

Data Analysis and Knowledge Discovery

Deployment phase

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- ▶ Evaluation of the model and the findings of the data mining process is already a part of the CRISP model. Evaluation includes
 - ▶ statistical evaluation (like cross-validation), but also
 - ▶ plausibility checks.
- ▶ Before a model (for instance a prediction model) is applied in practice, the impact of the use of such a model should be taken into account.

Example. Being aware that something is predicted by the model, might already change people's behaviour.
- ▶ If possible, a testbed for evaluation of the model in practice should be established.

Monitoring the system during operation aims at recognizing a drop in performance.

The “world” might change over time and the model derived from the original data might be no longer valid.

- ▶ Objectives change.

Example. A company might change their target customers or core products over time.

- ▶ Invalidated assumptions.

Example. The underlying data distribution might change or the ranges of certain attributes might change.

- ▶ The world changes.

Example. New products might be introduced, customer habits change (e.g. now buying more items on-line), competitors come and go, new machines are available for production, more powerful computers are available for simulation and planning, ...