National University of Science and Technology Politehnica Bucharest Advanced Analytics for Business **Predictive Modeling** 

Name:	
Master:	

## Practice 2. Handeling missing values

In this practice, you will use the dateset **ORGANICS**. You will need to handle missing values.

Launch Visual Analytics or start a new report.

- 1. Explore the missing values from the loaded dataset using **Explore and Visualize** reports.
- 2. Create a pipeline using **Model Builder** to explore the missing values.
  - o Indicate the missing values ratio of each variable in the dataset;
  - o Explain the input variable data correlation;
  - o Conduct a complete case analysis. Identify the complete cases.
- 3. Add to your pipeline a Variable Imputation block.
  - o Explore all imputation method both for numerical values and categorical values;
  - o Create single indicators for the categorical variables;
  - Create unique identifiers for the categorical variables and use them as input in the modeling process.
- 4. Add a Logistic Regression block to your pipeline.
  - Explore the binary target link functions; Create multiple Logistic Regression models with different binary target link functions and compare them.
- 5. Add a Neural Network block without any configurations.
  - o Compare the models.

## Important:

- Answer the question is this practice either in 1-2 paragraphs or by adding a screenshot that proves that you have accomplished the assignment correct;
- Convert the obtained file to a PDF file and upload it to Moodle.

Assignment due date: 01.05.2025 on Moodle.