

How to recognize campaigns that cause cannibalization (topic presentation)

Petra Huttunen 13.02.2018

Instructor: *TkT Tuomas Viitanen, Relex Solutions* Supervisor: *Fabricio Oliveira*

Työn saa tallentaa ja julkistaa Aalto-yliopiston avoimilla verkkosivuilla. Muilta osin kaikki oikeudet pidätetään.



Background

- If product A is in a campaign (promotion), it can decrease the demand of a non-promotional product, product B
- This phenomenom is called cannibalization
- Cannibalization relationships can be recognized by a few different methods
 - Examples include sales correlation and receipt analysis





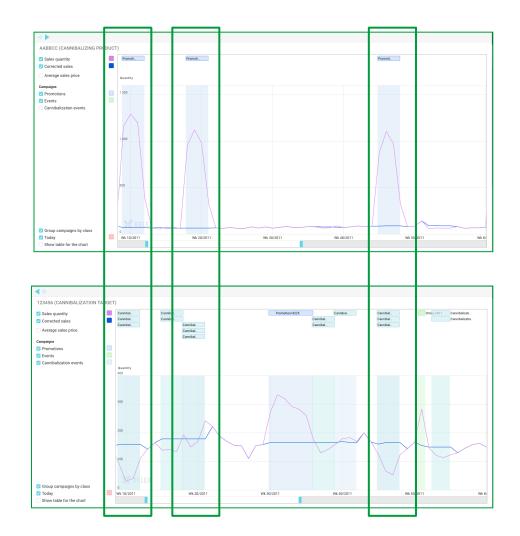
Background

When a cannibalization pairing has been created, we can create cannibalization events for product B for periods when A is on promotion

Aalto-yliopisto

Perustieteiden

korkeakoulu





Background

- Being able to forecast these cannibalization events
 decreases spoilage during those time periods
- Forecasting cannibalization requires knowledge of when cannibalization actually occurs
 - Even if we have already established the relationships, we can't be certain that each campaign of product A causes cannibalization (or the same amplitude of cannibalization) for product B







- The goal is to find out what campaign parameters and metrics attribute to cannibalization
 - E.g. if additional sales of product A during a campaign are > x and the price reduction is > y, product B's demand decreases





Data and scope

- The analysis will be conducted with data from one of Relex Solutions' customer environments
 - Food retailer
- The data will consist of promotions of three different
 product groups
 - Time period 2014-2016
- The promotion data will be combined with information of the cannibalization event and cannibalization relationships





Analysis method

- Taking advantage of the Relex setup and calculations gives us the campaign data, cannibalization event data and cannibalization relationship data in the right format
- The data will be analysed in R, method is to be decided later on
 - Investigating the possibility of using logistic regression
- A literature review will also be conducted





Schedule

- 1/2018: Choosing the topic
- 2/2018: Presenting the topic, setting up the analysis and literature review
- 3/2018: Analysis
- 3-4/2018: Writing the literature review
- 5/2018: Presenting the results



