

# 1 Modelling Report

The report should summarise the details of the modelling activities, e.g. machine learning experiments.

## 1.1 Initial situation

- Aim of the modelling - consistent with *Data Mining Goals* in the project charta
- Data set(s) and/or feature set used (references to the data report)
- Description of the independent variables and (if applicable) the target variable
- Type of model used or developed

## 1.2 Model Descriptions

Overview of the models used and/or implemented and their configurations

- Detailed description of the model used (e.g. literature references, specification of the software library, exact module, version or other implementation details etc.)
- Graphical representation of the modelling pipeline
- If applicable: link to the code of the modelling pipeline, version information in code repository, configuration files
- If possible, links to the artefacts of the executed modelling pipeline (training experiment)
- Link to the literature in which the model/method is described
- Hyperparameters

## 1.3 Results

Key figures dependent on the model and modelling objective

- RMSD, ROC/Lift-Charts, AUC, Confusion Matrix, Accuracy, Precision, Recall
- Coherence, Perplexity, ...
- If applicable: analyses/plots of (hyper)parameter screenings

## **1.4 Model Interpretation**

- If applicable: Results from the application of “explanatory models”
- Were the modelling objectives achieved?
- The findings resulting from the modelling phase: can the project objective be achieved with the results from the modelling phase?
- How can the findings be used? Are there any limitations?

## **1.5 Conclusions and next steps**

- Conclusions of the key findings from the modelling phase
- Discussion about limitations
- Proposal for extensions and further work
- Proposal for the deployment of the generated insights/model