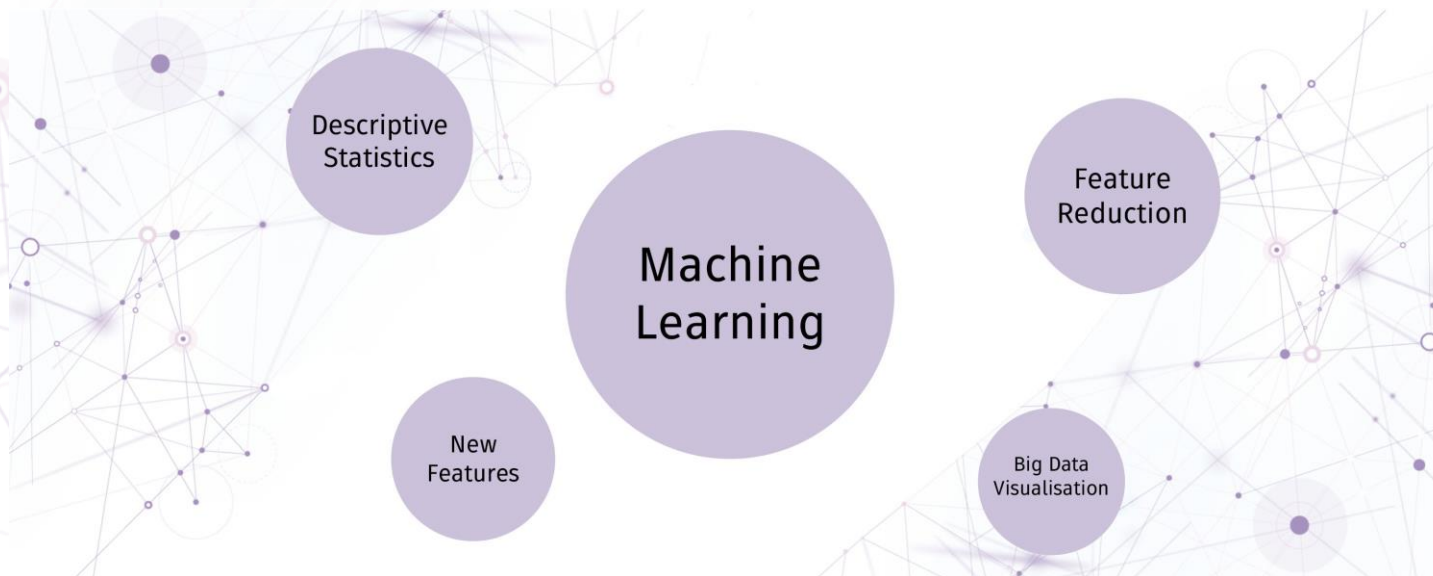
Data analyses

Data analysis allow businesses to get their data collected, processed and presented to them in the form of actionable insights. It delivers statistics that detect connections between the data sets and can be customized to meet your business needs, such as reducing decision-making time or increasing transparency.

There are many fields which it is applied; from HR, Manufacturing to Supply Analytics. Employee hiring strategy, equipment maintenance scheduling and identifying demand drivers, consumer demand forecasting and planning are a few of them.

Modelling

The future of any database relies on how the data is modeled and the assurance that all will be successfully integrated with each other. Building, evaluating, deploying, and monitoring machine learning models can be a complex process.

At this point, some questions are made and answered: where is the data coming from; how is it currently being organized and processes/applications are doing that organization; who and/or what touches the data and when… Modeling will execute Machine Learning these tasks.

Workshop for results presentation and evaluation

After conducting valuable data analysis, you must capture the value of that analysis to ensure decision-makers understand those results in order to make sound decisions. Here, we look more broadly at which model best meets the business and what to do next by checking the results.

It is time also to describe the process to clearly communicate analysis results, develop tables, graphs, and charts that convey information quickly and concisely. Additionally, it is recommended to apply the most appropriate method to evaluate both quantitative and qualitative analysis results.

The process ends here, the construction and implementation of the model based on the findings is not part of the workshop and must be contracted separately.

Next steps: Construction of a technical solution and deployment of the technical project, going through the steps of the process. The entire project can be executed and managed by AiTec Serv.