BIOVALUE´S DATA WAREHOUSE

WHAT IS A DATA WAREHOUSE?

In BioValue, we're developing a tool to help introduce underutilized crops into the food supply chain. We're using a modeling approach that looks at how different players interact in the agricultural system. We're considering factors like climate and water availability and aiming to encourage biodiversity by involving market and social influences.

Within this attempt, the creation of a data warehouse can be very valuable. In particular a darawarehouse helps in several aspects:

COLLECTING AND ORGANIZING INFORMATION:

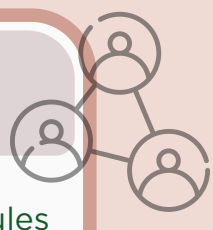
The agents might need information, like weather data or historical facts, to make decisions. A data warehouse collects and organizes all this information in one place.

CONNECTION TO MARKET

In BioValue's framework, we consider both value chains and markets. Markets have a big impact on how agents behave. ABM incorporates **demand-related factors** to make market recommendations, which in turn influence the decisions of everyone in the value chain.

SETTING RULES FOR AGENTS

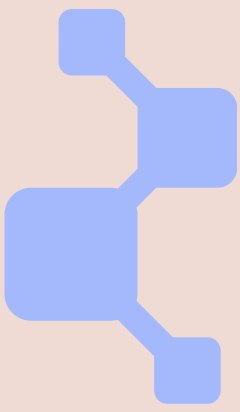
HOW IT WORKS

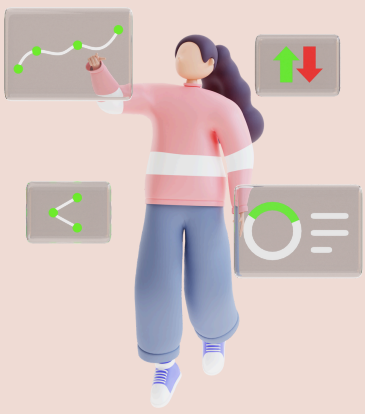


- The agents have rules they follow, like "if it's raining, go inside."
- These rules often depend on data. The data warehouse helps us store these rules and change them easily.

MAKING SURE EVERYTHING FITS REALITY:

We want our model to be as close to reality as possible. The data warehouse stores real-world data that we can use to check if the model behaves realistically.





HELPING AGENTS MAKE DECISIONS

When the agents need to decide what to do, they can use data from the warehouse. For example, if they would be cars, they can check traffic data to decide the best route

TRYING DIFFERENT SCENARIOS

We can use the data warehouse to test different situations, like "What happens if it's really sunny?". This helps us to understand how different conditions affect the model.

SEEING WHAT HAPPENED

After using our model, we can look at the data in the warehouse to see what happened.

Find the whole analysis HERE

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BioValue