

Team 13

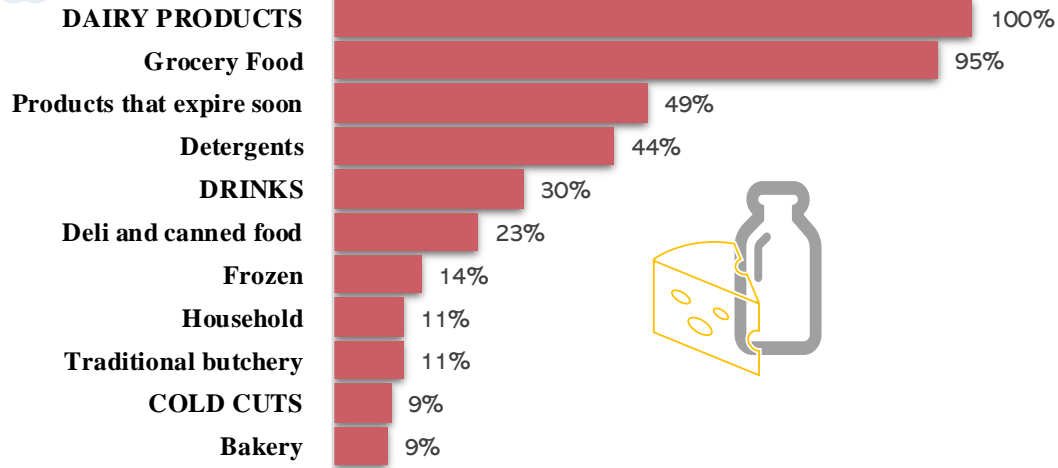
The OptiMizers

Student ID	Student Name
24234715	Ganesh Perumal Subramaniam Yadava
24239037	Anand Pazhangaparambhu Madambath
24239955	Varsha Ashwathappa Srilalitha
24236930	Amit Kumar
24241053	Charu Singi

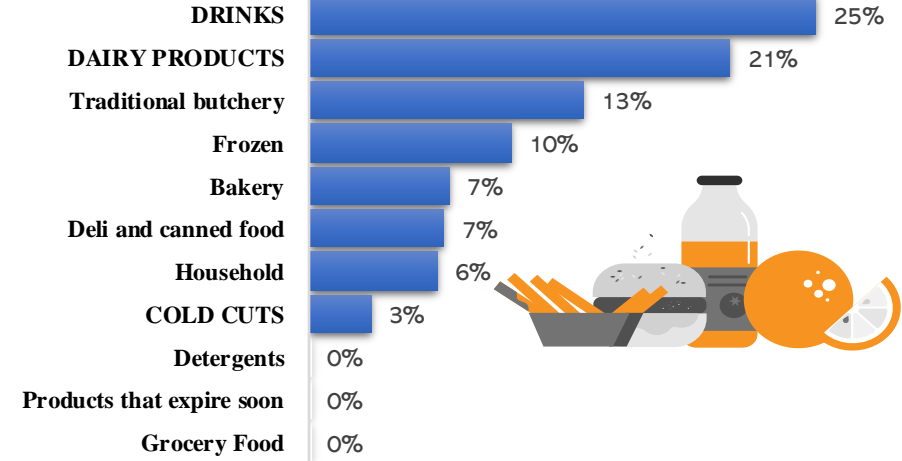


Basket Segmentation

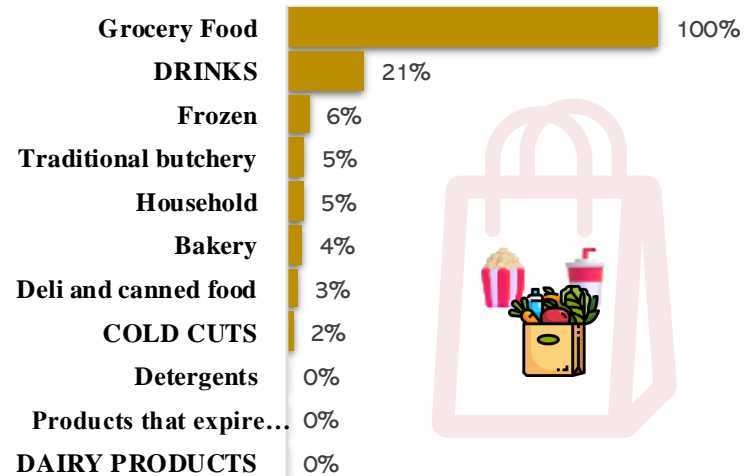
Dairy Dominant

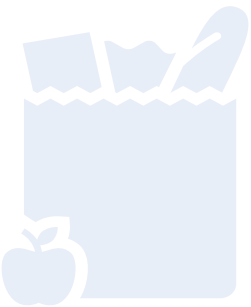


Snacks&Drinks



MixMatch Shoppers

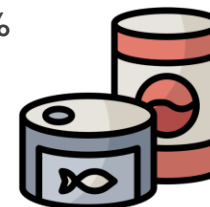
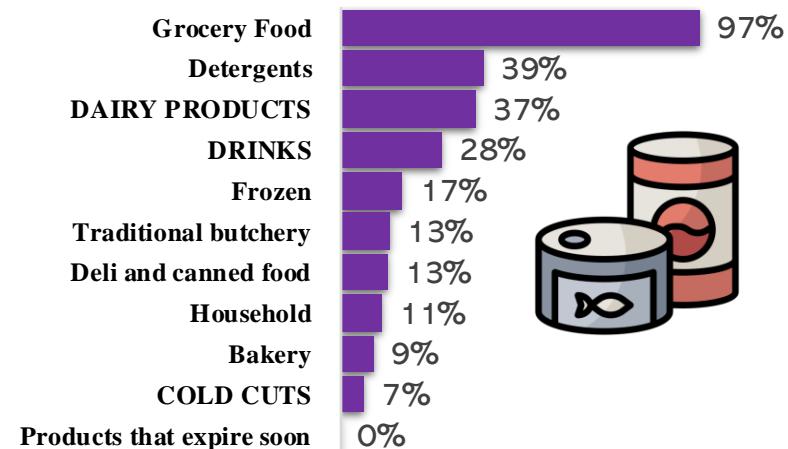




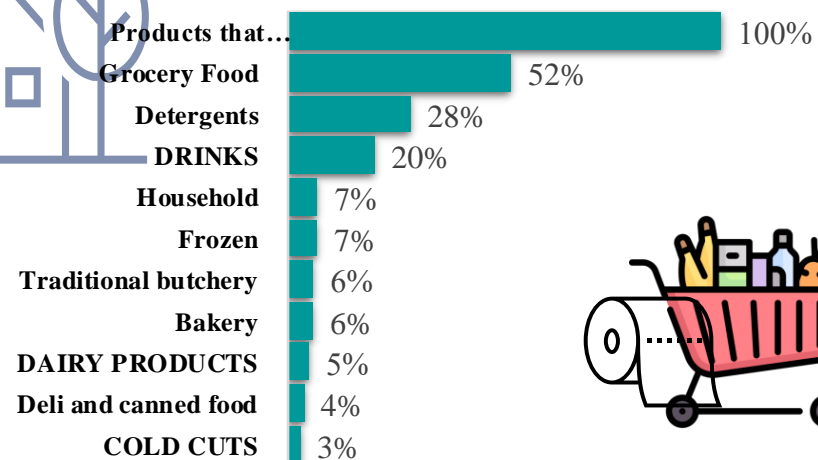
Participation of Product Category in a Basket



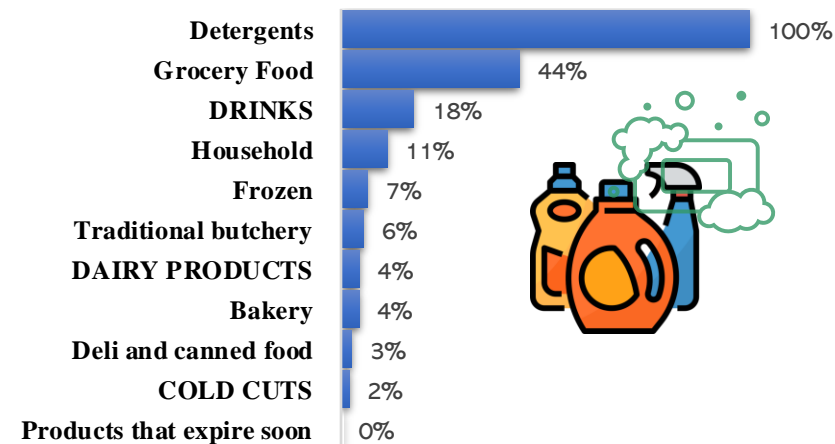
Grocery Shoppers

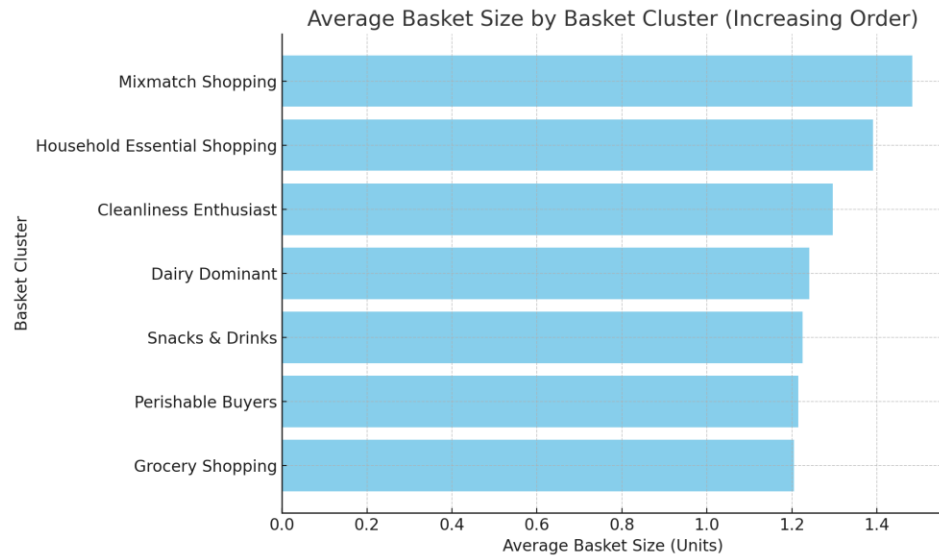


Household Essential Shopper



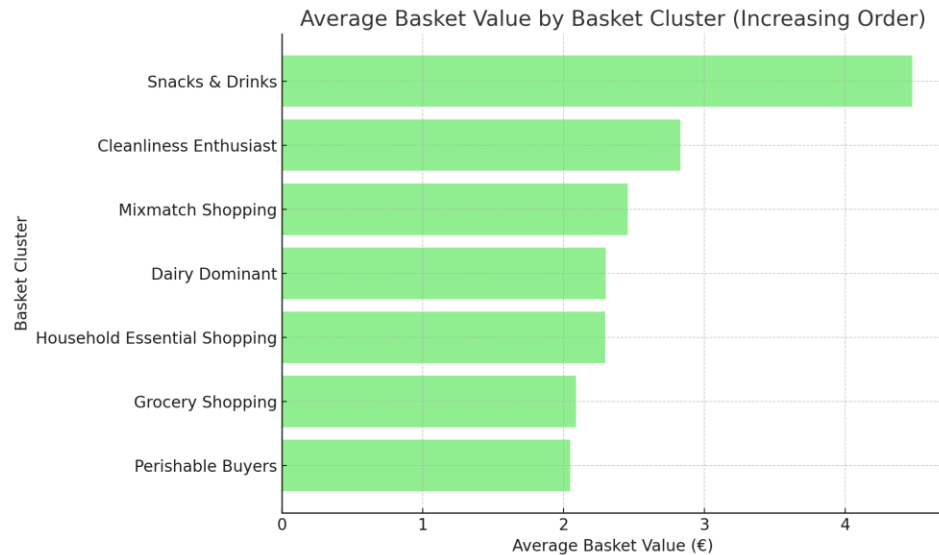
Cleanliness Enthusiasts





Basket Size:

- **Mixmatch Shopping:** This cluster has the **largest average basket size** , indicating diverse product purchases like groceries, household items, and more.
- **Grocery Shopping:** This cluster has the **smallest basket size** , focusing on essentials like fruits, vegetables, and basic groceries.



Basket Value:

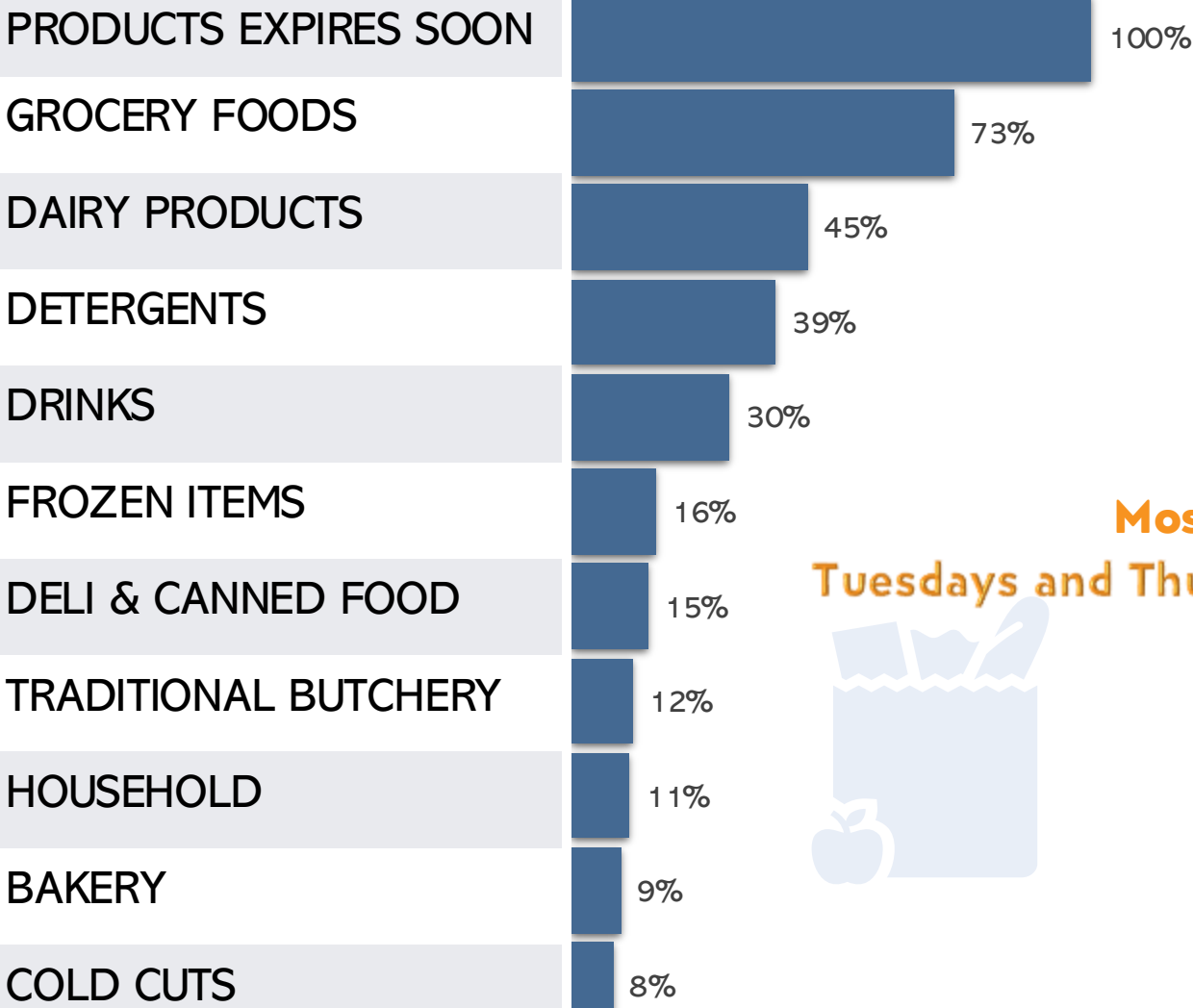
- **Snacks & Drinks:** This cluster shows the **highest average basket value** , reflecting higher spending on indulgent or premium items.
- **Perishable Buyers and Grocery Shopping:** These clusters have **lower basket values** , as they focus on cost-effective, essential items like bread, milk, and groceries.



Participation of Product Category in a Basket



Perishable Buyers



Majority of buyer from age 35 and 48

Approximate Purchase count 25,000



Morning hours

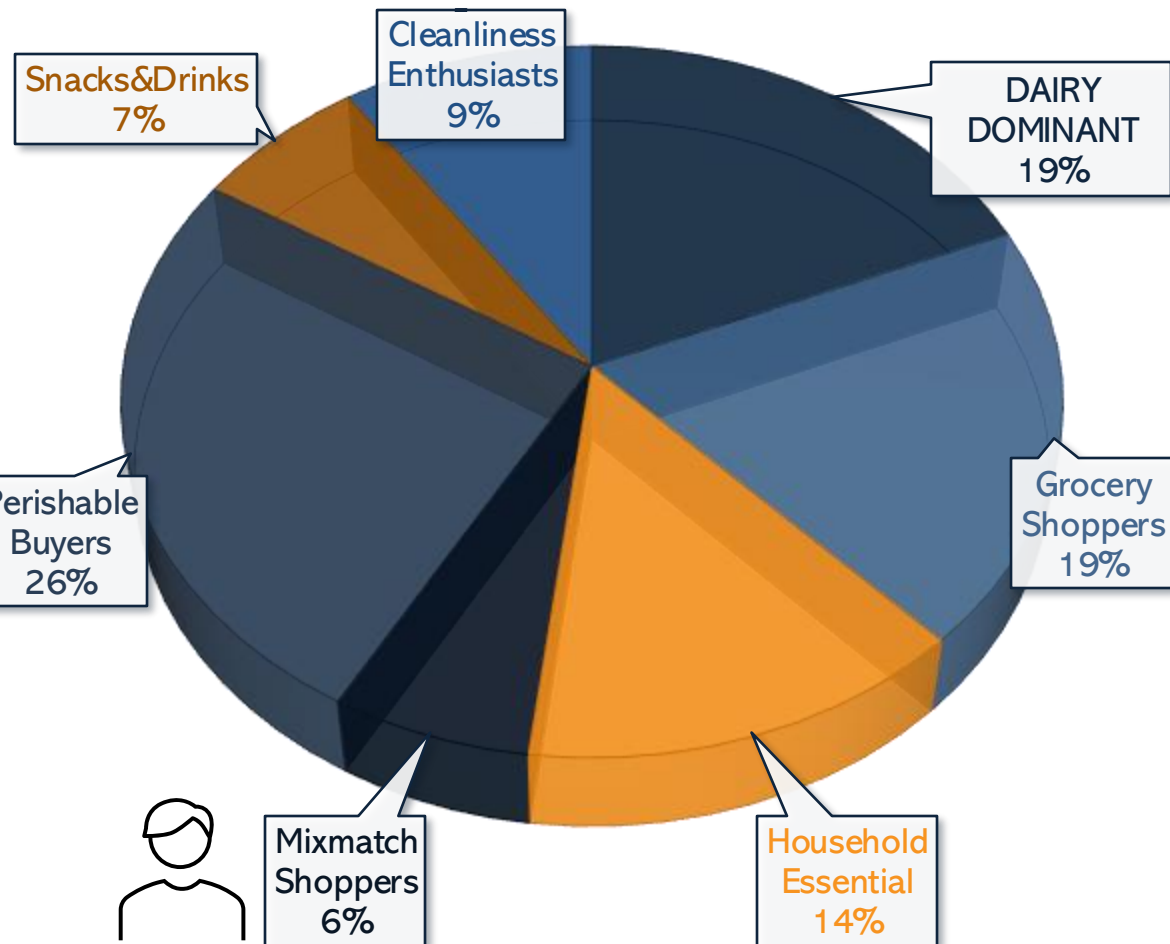
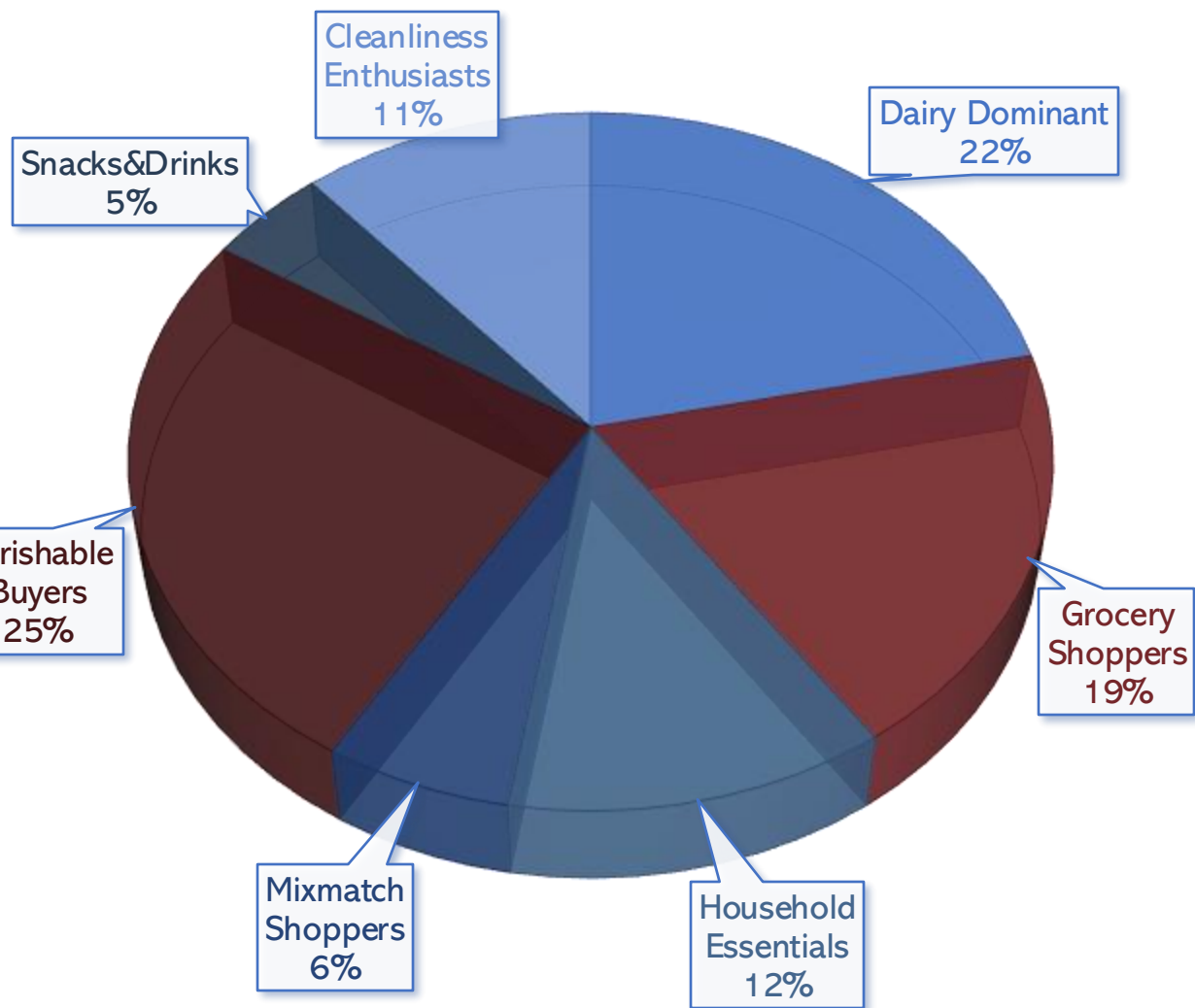
Most purchase on weekends.

Tuesdays and Thursday also noticed significant purchases





BASKET SEGMENTATION FOR FEMALES



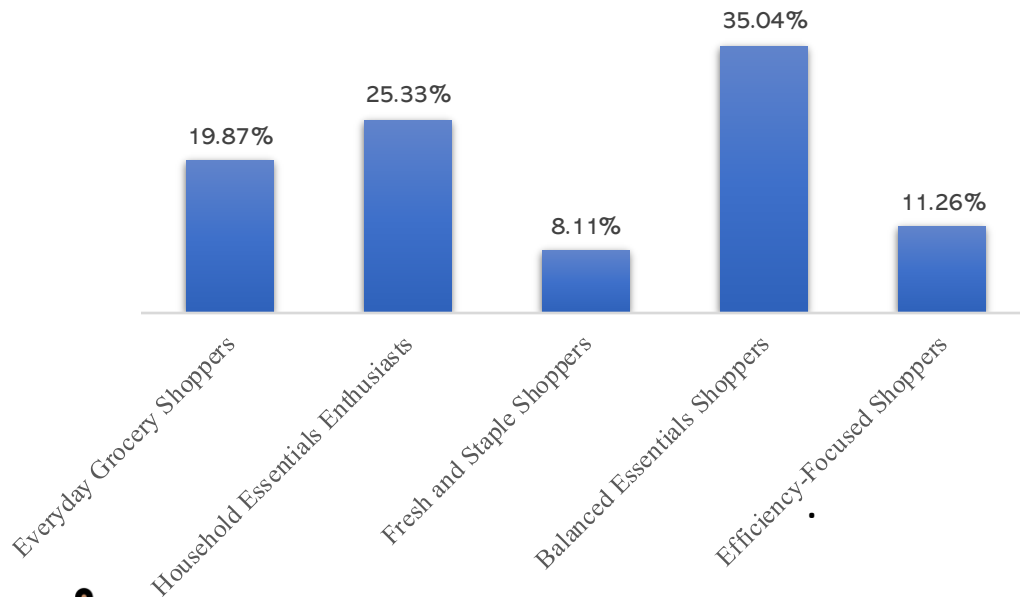
BASKET SEGMENTATION FOR MALES



Customer Segmentation

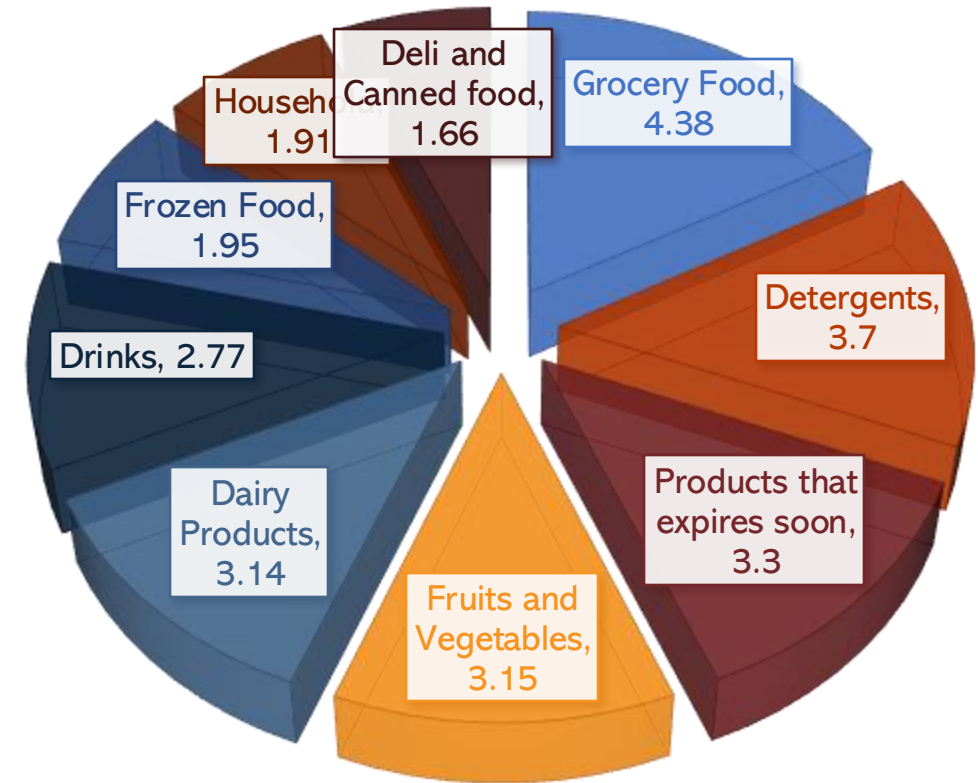
TOP 10 ATTRIBUTES ACROSS ALL CATEGORIES

Average Affinity Scores by Customer Group



'Balanced Essentials Shoppers' – Highest Affinity score (35.04%)

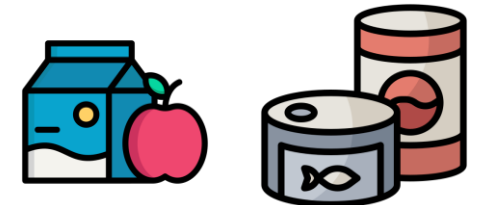
“Fresh and Staple Shoppers” – Lowest affinity (8.11%)



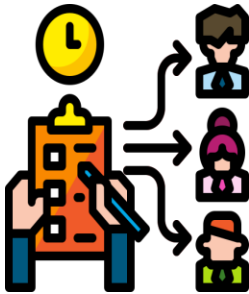
Grocery Food 🛒: Top attribute (4.38) – a must-have!

Fresh Favorites 🥬🧀: Fruits, Vegetables (3.15) & Dairy (3.14) shine.

Canned Goods 🥫: Least preferred (1.66).



Attribute	Everyday Grocery Shoppers	Household Essentials Enthusiasts	Fresh and Staple Shoppers	Balanced Essentials Shoppers	Efficiency-Focused Shoppers
Grocery Food	97.58%	98.31%	64.85%	99.75%	77.15%
Dairy Products	94.37%	85.25%	26.87%	97.49%	10.09%
Products that expires soon	81.28%	84.55%	34.44%	93.59%	35.73%
Detergents	79.05%	93.12%	0.00%	97.74%	100.00%
Fruits and Vegetables	77.01%	82.72%	32.42%	94.10%	29.23%
Household	0.00%	100.00%	8.38%	61.31%	21.58%
Baby Clothing	0.10%	0.42%	0.00%	1.13%	0.00%
Man Clothing	0.00%	0.14%	0.10%	0.38%	0.12%
Gifts	0.39%	0.84%	0.10%	0.75%	0.35%
TV - HIFI - Sound	0.00%	0.14%	0.10%	0.13%	0.00%

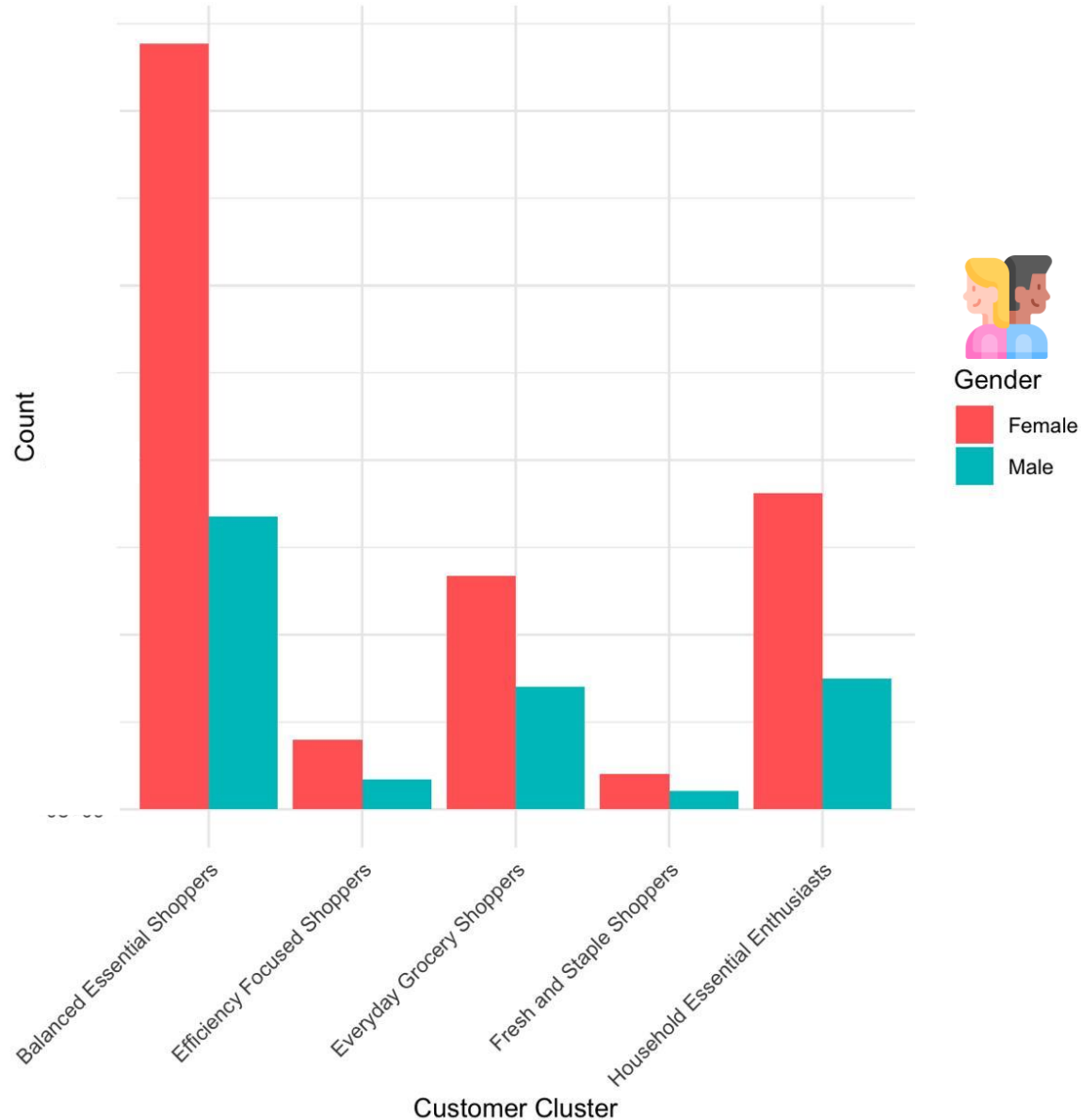


Patterns and Observations Based on the top 5 and bottom 5 attributes -

- 🛒 **Everyday Grocery Shoppers & ⚖️ Balanced Essentials Shoppers:**
High preference for 🥬 **Grocery Food**, 🧀 **Dairy Products**, and 🧴 **Detergents**.
- 🥦 **Fresh & Staple Shoppers:**
Avoid 🧴 **Detergents** (0%) and focus on fresh items like 🥦 **Fruits and Vegetables**.
- ⚡ **Efficiency-Focused Shoppers:**
Prioritize 🧴 **Detergents** (100%) but ignore most other categories.
- 🔑 **Key Items:**
🥬 **Grocery Food**, 🧀 **Dairy**, and 🧴 **Detergents** are popular across all groups.
- 🚫 **Low-Interest Items:**
😬 **Baby Clothing**, 📺 **TVs**, and 👤 **Men's Clothing** score low everywhere.

Insights	Actions
🛒 Stock Smart	Prioritize high-demand items like 🥬 Grocery Food, 🧀 Dairy, and 🧴 Detergents.
🎯 Target Groups	Promote 🥦 fresh items to Fresh & Staple Shoppers and ⚡ Detergents to Efficiency Shoppers.
📊 Maximize Space	Allocate shelf space to favorites; reduce space for 😬 Baby Clothing and 📺 TVs.
💡 Personalized Offers	Design loyalty programs and special deals based on shopper preferences.
🏆 Stay Ahead	Use insights to improve satisfaction and stay ahead of the competition.

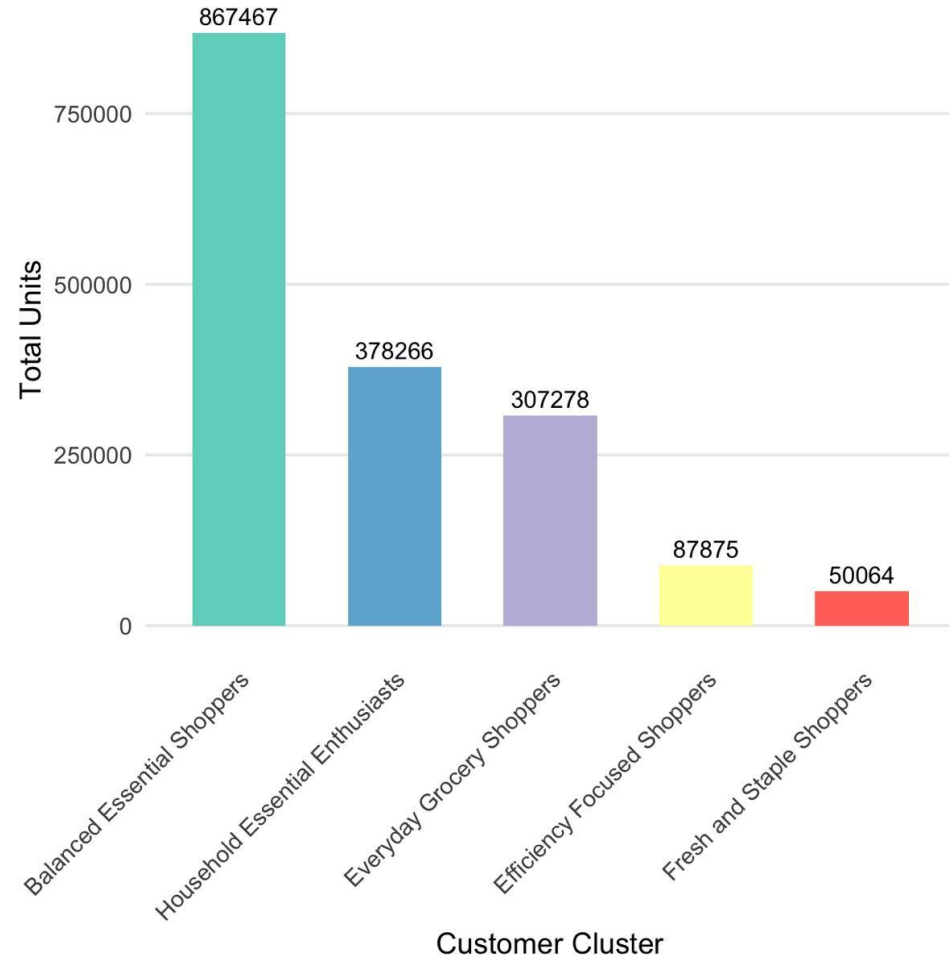
Gender Distribution by Customer Cluster



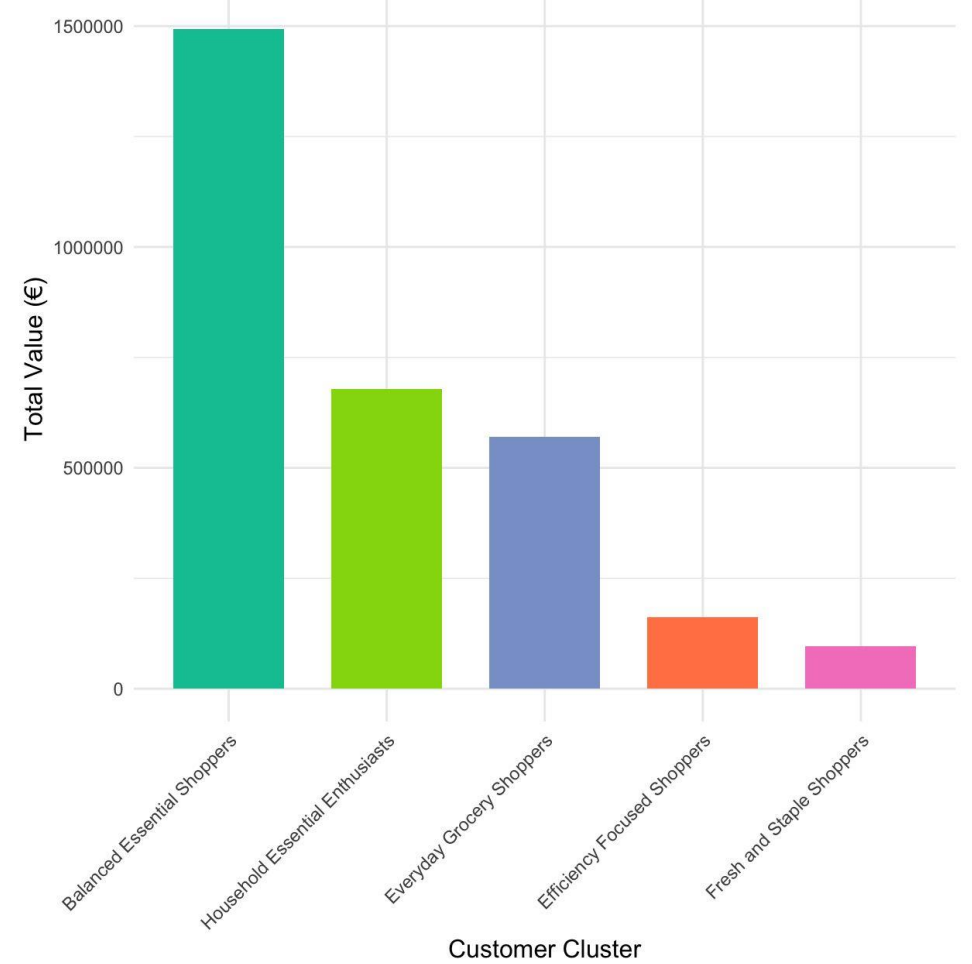
1. **Balanced Essential Shoppers** 🛒👤
↗ Largest Cluster
↗ Female Majority
2. **Efficiency Focused Shoppers** ⌚🧐
↘ Smallest Group
↘ Male-Dominated
3. **Everyday Grocery Shoppers** 🥕📦
↔ Mid-Sized
↔ Mixed Gender
4. **Fresh and Single Shoppers** 🥗👩
↘ Fewest Shoppers
↘ Mostly Female
5. **Household Essential Enthusiasts** 🏠🛒
↗ Second Largest
↗ Female Majority



Total Units Purchased by Customer Cluster



Total Value Sum by Customer Cluster



Thankyou!

