Notes on Expanding Internal Data Mining Efforts

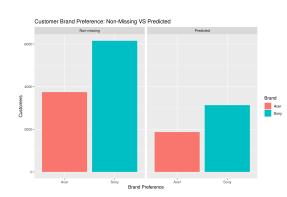
Tuomo Kareoja

Blackwell

September 30, 2019

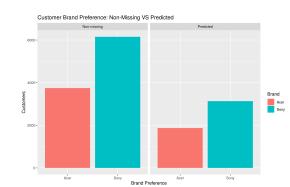
Filling Missing Data with a Predictive Model

Problem: Some of the customer data has missing values and this could skew further analyses if not fixed



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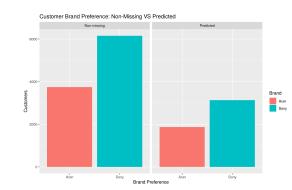
Problem: Some of the customer data has missing values and this could skew further analyses if not fixed **Solution:** Create a model to predict the missing values from the values of the other columns



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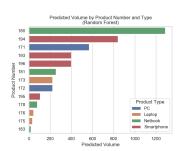
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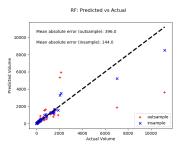
Knowledge Gained: The data are missing at random so the missing values don't skew the analysis



Predicting Sales of Upcoming Products

Problem: We would want to know the future sales volumes of our upcoming products



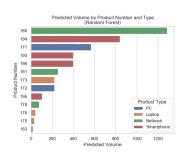


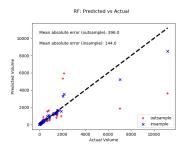
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Solution: Create a model to predict the sales volume from customer reviews and product attributes

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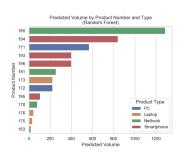


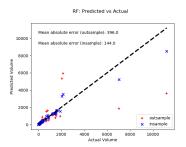
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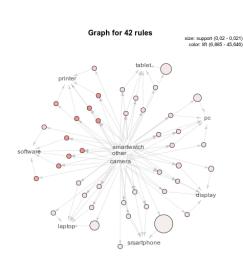
Knowledge Gained: Some products are predicted to perform way better than others, but a better model would need more data





Assessing Electronidex Sales Profile

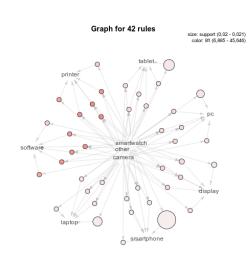
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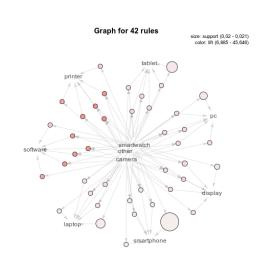


Assessing Electronidex Sales Profile

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Solution: Find product categories that are overlapping and those that fit together and do a market basket analysis of their sales data

Knowledge Gained: About 50 % of our current profits come from products that overlap with Electronidex offerings. There seems to be customer group that we do not serve at the moment and which would be interested in our products.



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 - **Advice:** Pair data scientists with analysts that have relevant domain expertise

The End

Questions?