

Marketing Campaign Analysis Using Machine Learning

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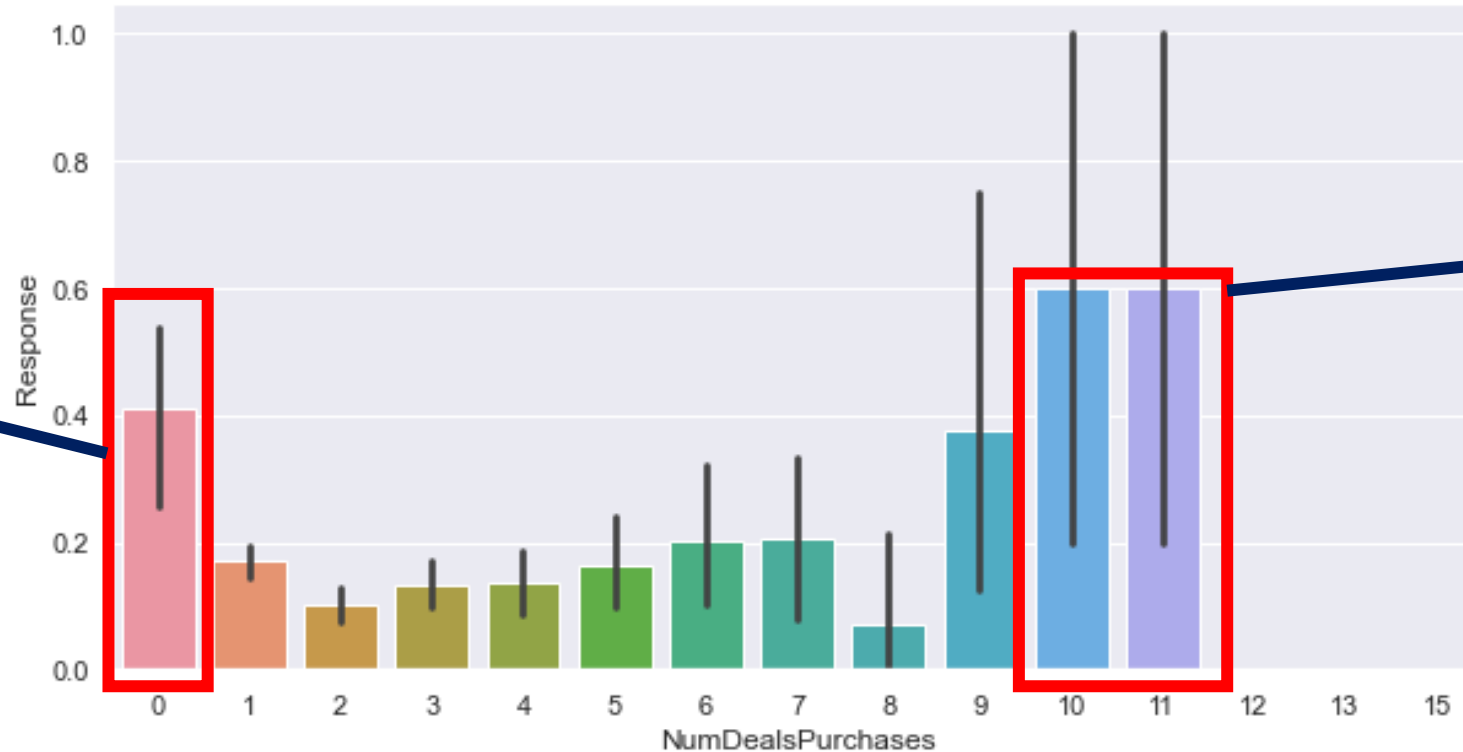
Agenda

- Understanding targeted customers
- Machine learning vs traditional analysis
- Model evaluation
- Suggestions on improving marketing efficiency



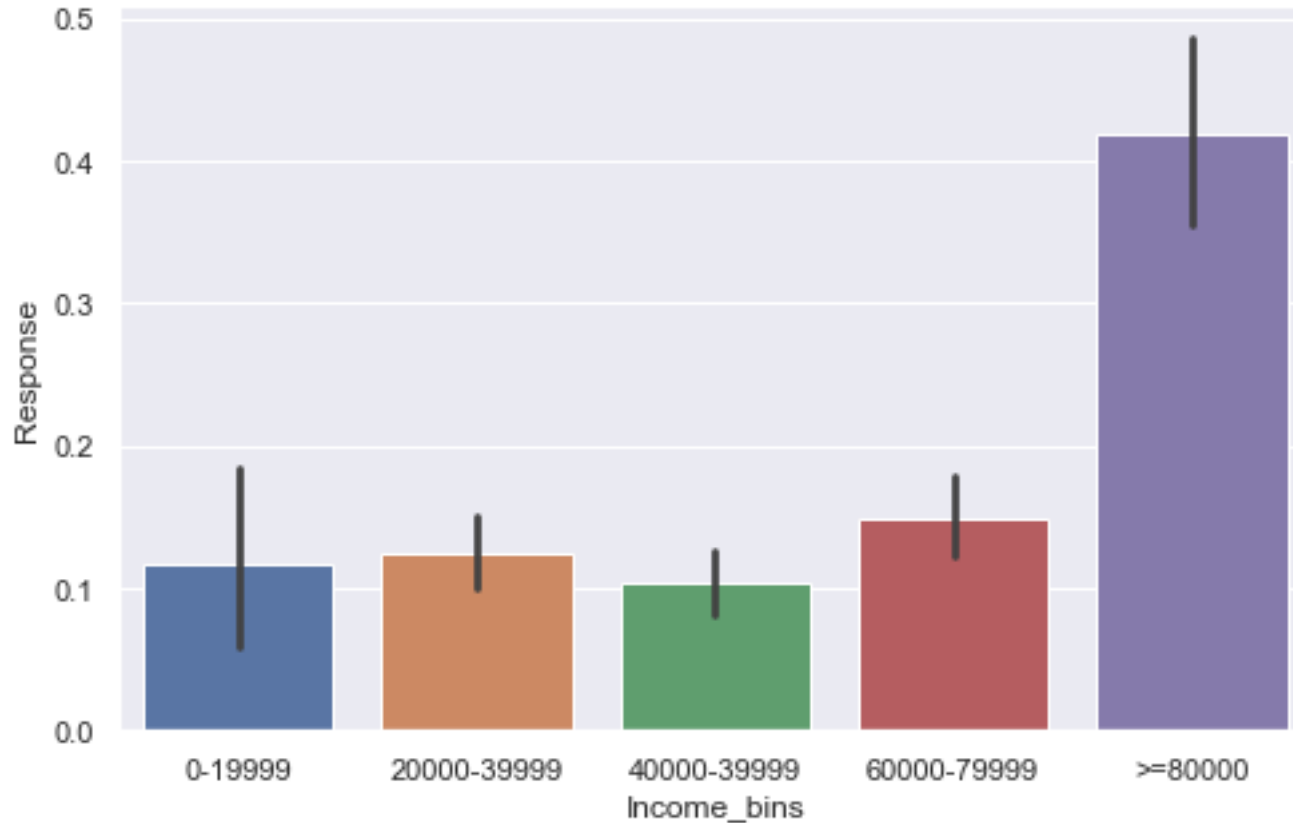
New customers and frequent buyers more likely to response

Potential customers show strong interest in the market campaign



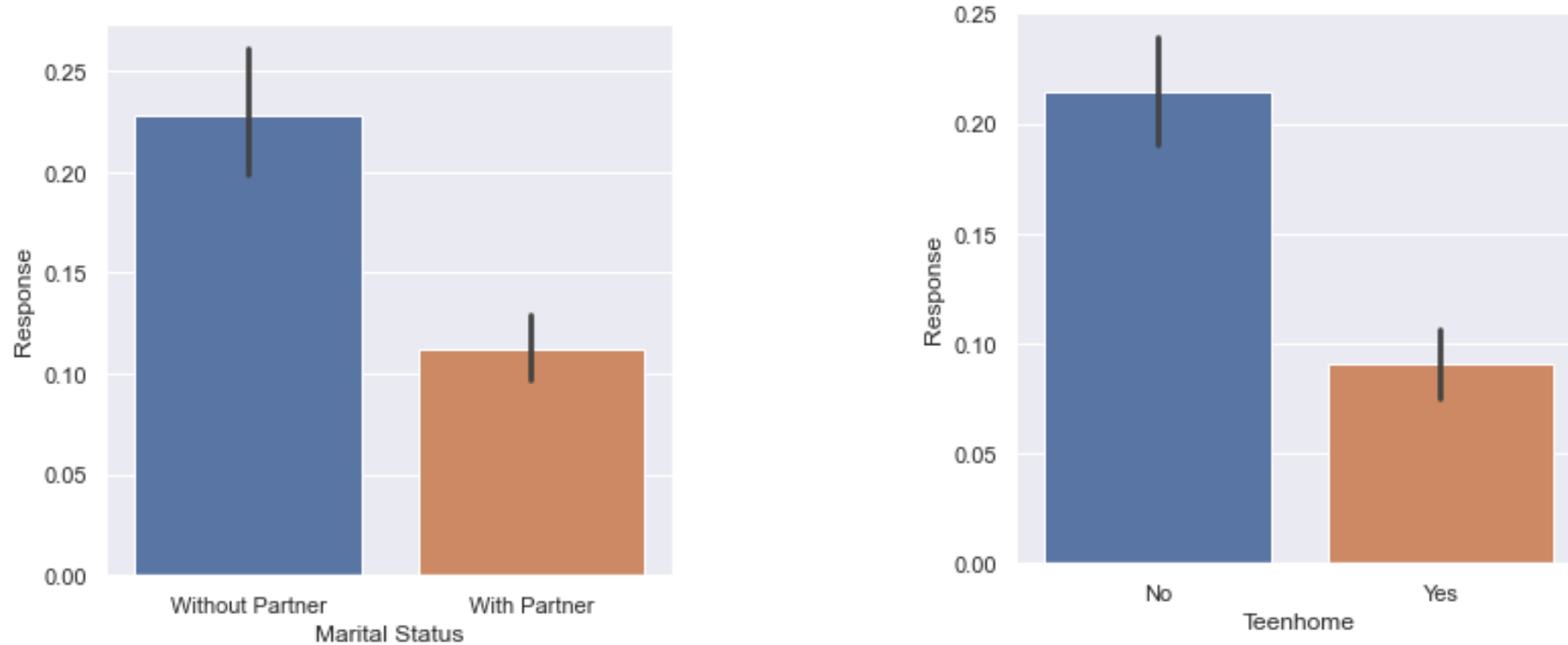
These customers have the highest response rate at **60%** meaning most of them will response

The richest customers are most likely to response



For customers who earn more than 80,000, the response rate is **almost 2 times** higher

Single-person households are more likely to response

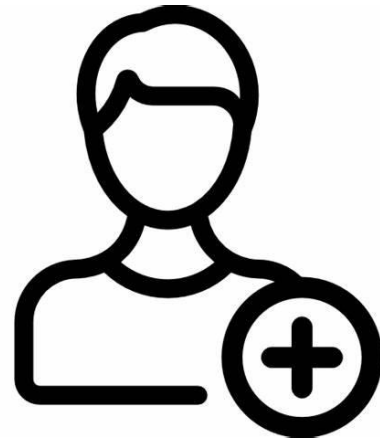


- For customers without partner (including divorced and widow) or kid, the response rate is **doubled**

Key features of customers who are more likely to be converted



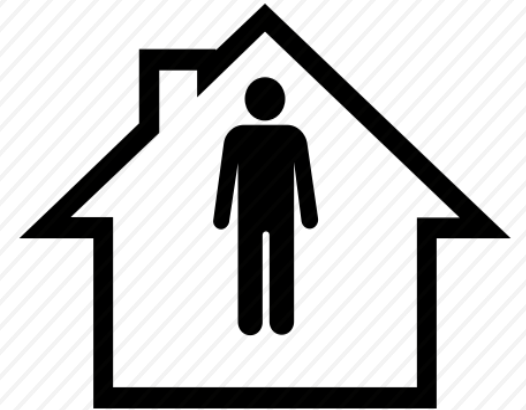
High income



New customers



Frequent buyers



Customers without partner or kid

Machine learning vs Traditional analysis

Traditional:



- Manually create a model to produce the output
- Using predefined codes or rules to analyze data

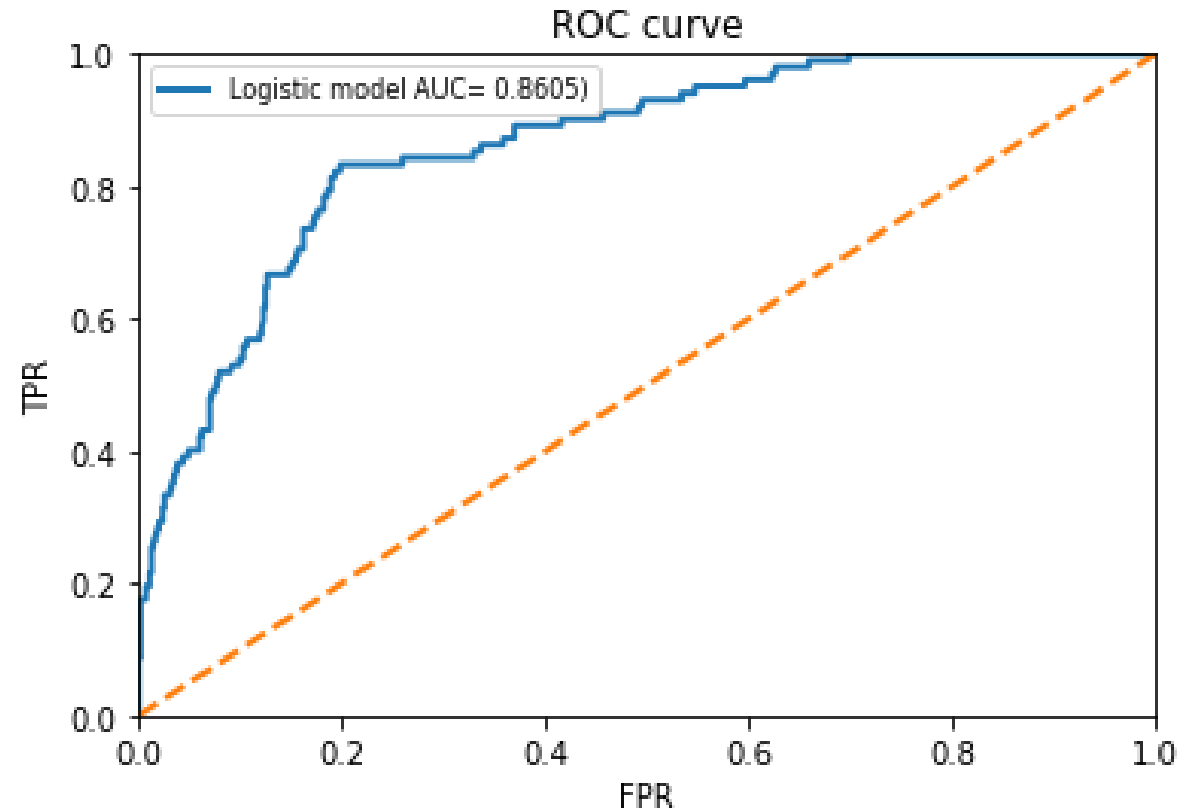
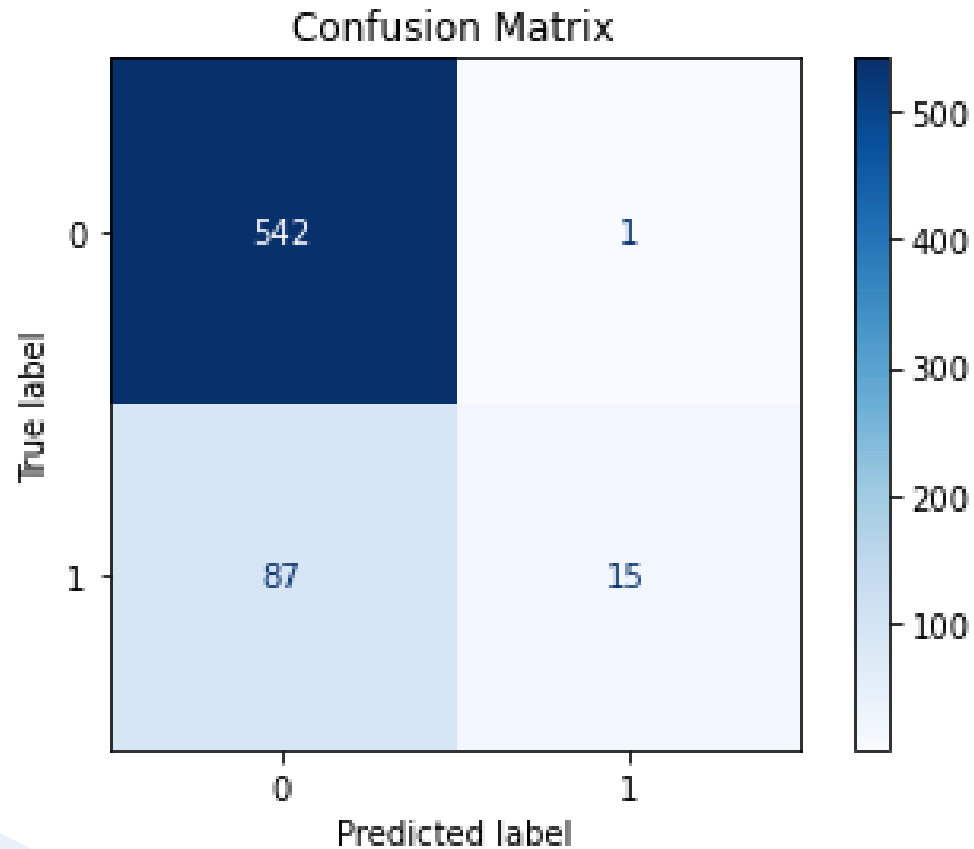
Machine learning:



- Automatically formulate rules between inputs and outputs
- Create a predictive model to forecast an event in the future

Model evaluation

Machine learning algorithm shows high accuracy in predicting the customer response rate



Suggestions on improving marketing efficiency



Focus on low and middle income customers' needs

- Personalized advertising
- Build a recommendation system
- Promote customer loyalty program



Improve customer loyalty programs

- Member-only offers
- Give rewards for referrals
- Partner with other companies to provide extra offers



Attract customers who have a partner or children

- Identify their needs
- Market segmentation
- Engage with parents (e.g. helping them select right products for their kids)



Thank you!

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