



NORTHWESTERN
UNIVERSITY

SCHOOL OF
CONTINUING
STUDIES

Handout: Best Practice of Modeling Process in a Business Environment

PREDICT 410: Predictive Modeling I

Phase 1: Project Scoping

- Understand the business objective.
- What will the model be used for? How will the model be applied?
- What data are available for analysis?

Phase 2: Model Design

- What is the appropriate model for solving this business problem?
- Can other methods be used?
- What is the best solution?
- Provide the model solution to the business owner.

Phase 3: Data Audit

- Require the appropriate data for analysis
- After obtaining the data, audit data to ensure the data meet the requirements.

Phase 4: Modeling

- Check assumptions.
- Estimate the model.
- Assess the overall model fit.
- Interpret the model variables.
- Validate the model.
- Produce the final model result.

Phase 5: Communication with the Business Owner

- Ensure the result makes business sense.
- Provide the model application recommendation.

Phase 6: Implementation of the Model

- Apply the model.
 - Score business file.
 - Apply the model score to aid business objectives such as optimizing the marketing campaign result.

Phase 7: Monitor the Model Performance

- Perform backend analysis to ensure the model is performing as expected.
- If model is not performing as expected, collect new data to refine the model.
- If model is working, monitor the result performance. Refine the model when the model performance starts to drop.
 - Refresh the model every 18–24 months.