Data Fusion for Sales Forecasting and Scenario Testing

SKIM
decision behavior experts

Predicting future consumer behavior is difficult but not impossible. By blending various data sources such as historical sales data and experimental data such as conjoint, more accurate sales forecasts are possible. SKIM's data fusion approach is powerful because it leverages the best of each data set while overcoming the limitations of each, which facilitates more holistic decision-making.
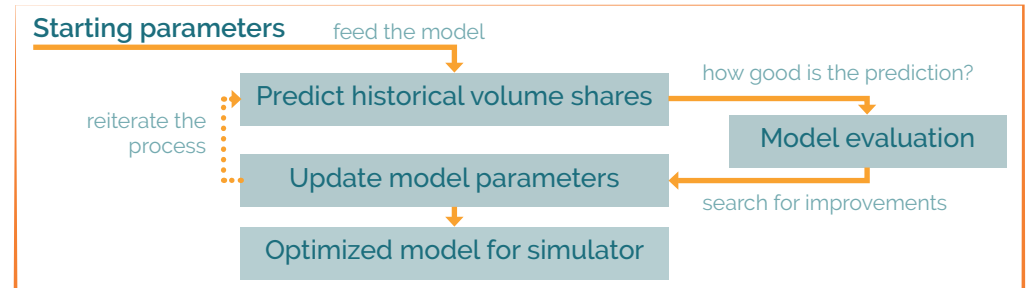
What questions does it answer?

- What is the outlook of future sales over time if nothing changes in the market?
- What is the impact of external factors such as distribution and promotion?
- What is generally the reaction of competitors on market changes?
- What would be the impact of portfolio changes?
- What are the optimal prices for my products?

Why do you need it?

The amount of data that companies rely on today to help guide business strategies can be overwhelming. Mining the vast amount of internal and external data alone is no small feat, but rear-looking analysis is only half the battle towards data-driven decision making. Thanks to the combination of historical data with predictive 'forward-looking' data, SKIM's Data Fusion approach, provides more accurate insights and actionable recommendations.

How does it work?

SKIM's data fusion model is fed with several starting parameters based on historical data and conjoint studies such as price elasticities of each product and interactions between the products. It takes into account the theory of time series forecasting and the use of transition matrices. The model is additionally fed with historical data such as sales volume, average shelf price, weighted distribution, and promotional activity. The model evaluation is conducted to update the model parameters. This update is done iteratively to finally end up with the optimized model used for simulation.

Starting parameters — feed the model

- Predict historical volume shares
- how good is the prediction?
- Model evaluation
- reiterate the process
- Update model parameters
- search for improvements
- Optimized model for simulator

Benefits

- Makes use of historical information while being able to **predict scenarios** which have not yet happened
- **More accurate** price sensitivity than behavioral data alone
- Produces insights on **switching among products** given the individual-level behavioral data
- Allows for optimizing future sales on a **granular level**
- Is flexible to include **multiple data sources**/updates

What you get out of it

Market Simulation Tool for:
Future sales forecast
Market scenarios and optimization
Yearly pricing strategy planning

Recommendations
for short and mid-term portfolio and pricing optimization

Wargaming
A wargaming workshop with internal stakeholders to test various scenarios, also against competitor strategies
A one-day workshop with the objective of "stress testing" the business strategy by playing 'what-if' scenarios in a competitive environment of actions and reactions to enhance participants' understanding of market dynamics leading to a better strategy planning and execution.

Are you interested in applying Data Fusion? Contact us today!

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