Improve Profitability With Retail Science

USING ADVANCED MACHINE LEARNING, TO SPOT INFLUENTIAL RETAIL CUSTOMERS FOR TARGETED OFFERS, CAN IMPROVE BOTTOM LINE

The following research, conducted by MIT Sloan School of Management and Oracle Retail Science researchers, employs machine learning to identify and understand influential relationships between early adopters and late buyers of a product.

The results indicate an average 9% improvement in profit.

ABOUT ORACLE RETAIL SCIENCE:

The Oracle Retail Science team works in partnership with participating retail customers and researchers from major universities like (MIT) to further the advancement of knowledge and solutions that enable new capabilities in adaptive, intelligent retailing.

FREE EBOOK

PREDICTING PROMOTION EFFICACY AND SELL THROUGH IN FASHION RETAIL

THE QUESTION

If you accelerated the pace of the early buyers of a given item—by, say, offering them a discount—could you speed up group two? And would that in turn speed up groups three and four behind them? And thus create overall better sell-through and margins for the item?

As part of the test, the Oracle Retail and MIT research collaboration generated suggestions for promotions and compared them to the retailer’s own promotions and discount programs.

KEY TAKE-AWAYS

1. Targeted promotions, shaped and informed by machine learning, may turn conventional wisdom on its head.
2. Costly data sources (e.g., social) are not the only option for predictive models.
3. Retailer POS and loyalty data can provide significant insights, with the right predictive model.

“As no one is suggesting that there’s any magic at work here... but with enough data, and the necessary analytical tools, statistical correlations between one group and another can be established and used as the basis for profitable, successful, and repeatable targeted promotions.”
—Professor, Dr. Georgia Perakis, MIT Sloan School of Management

# METHODOLOGY

The team analyzed the following customer behavior of a fashion retailer:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Spending Behavior</th>
</tr>
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<tbody>
<tr>
<td>High Spender</td>
<td>Early Buyer</td>
</tr>
<tr>
<td>Medium Spender</td>
<td>Early Buyer</td>
</tr>
<tr>
<td>Medium Spender</td>
<td>Late Buyer</td>
</tr>
<tr>
<td>Low Spender</td>
<td>Late Buyer</td>
</tr>
</tbody>
</table>

FOR EACH STORE, CUSTOMERS WERE PUT INTO GROUPS SUCH AS:

- High spender/early buyer
- Medium spender/early buyer
- Medium spender/late buyer
- Low spender

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50+ U.S. patents dedicated to retail processes and technologies

Works with 20 of the top 20 retailers worldwide

Turns data into $ with consistent user & data scientist experience

Innovates with top universities to prepare retailers for retail in 2020 and beyond

Helps you stay ahead with latest machine learning & AI solutions

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About this image: The image contains text related to improving profitability in retail through the use of advanced machine learning. It highlights the work of Oracle Retail Science in partnership with MIT Sloan School of Management. The text discusses the methodology used to predict promotion efficacy and sell-through in fashion retail, along with key takeaways and the impact on profitability. Additionally, it provides information about Oracle Retail Science’s contributions, including research and patents.