Product Optimization: Insights on older and newer strategies

Worch Thierry: Friesland Campina, Wageningen, The Netherlands

Abstract

Optimizing samples is a critical step in product development as it allows companies to get closer to the consumer's optimal sample, hence increasing the chances of market success.

Originally, optimization was performed through statistical modelling that combined sensory description of the samples gathered from trained panels to the consumers liking responses. Such approaches have been extended with data collection methods that include directly the information regarding optimal product (e.g. Ideal Profile Method, Just About Right Scale).

This tutorial does not aim to tackle details of new data collection techniques for collecting information on the ideal product, but goes back to basics by providing a comprehensive insight into the statistical models and how they can be efficiently used to help you with your product optimization. Original approaches (e.g. Preference Mapping) as well as more recent methods (e.g. PrefMFA) will be presented and discussed. This information will then be used in an attempt of discussing new strategies.

Outline

This tutorial will provide you an overview and tips on the *statistical methods for optimization*, including:

- Finding your drivers of liking in an interactive way;
- Building your preference maps (PrefMap, PrefMFA, etc.);
- Estimating the profile of your optimal sample from the external preference map;
- Communicate information to the product developer, and compare the solution to reformulated samples;
- Discuss the potential of new methodologies.

Due to limited time, this tutorial will not cover product optimization based on experimental design.

Intended Audience

Students, researcher or professionals who would like to learn more about these methodologies, or who would like to learn a new way of getting relevant information from consumers.

Prerequisites

No prior knowledge is required.

If interested, please bring your own laptop with R installed for some practical (more information regarding the packages to install will come at a later stage).

Duration

½ day