The KNIME Model Factory
- Workshop -
KNIME and The Next Generation Model Factory

Using a platform and well defined metadata to create, execute, monitor and control all aspects of modelling processes
### The Tables

#### ProcessDefinition
- **Process_Name**
- **Step_Type**
- **Location**
- **Description**
- **User Defined**

#### Modelling_Configuration
- **Model_Name**
- **Process_Name**
- **Metric**
- **UpdateType**
- **Threshold**
- **CurrentModel**
- **ChallengerModel**
- **Model_Initialisation**
- **Responsible**
- **Last_Execution**
- **User Defined**

#### Models
- **Model_Name**
- **Process_Name**
- **Date_Model_Created**
- **Model**
- **Model_Type**
- **Model_Update (Y/N)**
- **User Defined**

#### Evaluation_Table
- **Model_Name**
- **Process_Name**
- **Date_Model_Created**
- **Timestamp**
- **Value**
- **Model_Update (Y/N)**
- **User Defined**
The Abstract Model Factory

Abstract Model Factory

Execute all Modelling Configuration

- Get model configuration table
- Table Row To Variable Loop Start
- Select model process definition

- Cleanup and collect
- Loop End
The heart of the factory: Call Local Workflow

- Executes another workflow in the same instance
- Interface is via JSON

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Two Use Cases

• Trend prediction

• Price prediction

[Images of a television and a washing machine]
Some results - AirBNB

>2_Beds | AirBNB Price Prediction

>2_Beds | AirBNB RentApp Prediction

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>2_Beds | AirBNB RentApp Prediction
Some results – Product Data