

Reading Customer Minds: Multi-brand Customer Segmentation to Inform Business Strategy

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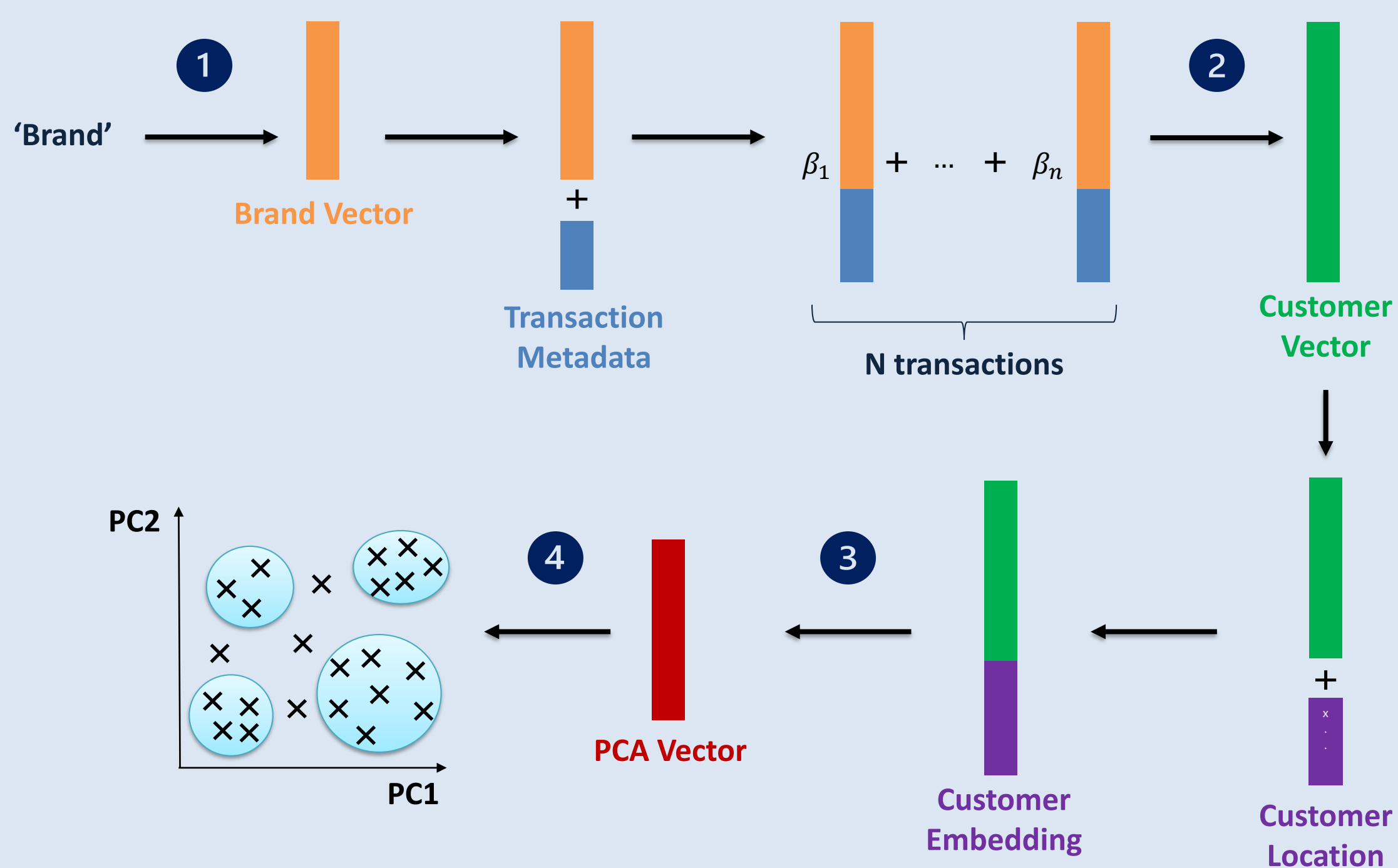
What can we learn about customers from their full card history?

13B Transactions
30M Customers
10k Brands
across USA

Customer
Personas

Bridges gap in
data scarce
Private Equity
sector

Methodology



Process Flow

- 1 Word2Vec to obtain Brand Vector
- 2 TF-IDF aggregation to obtain Customer Embeddings
- 3 PCA dimension reduction
- 4 K-Means to assign Customer cluster

9 Cluster Personas

- | | |
|---------------------|-----------------------------|
| A. The 1% | F. Rental Fashionable Youth |
| B. Healthy & Sporty | G. Financial Youth |
| C. Non-city dweller | H. Simple Sam (Card) |
| D. Golden years | I. Simple Sam (Cash) |
| E. Frequent Fliers | |

Results

Sample Cluster Description

Healthy & Sporty (N = 3.2M)

Health conscious, active early career, higher income

Income \$150,000+ 0.5M 24% [^]	Wealth \$160,001+ 1.0M 18% [^]
Age 25-34 0.2M 12% [^]	Homeowner Homeowner 1.6M 4% [^]
Children No children 1.1M 2% [^]	Affiliation Democrat 0.7M 13% [^]

Brands/industry preferences:
Lululemon, Nike, Sephora, Whole Foods, Alaska Air

Interests:
Athleisure, Beauty, Meal kits, Online retail, Travel

Spend profile:

Daily spend	\$50.97
Frequency	0.63/day
AOV	\$80.48
#Debit/ #Credit	0.18
#Online/ #Offline	0.62

Industry Application

Cluster level Competitor Analysis of F&B brand

Rental Fashionable Youth

34% of brand's customers in cluster

Cluster	Brand X	Comp A
Penetration	Higher	Lower
Purchase Freq	Lower	Higher
AOV	Higher	Lower

Recommendations:

- Examine purchase frequencies, loyalty and customer churn
- Examine possible customer purchase occasions (e.g. buying coffee)
- Implement online orders with pick up option:
 - Customer receptiveness to online purchasing
 - Creates new purchase occasion

Simple Sam (Card)

37% of brand's customers in cluster

Cluster	Brand X	Comp A
Penetration	Lower	Higher
Purchase Freq	Lower	Higher
AOV	Higher	Lower

Recommendations:

- Examine penetration, footfall and competitor co-location
- Compare assortment across brands, as cluster has preference for fast food
- Develop products more suited to cluster palette preference:
 - American Breakfast equivalent (e.g. Bacon & Eggs)
 - Mexican flavor profiles

*AOV – Average Order Value