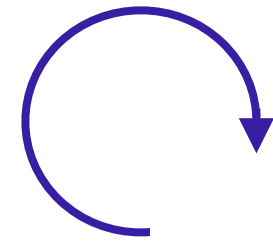


DrWhy.AI : : Visual exploration, explanation and debugging of predictive models

In each iteration model development starts with some concepts, ideas, then the model is trained and finally model needs to be validated.



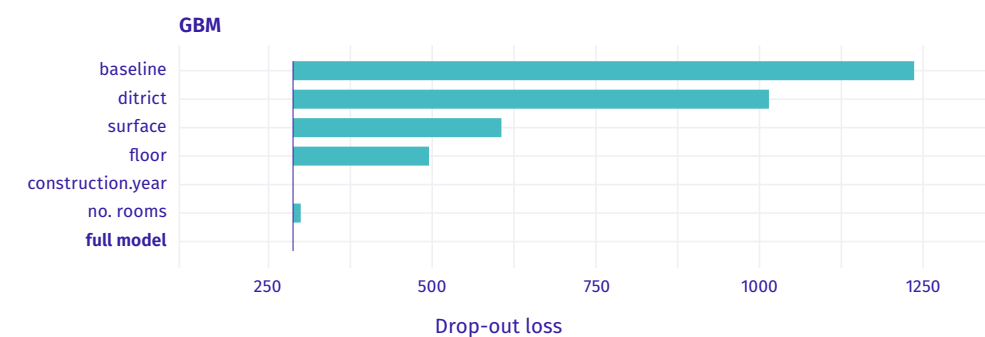
Concept

Forge

Validate

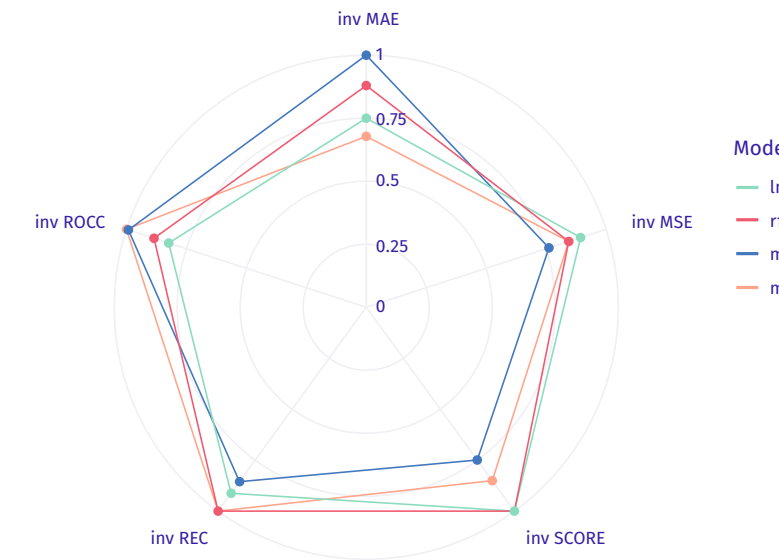
Variable selection

Variable importance



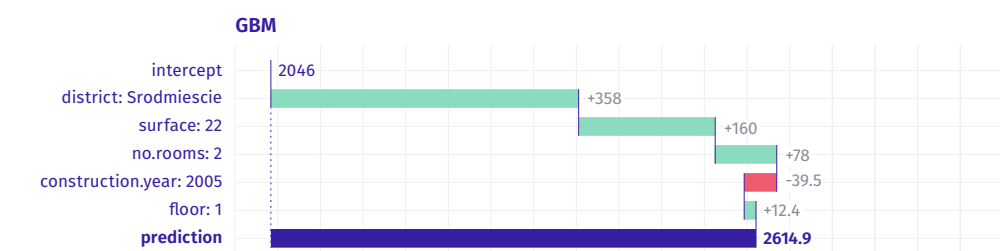
Model benchmarking

Model Ranking

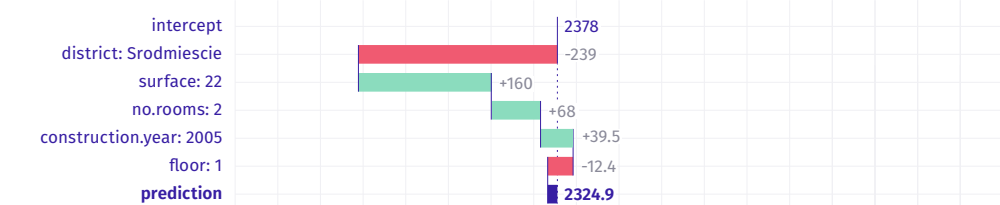


Model debugging

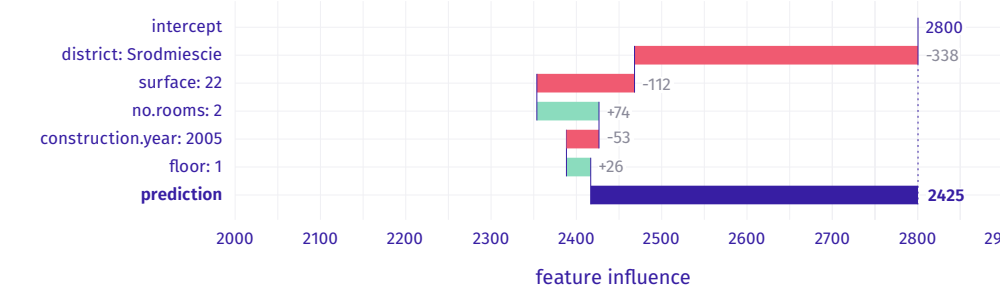
Variables attributions



Random Forest



LM



Model development is an **iterative process**. Each iteration brings new insights.

Early phases:

Crisp modeling, general understanding of the problem.

Medium phases:

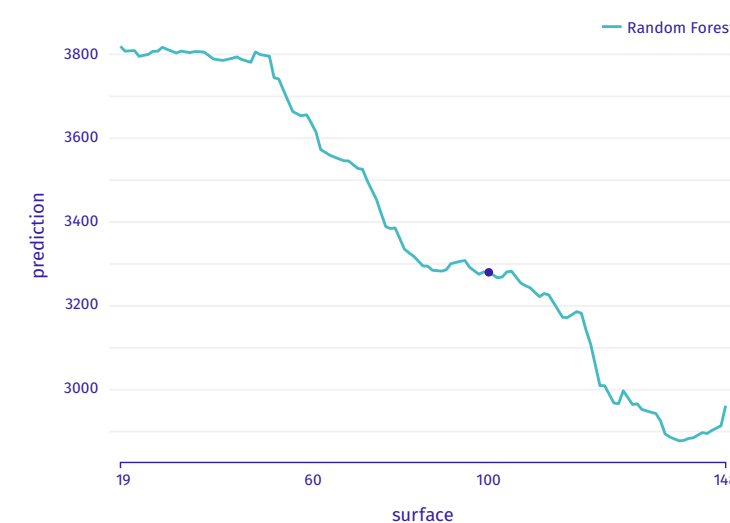
Selective modeling, here we select the best type of model.

Late phases:

Fine tuning of model parameters or variable engineering.

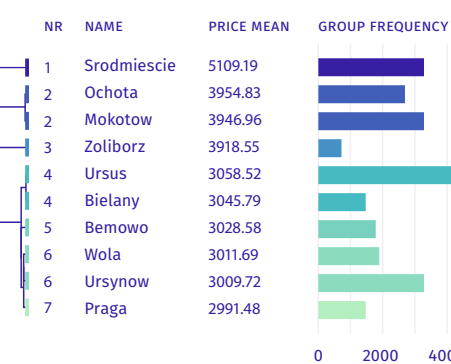
Feature engineering

Surface



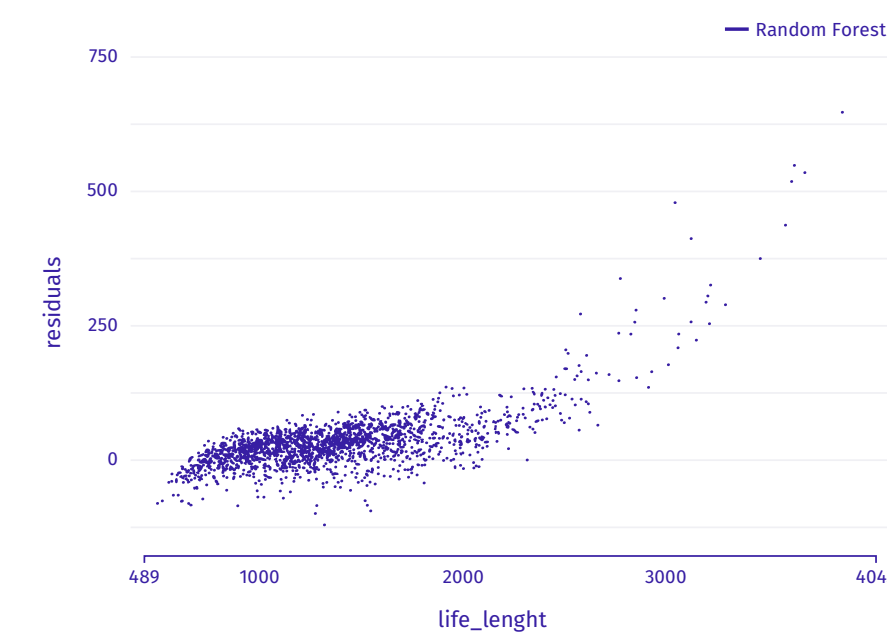
Factor Merger

Random Forest



Model auditing

Residuals vs life lenght

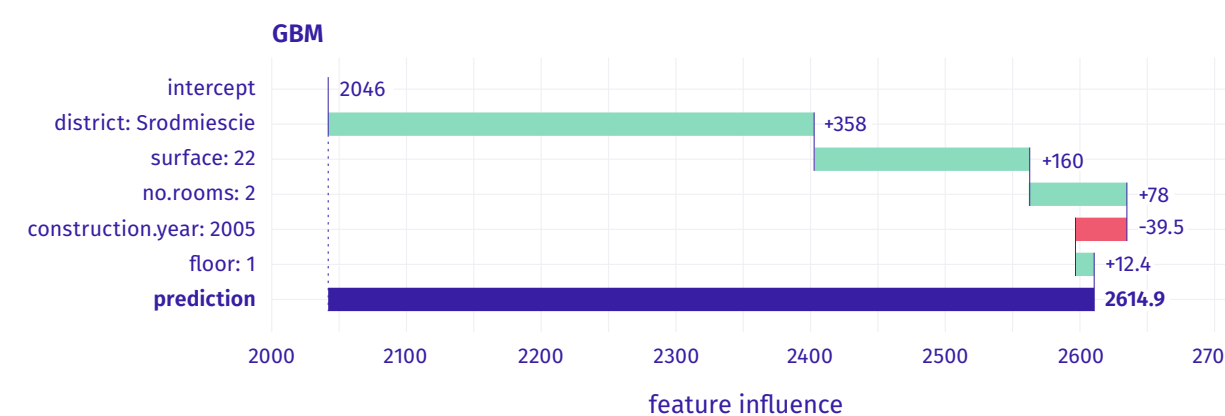


Development

Production

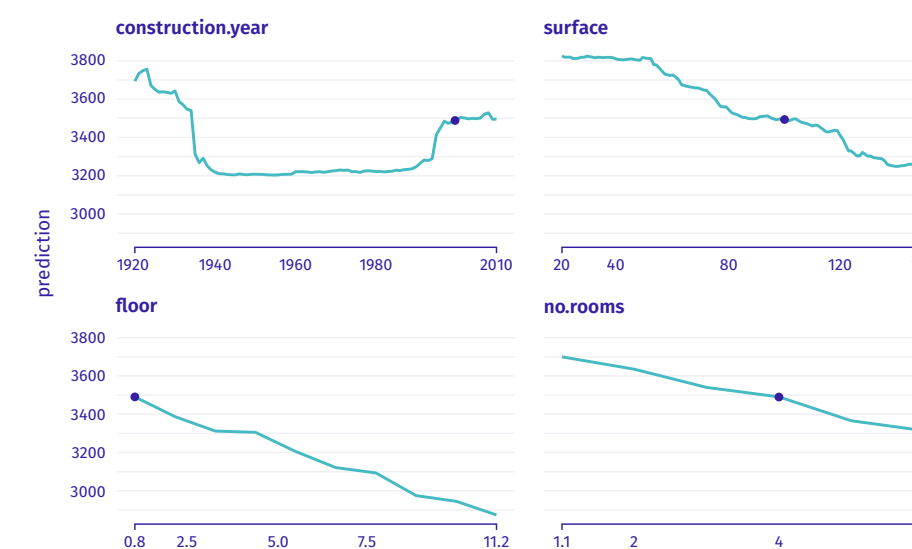
Prediction explanations

Variables attributions



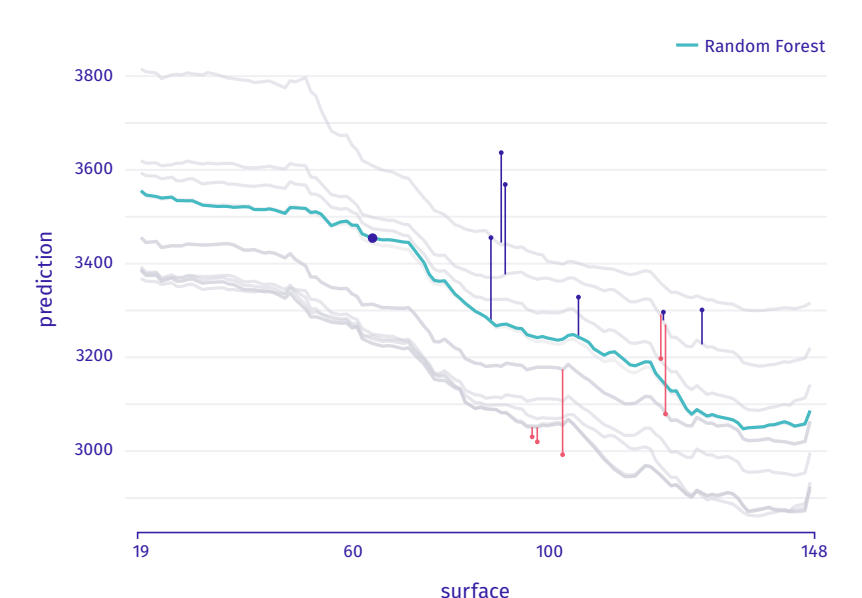
What-If analysis

Surface



Concept drift detection

Surface



Predictions need to be explained. Here the instance level explanation helps.

With time the model performance may deteriorate, thus it requires constant monitoring, e.g. with the drifter package.