A Bidirectional Model-driven Spreadsheet Environment

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**MDSheet** is a framework for spreadsheet model and spreadsheet data co-evolution, providing several transformations that can be applied to models or data, ensuring that they are always kept synchronized.

The user can update both the Model or the Data.

Both Model and Data are sent to the MDSheet back end. If the user updates the Model, a Model Evolution step is performed; otherwise, a Data Evolution step is performed.

Both the Model and the Data are sent back to the spreadsheet system.

Evolutions are guaranteed to be safe.

The user may perform more evolution steps on the evolved Model and Data.