**Operations Planning Accounting & Control**

# Automated Store Ordering Versus Manual Store Ordering at Jumbo

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JUMBO

## Problem Definition

Jumbo experiences deviations between the automatically generated orders and what the store managers actually order. Jumbo's perception is that, ideally, store managers do not intervene in this automatic ordering process (the so called "hands-off" policy). However, it could be possible that store managers improve the order advice by manually adapting the order advice. Because of that, this Master Thesis focusses on characteristics that are related with the probability that an order advice will be adapted and which of them are likely to add value.

Therefore, the main research question is as follows:
• How could Jumbo narrow the gap between their actual and automatically generated orders



*Figure 1: PDA screen where the store manager can change the order advice*

## Research Design

To answer the main research question, this research was set up as follows (see also Figure 2):
1. Identify incentives for order adaptions. These incentives were identified by interviewing store managers.
2. Check whether these incentives could also be supported by a quantitative analysis (logistic regression).
3. Combine the knowledge from step 1 and 2 to give recommendations on how important reasons for order adaptions could be tackled.
4. Analyse the added value of the order adaptions made by store managers
5. Combine the knowledge from step 1, 2 and 4 to analyse the ordering behaviour such that store support and forecasting & replenishment can improve their processes for moving to a hands-off policy.
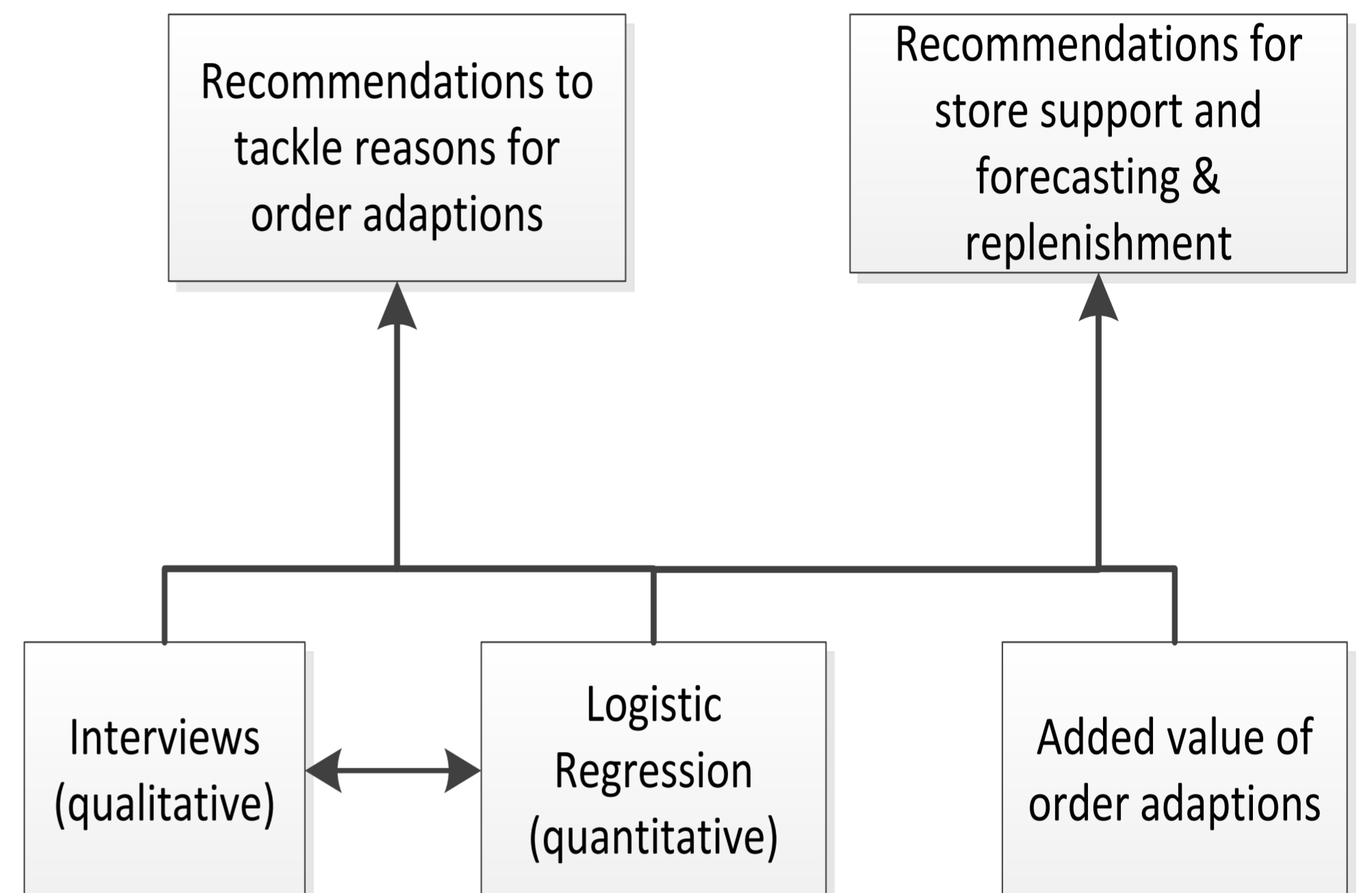


*Figure 2: Overview Research Design*

## Recommendations

Based on the research design, there were two important recommendation directions:
1. Tackle most important reasons for order adaptions
2. Analyse ordering behaviour to improve the processes for store support and forecasting & replenishment

### Tackle most important reasons for order adaptions

Most important reasons for order adaptions and their corresponding recommendations are:
• Second placing: Standardize second placing and change the corresponding minimum shelf quantity automatically
• Improving store view: Increase minimum shelf quantity for non-perishable, high volume products (e.g. beer or water)
• Inventory corrections: Implement re-run functionality

### Analysing ordering behaviour for store support

Use three KPIs to determine how a store should go to a hands-off policy. These three KPIs are: process trustworthiness, added value of order adaptions and order acceptance.

### Analysing ordering behaviour for forecasting & replenishment

Forecasting & Replenishment should use the overall added value data to determine for which SKUs store managers add a lot of value.