# **Group 5 - Final Presentation**

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### **Business Problem**

- Focus on performance of two of
   CFI's largest marketing investments
   promotions (e.g., coupons, etc) and
   the frequent shopper program
- Increase revenue for CFI



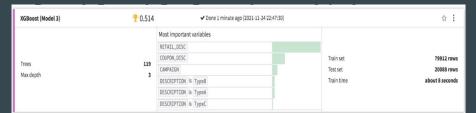
Photo from https://www.wholefoodsmarket.com/quality-standards/organic/certified-organic-grocery-store

## Recommendation for Campaigns & Loyalty Program

Continue existing campaigns.

Further information is needed before potentially expanding. Loyalty program has the largest impact on sales value and the quantity purchased.

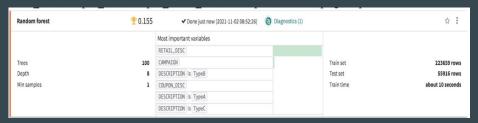
Quantity as the response and Retail\_Disc, Coupon\_Disc, Coupon\_Match\_Disc, Description, and Campaign as predictors.



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Sales\_Value as the response and Retail\_Disc, Coupon\_Disc, Coupon\_Match\_Disc, Description, and Campaign as predictors.



Sales\_Value as the response and Retail\_Disc, Coupon\_Disc, and Coupon\_Match\_Disc as predictors

Random forest	<b>?</b> 0.178	✓ Done 19 days ago (2021-11-04 22:58:36)  ⑤ Diagno	stics (1)	☆ <b>!</b>
Trees Depth Min samples Size of hyperparameter search	147 18 1 24	Most important variables  RETAIL_DISC  COUPPOIL_DISC  COUPPOIL_MATCH_DISC	Train set Test set Train time	2075756 rows 519976 rows 35 minutes and 58 seconds

# **Recommendations Based on Demographics**



Photo from: https://www.shutterstock.com/image-photo/woman-chooses-fruits-vegetables-food-market-1535966159

Random forest	₹ 0.929 (± 0.002)	✓ Done 14 days ago (2021-11-11 16:11:23)		☆ :
Trees Depth Min samples Size of hyperparameter searc	100 14 1 :h 2	Most important variables  MARITAL_STATUS_CODE is A  MARITAL_STATUS_CODE is U  AGE_DESC is 25-34  HOMEOWNER_DESC is Homeowner  AGE_DESC is 35-44  INCOME_DESC is 50-74K	Train set Train time	100310 rows 4 minutes and 41 seconds

- Future meetings with Ms. Salome to have more meaningful groupings of commodity descriptions
- Better documented data dictionary
- Further data collection on customers and their families
- Differentiate product supplies based on different income groups at each store location

### Recommendation for Product Sales and Revenue



- Targeted marketing campaigns on high revenue generating customer groups at retail stores.
- More coupons and discounts for products at retail stores.

Photo from https://www.canstockphoto.com/blue-revenue-2515817.html

#### **Recommendation for a Vision Board**

Evaluate market, financial, and operational performance against competitors.



# Questions?

Thank you!