

## CASE STUDY

# Calvin Klein uncovers actionable insights using machine learning



### THE CHALLENGE

PVH (which owns brands such as Tommy Hilfiger, Calvin Klein, Warner's, and Olga) was looking to identify a comprehensive list of customer needs related to bras and bra purchasing. In particular, our client wanted to understand challenges and needs related to online shopping for Calvin Klein bras. This is especially pertinent given the COVID-19 pandemic, which has led an increasing number of customers to purchase clothing and intimate apparel online.

### WHAT WE DID

Applied Marketing Science (AMS) used machine learning technology to identify a complete list of customer needs. Researchers compiled a dataset of over 20,000 relevant sentences from popular online forums, review sites, and e-commerce site reviews. Using 2,000 of the sentences from the database, analysts trained the machine to distinguish informative content from uninformative content. The researchers then ran the trained machine on the full content of the database. Within seconds, the machine identified 2,101 sentences as most representative of the complete dataset. That is, the machine acted as a sophisticated data reduction tool and identified 2,101 sentences that represented the overwhelming majority of all of the content included in the full database.

### THE OUTCOME

From the 2,101 sentences, trained analysts identified 135 unique customer needs related to purchasing bras. The needs pertained to seven categories including arrival and packaging, quality and durability, comfort/wear, shopping experience (in-person and online), post-shopping experience, style/look, and fit, measure and sizing.

The researchers also highlighted needs that were frequently mentioned in a negative manner. Most of these needs pertained to poorly fitting bras (e.g., incorrect measurements) and challenges with the online shopping experience (e.g., online images and descriptions that are inaccurate). AMS was able to provide Calvin Klein with actionable insights to improve fit and the purchase experience.

The team also analyzed comments about specific brands to isolate the perceived strengths and weaknesses of each brand. This analysis included our clients' brand and their competitor brands. Applied Marketing Science identified brand by brand insights related to styles, comfort and support, irritation, fabric, environmental friendliness, and more.

### CLIENT

PVH Corporation

### INDUSTRY

eCommerce and Retail

### SERVICES

Machine learning / AI

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