



Know the customer. Know the company.

earnest

# Ask the Experts: Competitive Benchmarking Powered by CLV Ultra

# CLV Ultra is Theta's breakthrough CLV model that combines unprecedented accuracy with a high degree of automation

## RFM-based Models

### Pros:

- Easy to use
- High automation

### Cons:

- Low accuracy
- No covariates (e.g., seasonality or business dynamics)
- Can't value new customers

## BTYD Models (publicly available)

### Pros:

- More accurate than RFM
- Reasonable way to model customer behavior

### Cons:

- Highly manual
- Limited covariates (except for some proprietary models)
- Additional effort required to value new customers

## Next Generation: CLV Ultra

Usually, there is a tradeoff between accuracy and automation

But we have created a model that **automatically and simultaneously**:

- Detects seasonality and other covariates
- Jointly estimate all cohorts to capture cross-cohort effects
- Accurately values new customers

## CLV Ultra

Highly accurate

Automated

Scalable

# CLV Ultra combines customer behavior models with advanced machine learning to automatically detect and decompose covariates

## CLV Ultra

### Highly Accurate

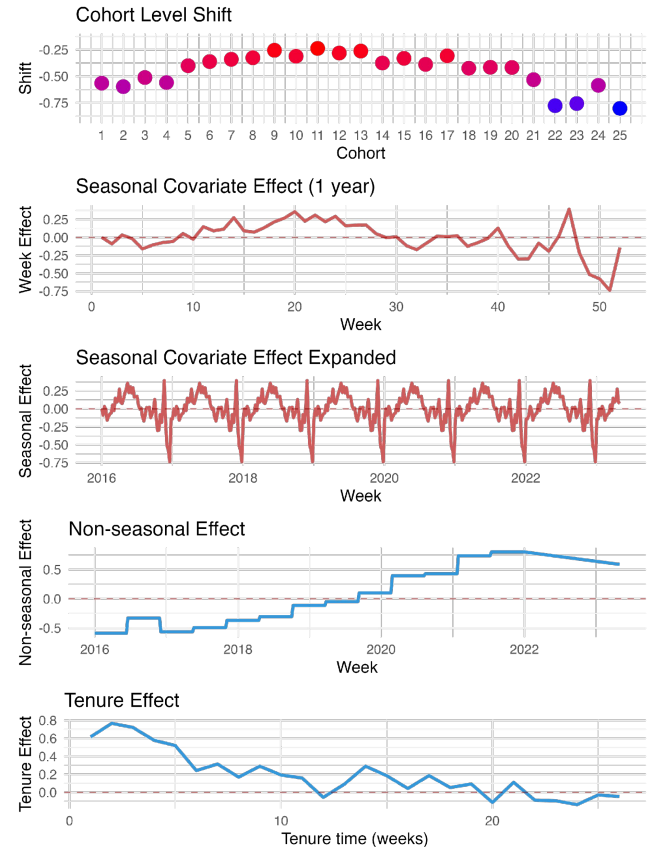
- Estimates cohorts jointly, more accurately capturing cross-cohort dynamics and customer behavior evolution
- Detects and decomposes covariates into seasonal, non-seasonal, and tenure effects
- Can incorporate a wide variety of covariates all the way down to the customer level

### Automated

- Fully automated, dramatically reducing the time to validate the model and generate insights

### Scalable

- Efficiently processes data for hundreds of millions of customers, making it ideal for large-scale applications



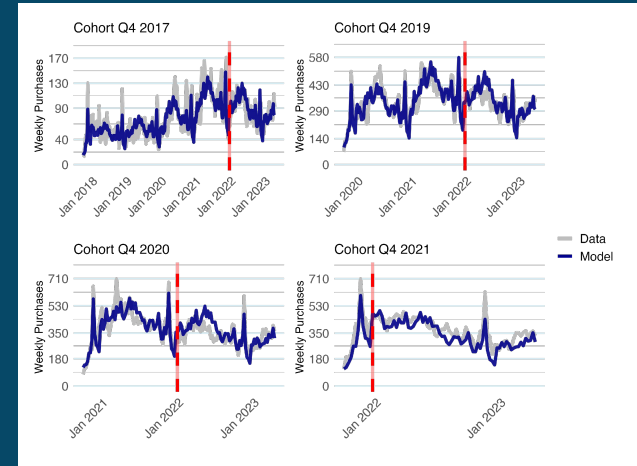
# This results in quicker and even more impactful CLV improvement opportunities

Much more easily accommodates **managerially relevant decision variables**

**Better accuracy**, especially for **newer customers** (very important for growing companies!)

Substantially **shorter turnaround times**

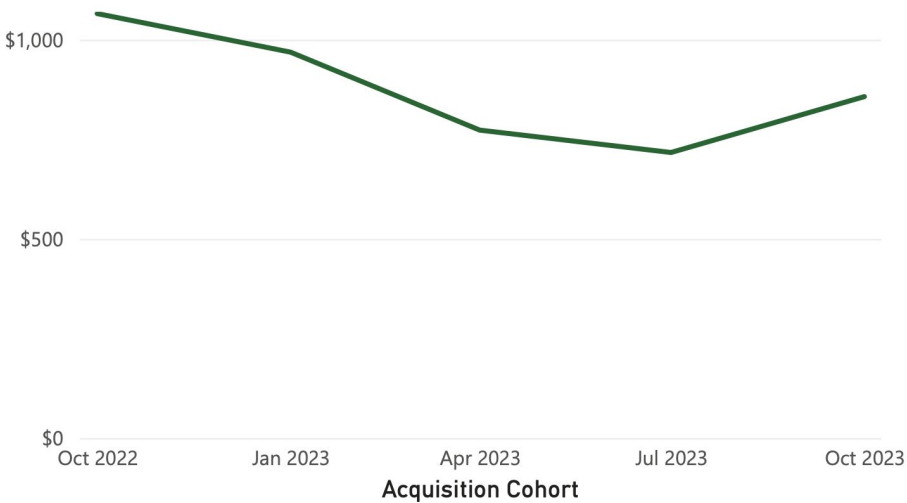
Model outputs that are **easier to interpret**, showing critical business dynamics and CLV drivers



# Temu Unit Economics

## Post Acquisition Value

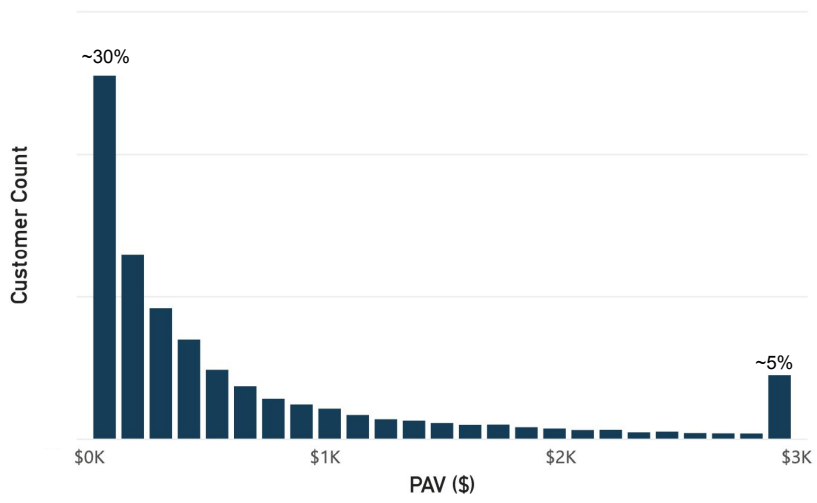
Filtered to All Segments - All



## PAV Distribution for all cohorts

Filtered to All Segments - All

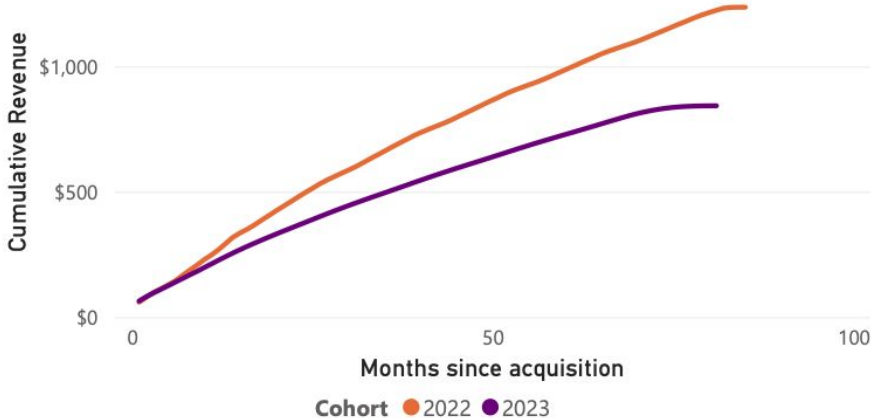
Cohort: All



## Cumulative Revenue

Filtered to All Segments - All

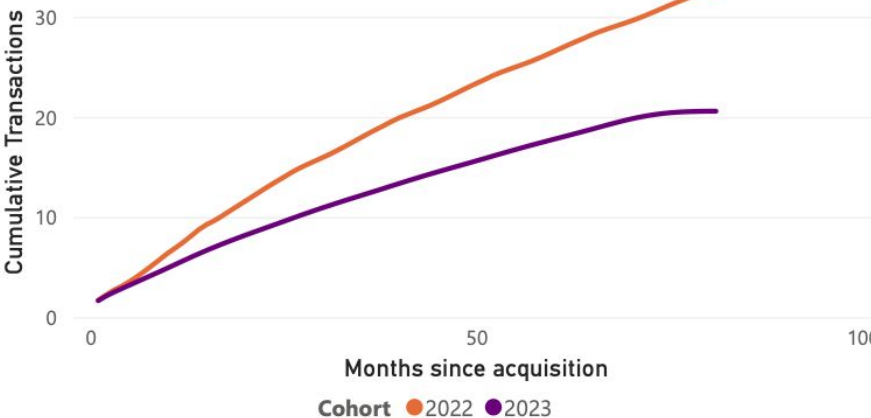
Cohort Years :



## Cumulative Transactions

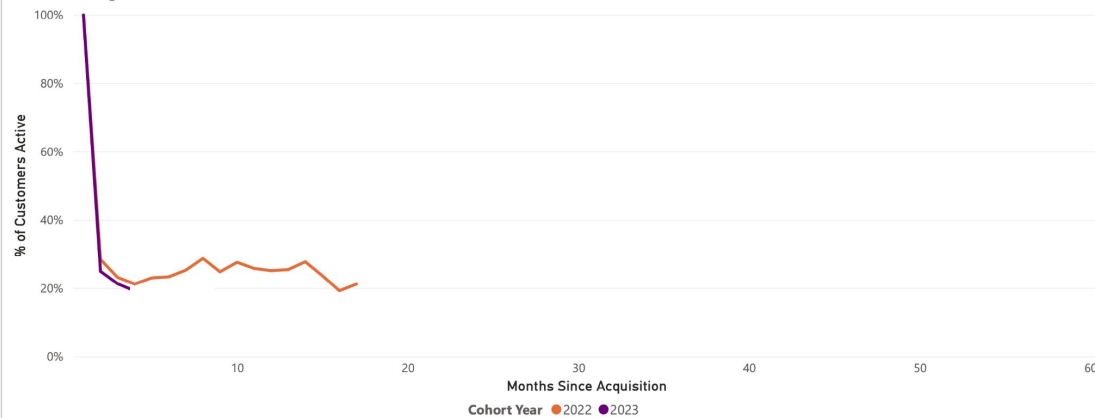
Filtered to All Segments - All

Cohort Years :



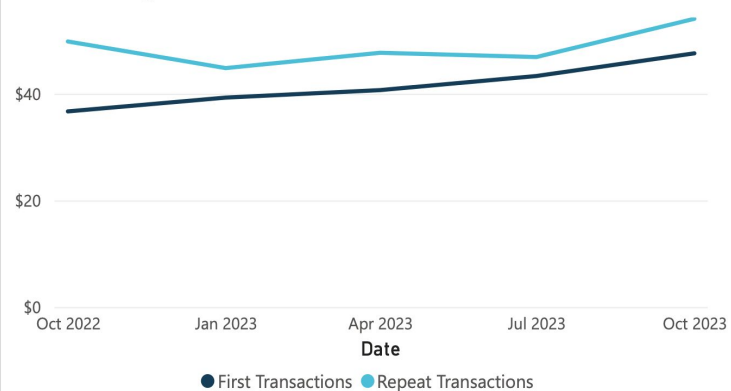
## Cohorted Active Customers

Filtered to All Segments - All



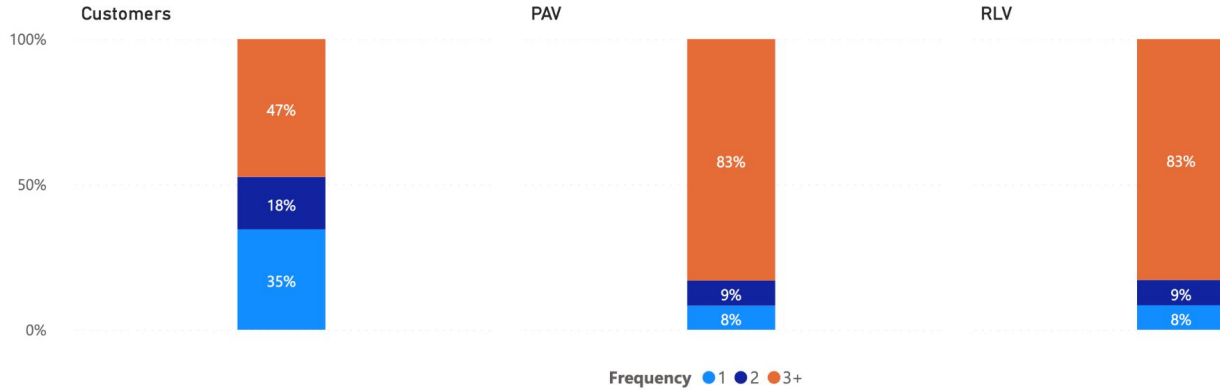
## Average Revenue Per Transaction

Filtered to All Segments - All





## Customer Base and Value by Purchase Frequency



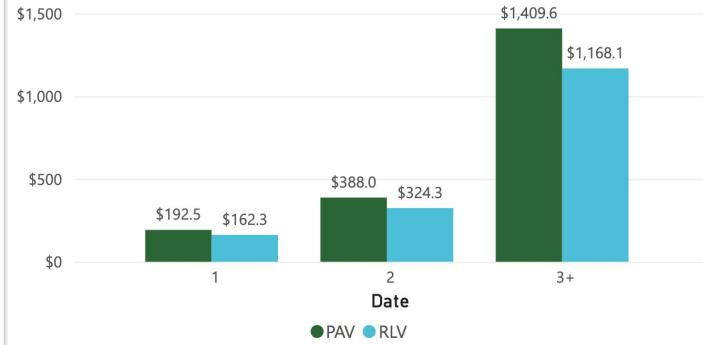
## Value from First vs Following Purchases

Filtered to All Segments - All

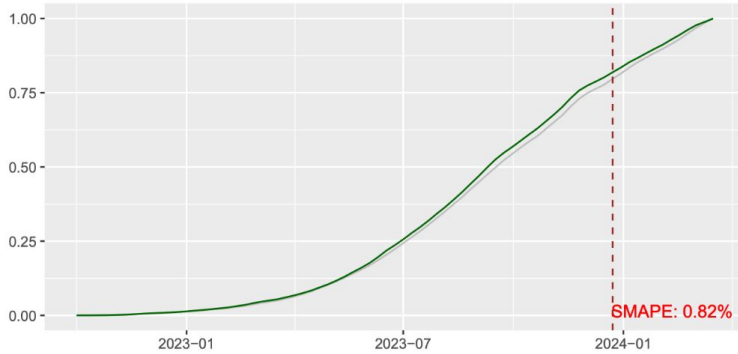
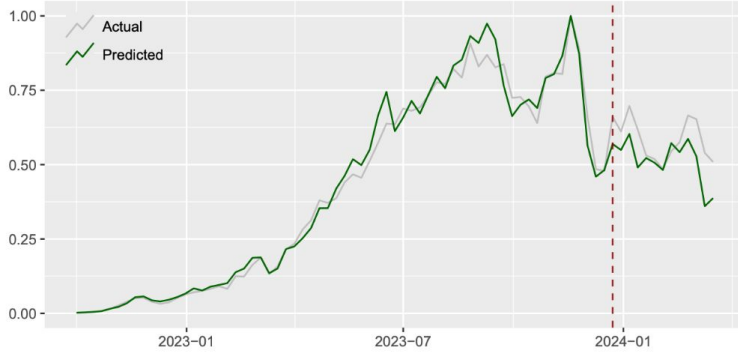


## PAV and RLV per Customer by Purchasing Frequency

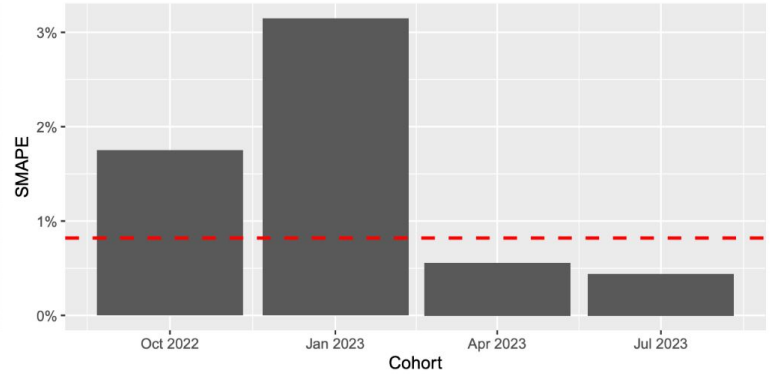
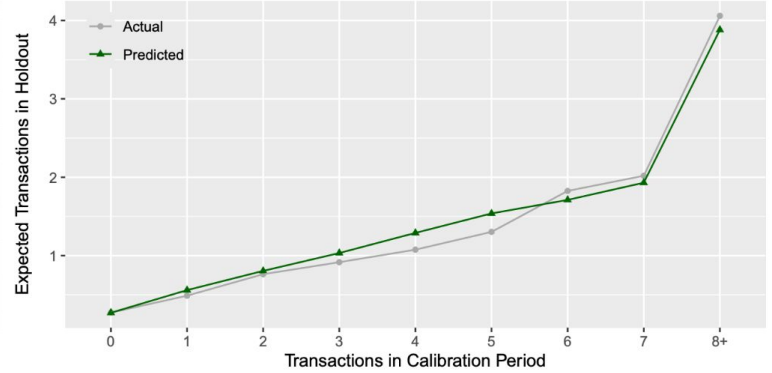
Filtered to All Segments - All



Tracking Plot  
# Repeat Purchases



CEs (13 week holdout)

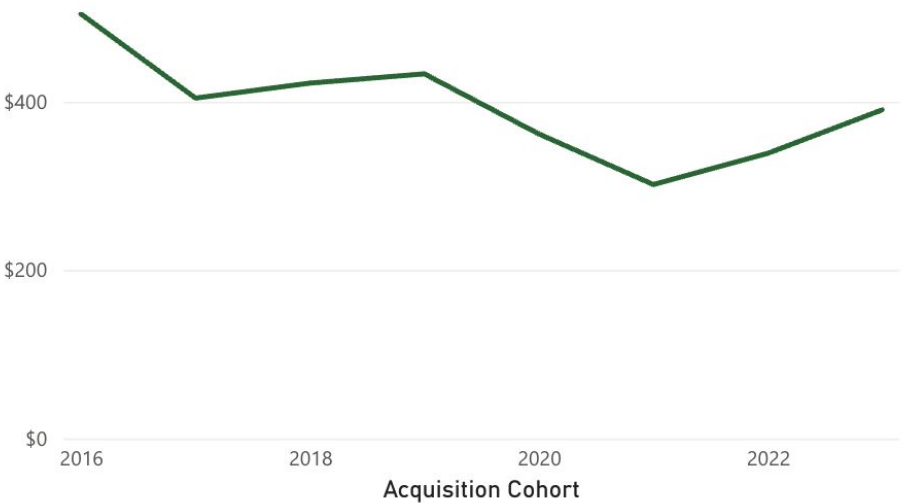


Dataset: Temu

# Etsy Unit Economics

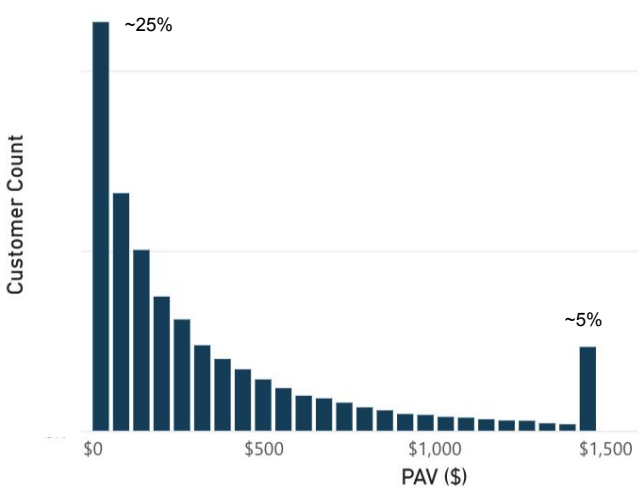
## Post Acquisition Value

Filtered to All Segments - All



## PAV Distribution for all cohorts

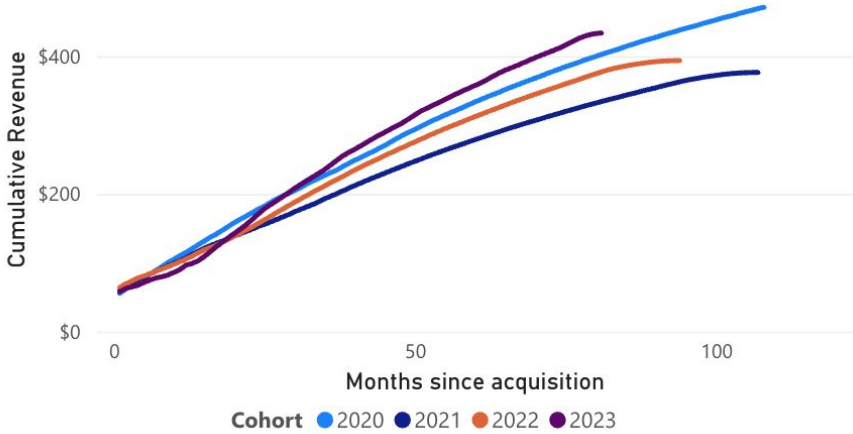
Filtered to All Segments - All



## Cumulative Revenue

Filtered to All Segments - All

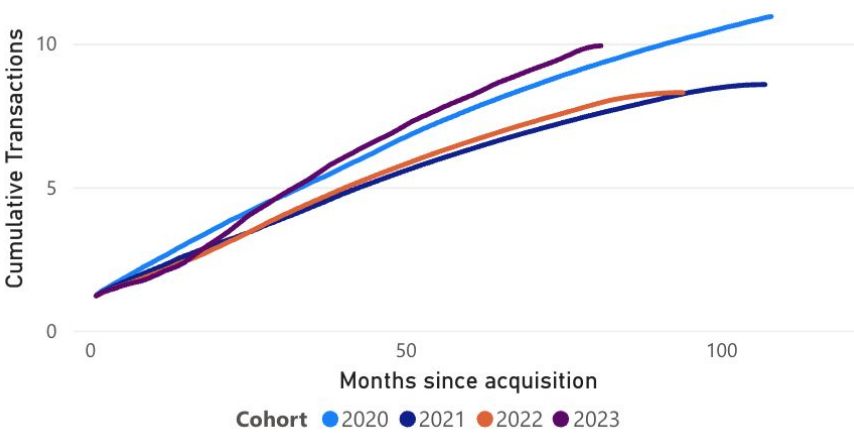
Cohort Years :



## Cumulative Transactions

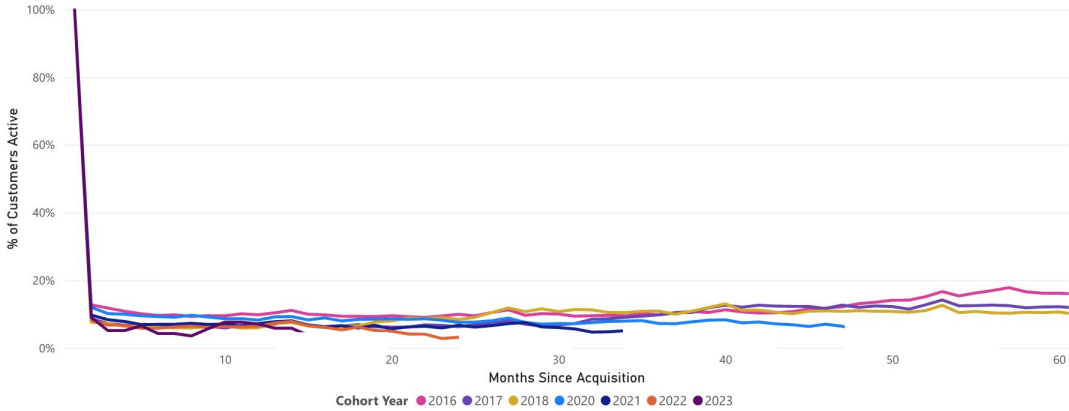
Filtered to All Segments - All

Cohort Years :



## Cohorted Active Customers

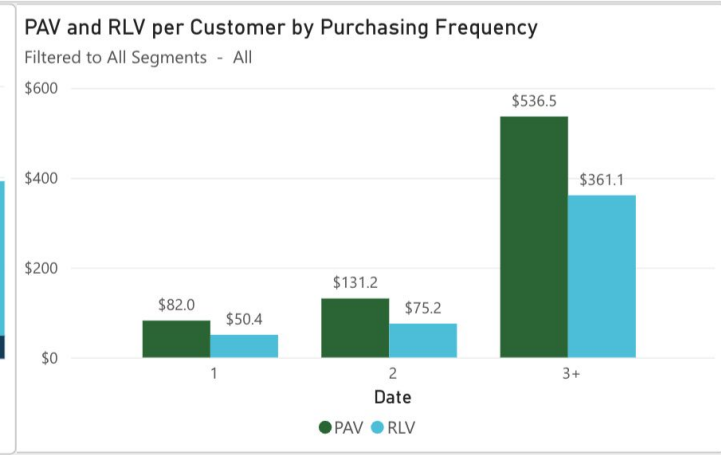
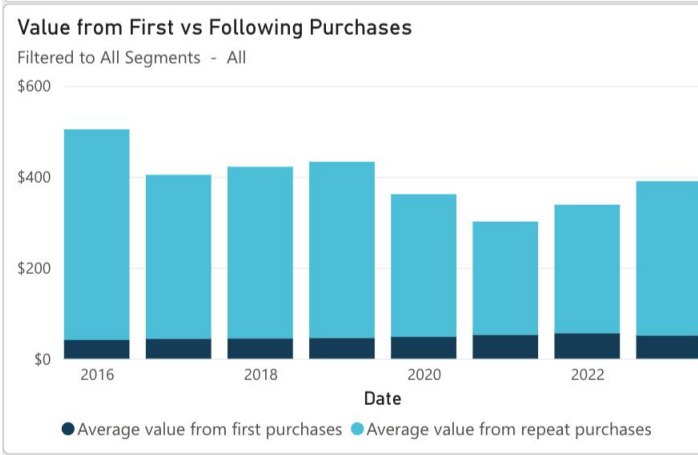
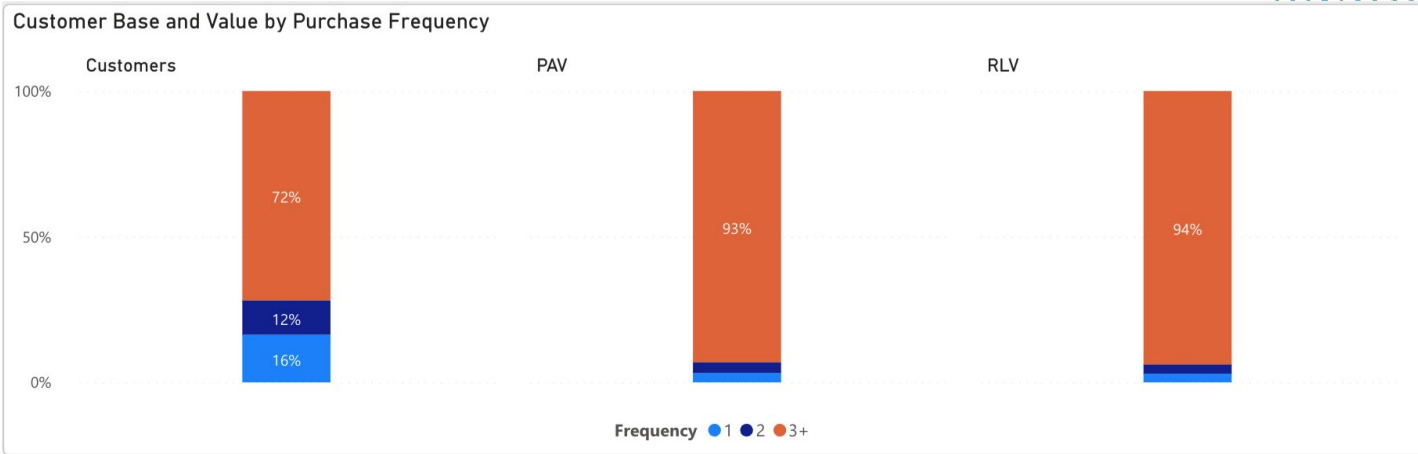
Filtered to All Segments - All



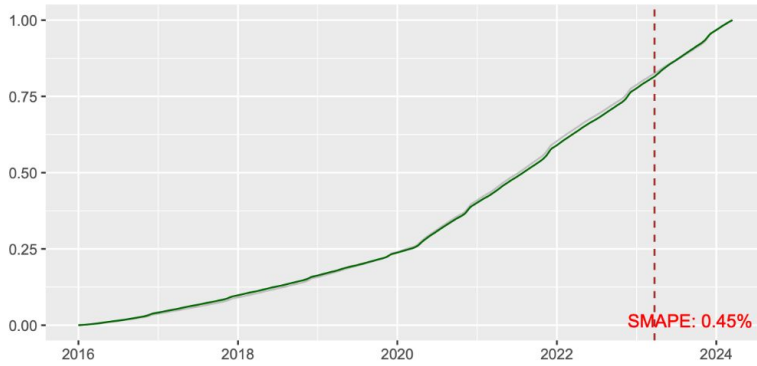
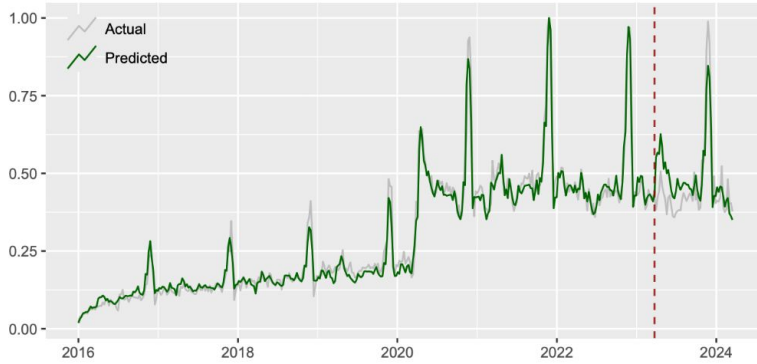
## Average Revenue Per Transaction

Filtered to All Segments - All

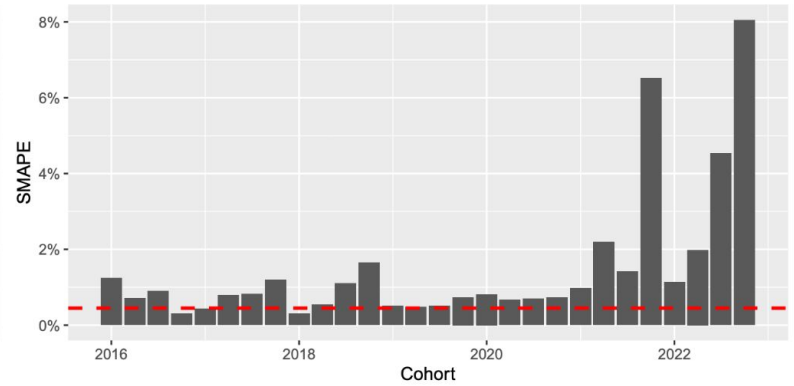
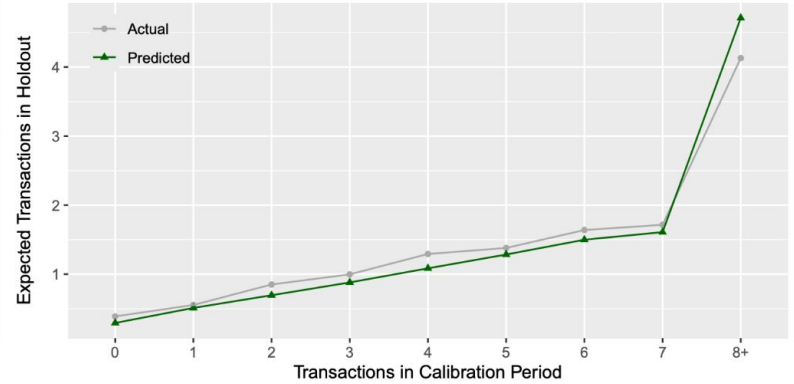




Tracking Plot  
# Repeat Purchases



CEs (52 week holdout)



Dataset: Etsy

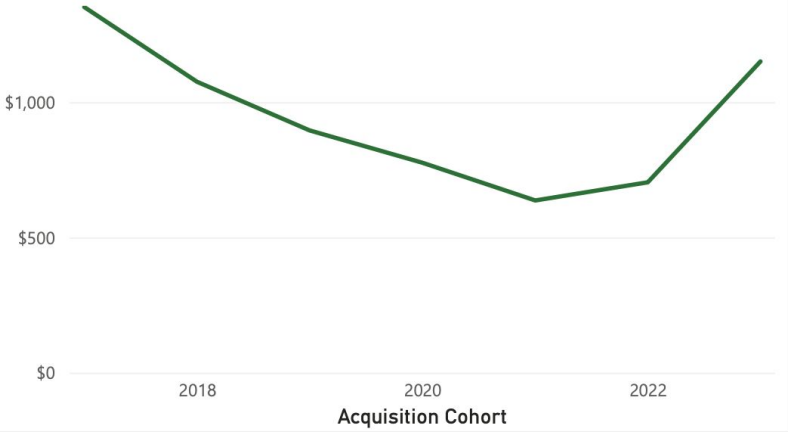


# Walmart Unit Economics

# Walmart

## Post Acquisition Value

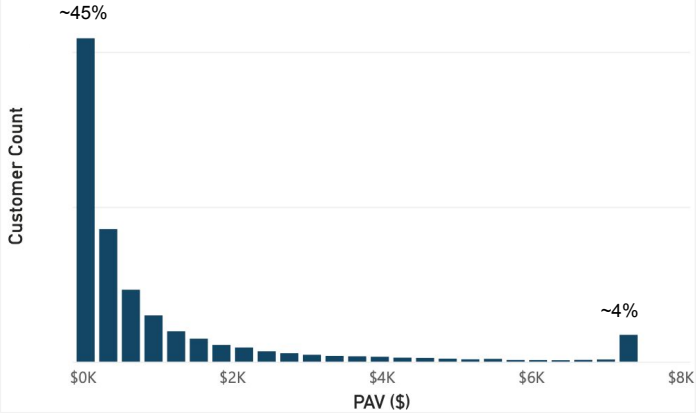
Filtered to All Segments - All



## PAV Distribution for all cohorts

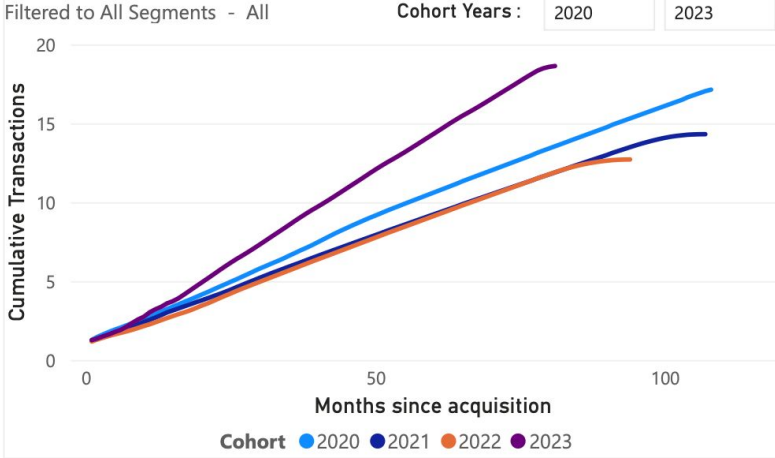
Filtered to All Segments - All

Cohort: All

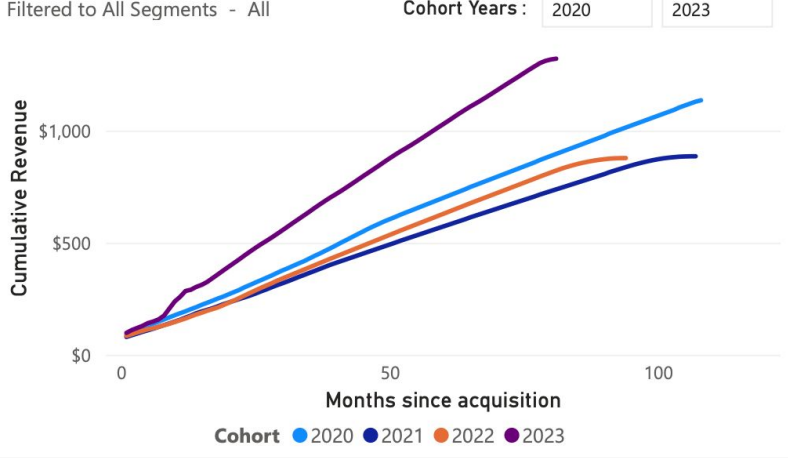


# Walmart

## Cumulative Transactions



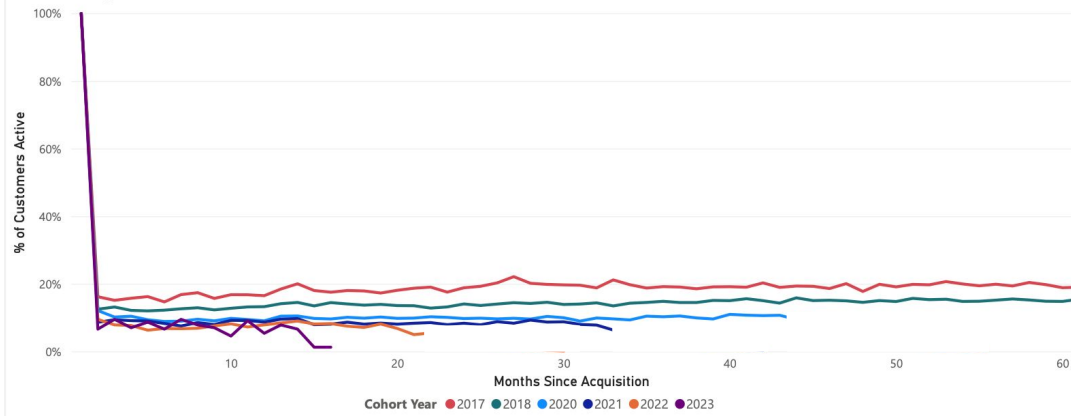
## Cumulative Revenue



# Walmart

## Cohorted Active Customers

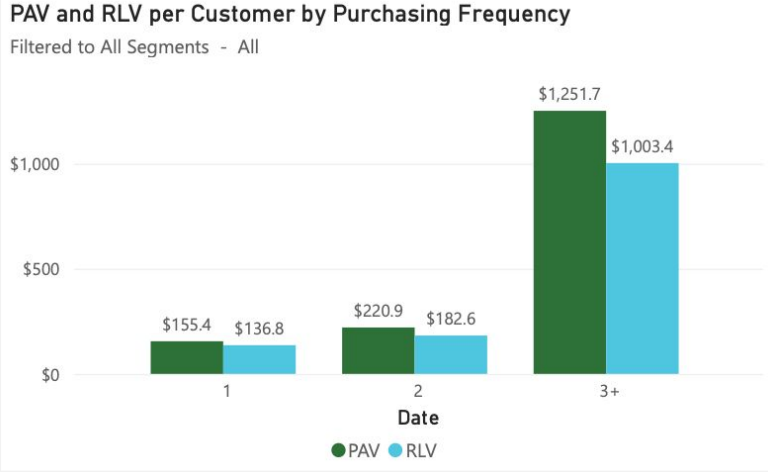
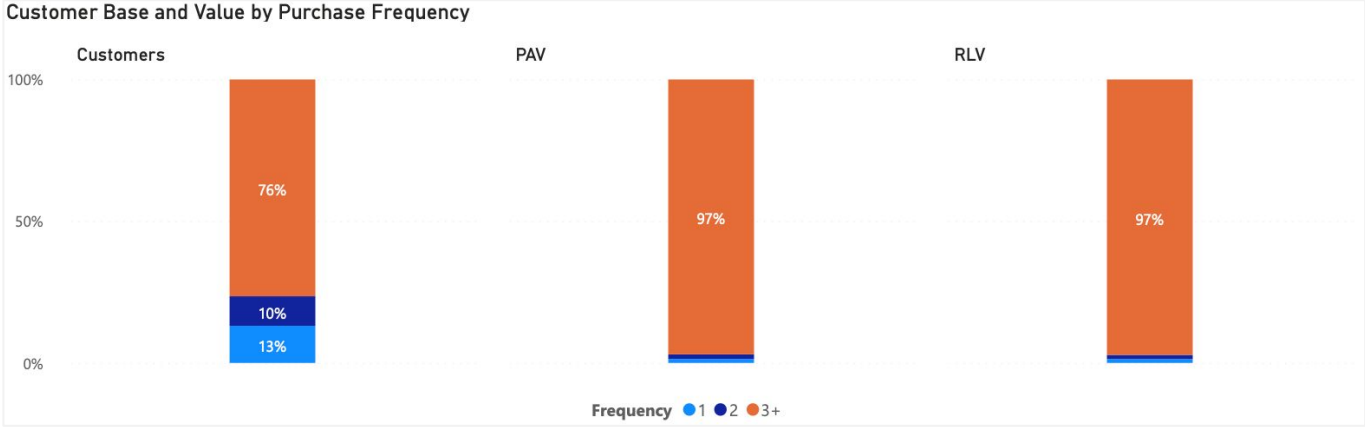
Filtered to All Segments - All



## Average Revenue Per Transaction

Filtered to All Segments - All

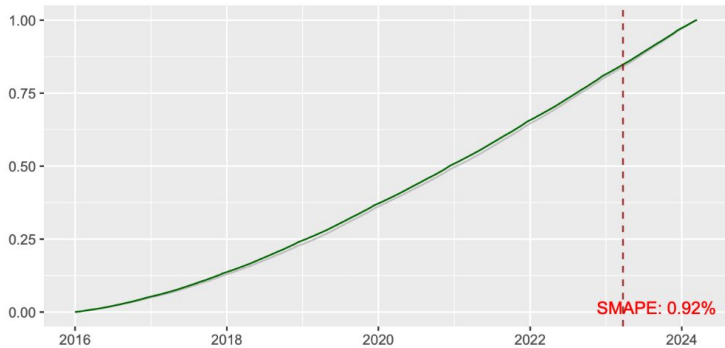
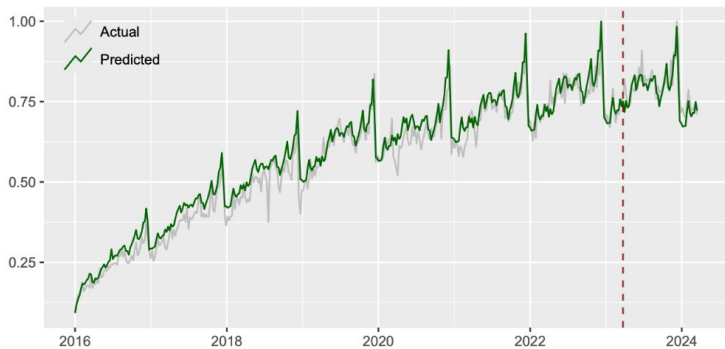




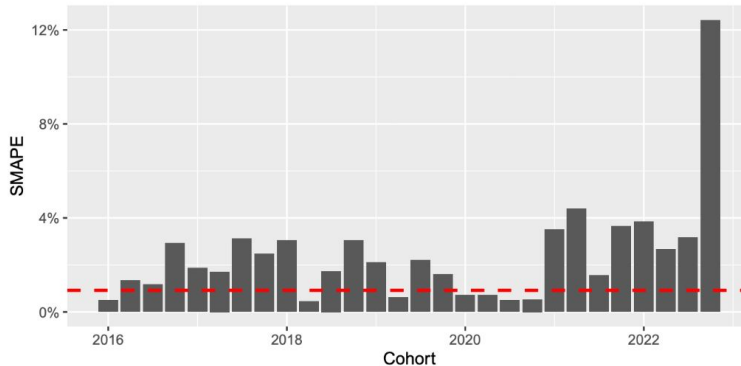
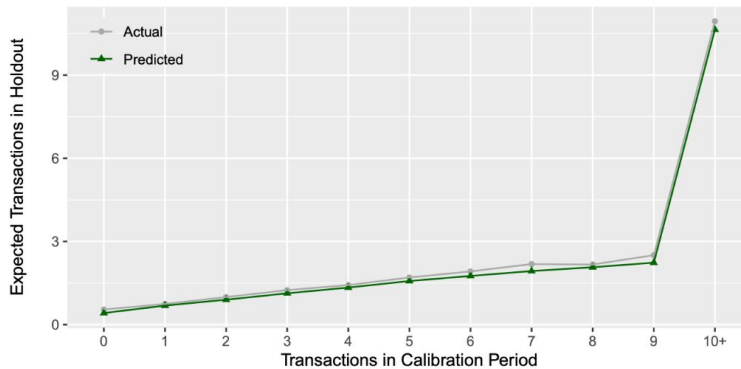
# Walmart

Tracking Plot

# Repeat Purchases



CEs (52 week holdout)



Dataset: Walmart

# Ebay Unit Economics

# Ebay

## Post Acquisition Value

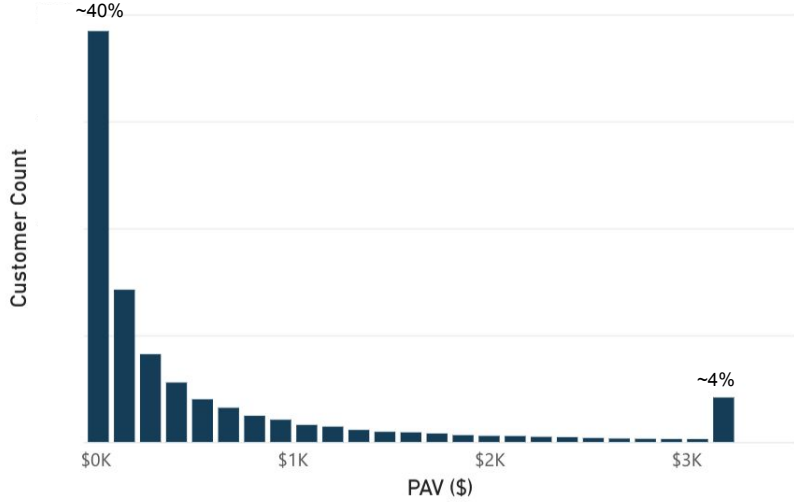
Filtered to All Segments - All



## PAV Distribution for all cohorts

Filtered to All Segments - All

Cohort: All



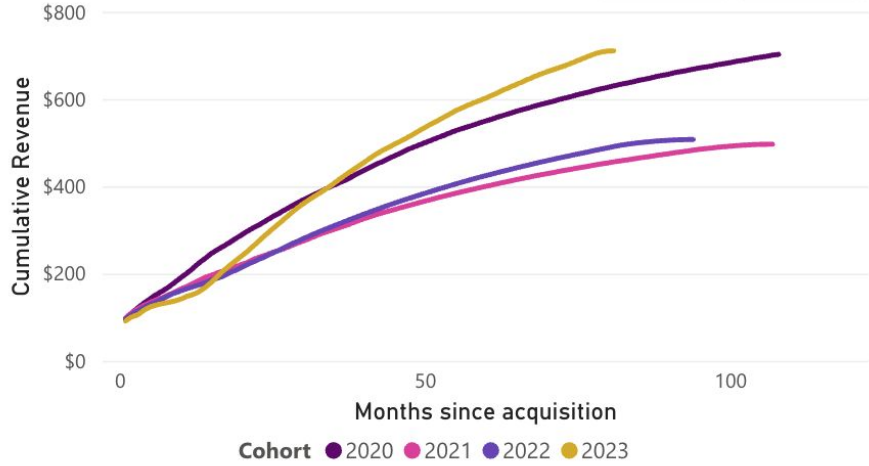


# Ebay

## Cumulative Revenue

Filtered to All Segments - All

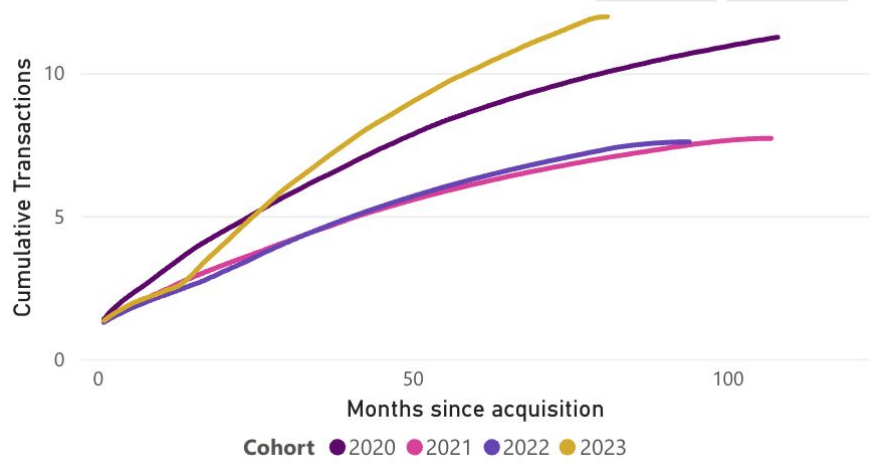
Cohort Years :



## Cumulative Transactions

Filtered to All Segments - All

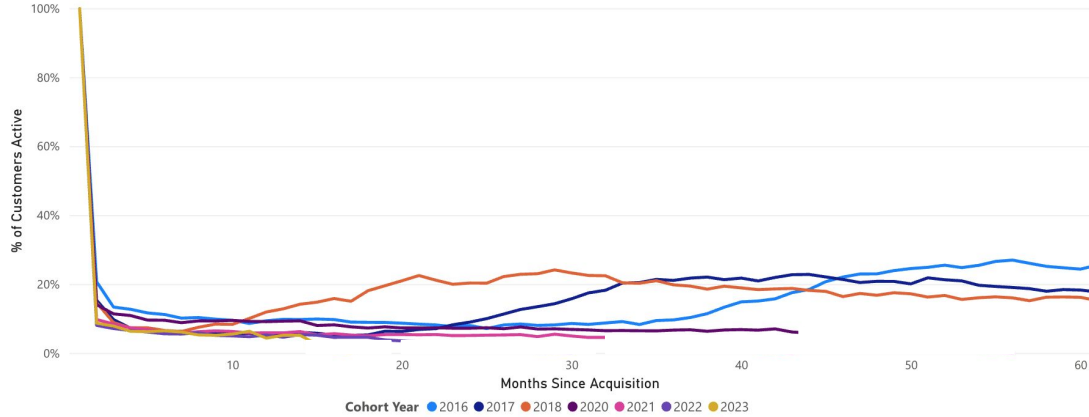
Cohort Years :



# Ebay

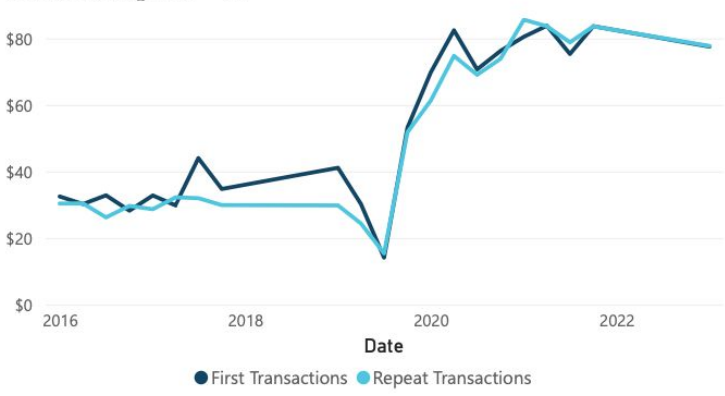
## Cohorted Active Customers

Filtered to All Segments - All

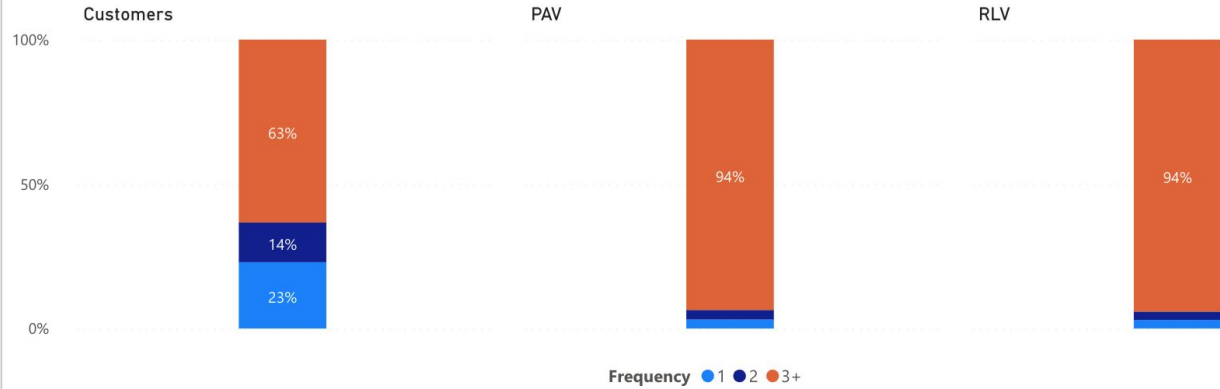


## Average Revenue Per Transaction

Filtered to All Segments - All



## Customer Base and Value by Purchase Frequency



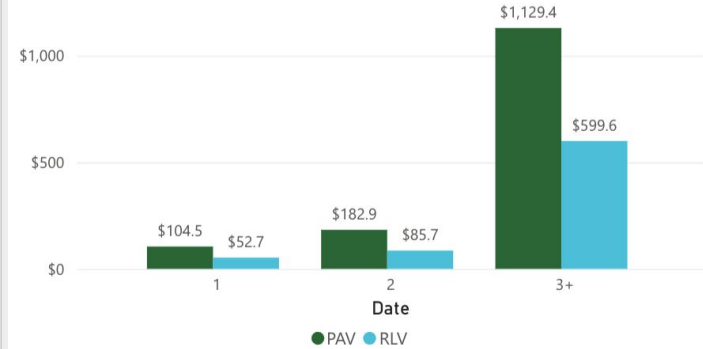
## Value from First vs Following Purchases

Filtered to All Segments - All



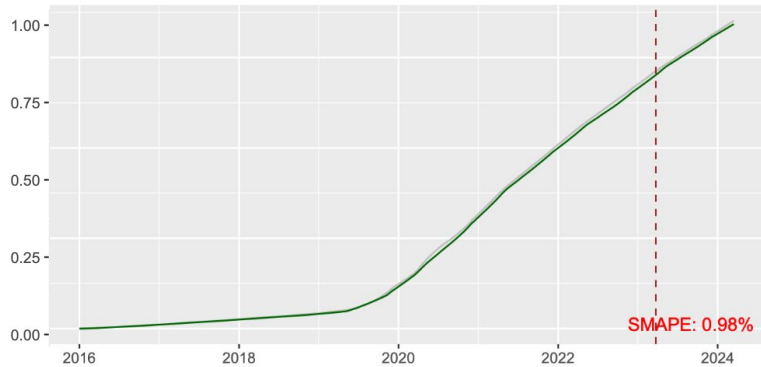
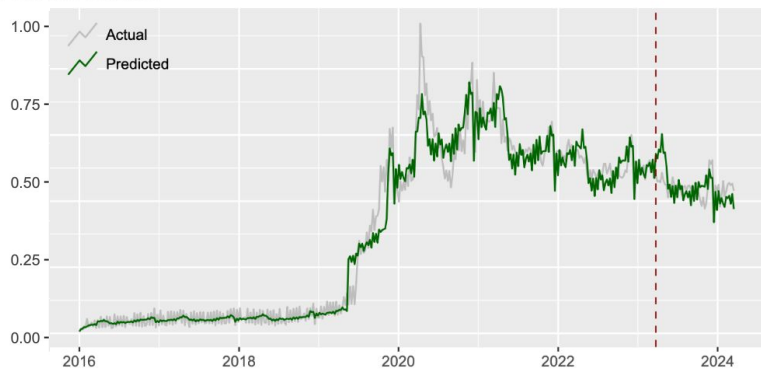
## PAV and RLV per Customer by Purchasing Frequency

Filtered to All Segments - All

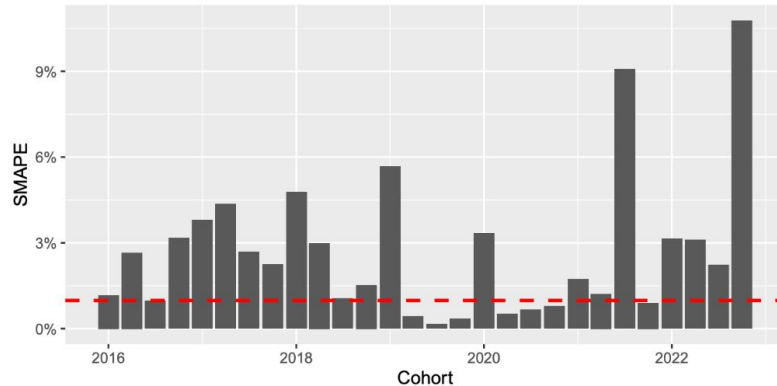
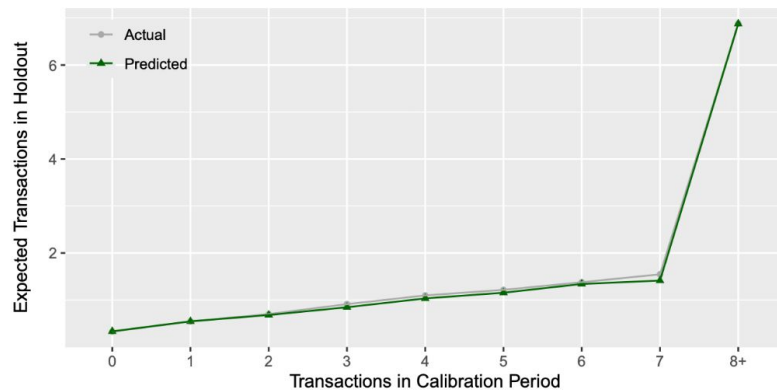


# Ebay

Tracking Plot  
# Repeat Purchases



CEs (52 week holdout)



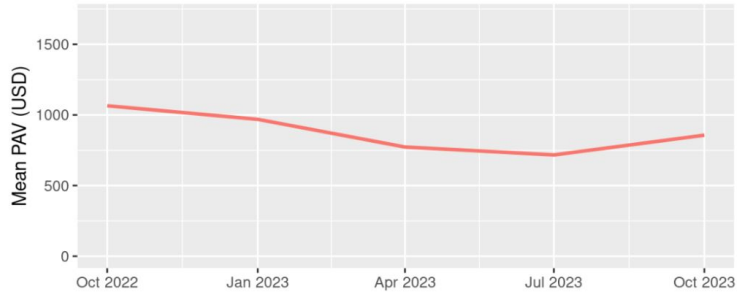
Dataset: Ebay

# Benchmarking

# PAV

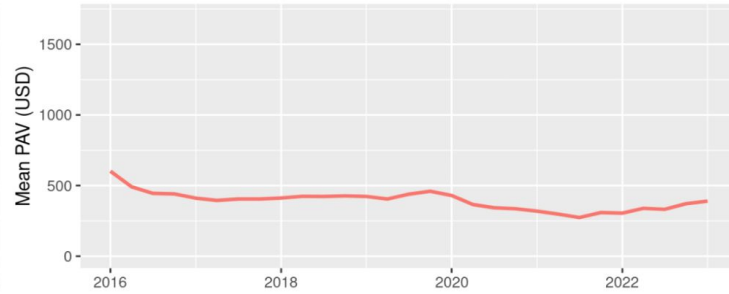
Post Acquisition Value (PAV)

Temu



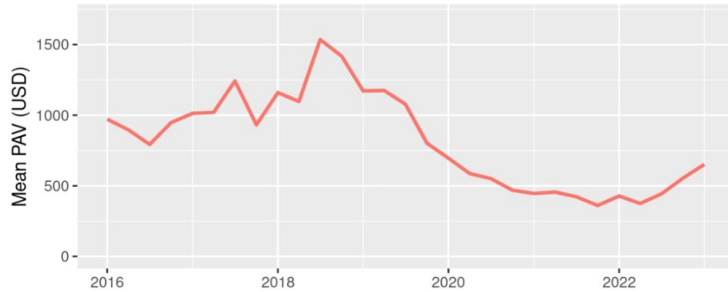
Post Acquisition Value (PAV)

Etsy



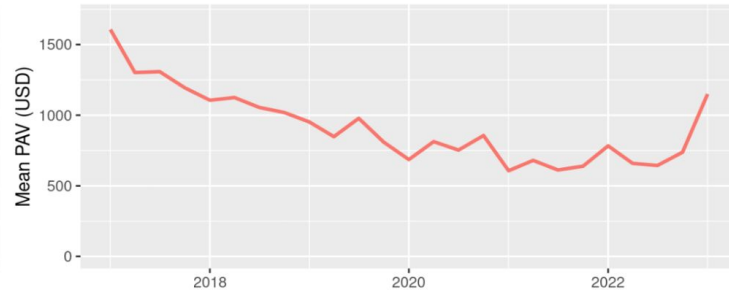
Post Acquisition Value (PAV)

Ebay

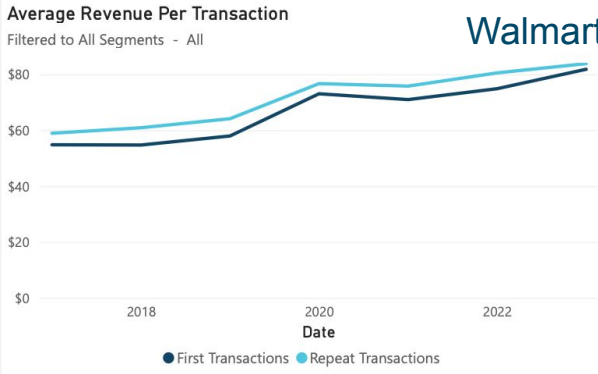
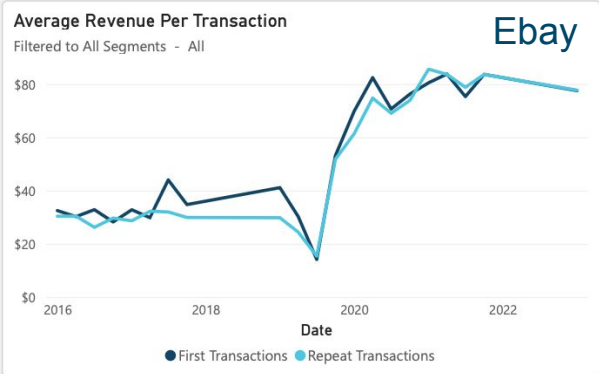
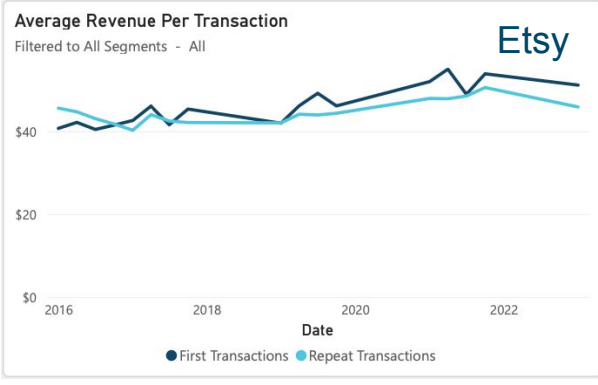
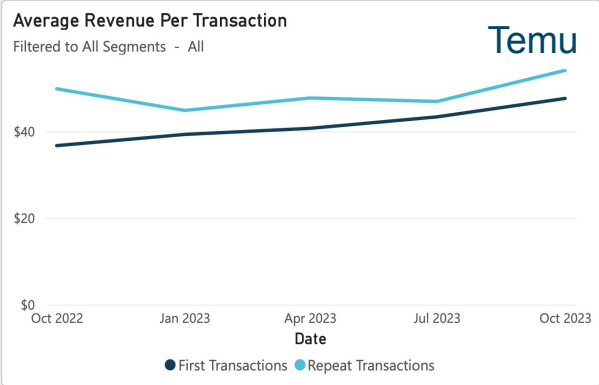


Post Acquisition Value (PAV)

Walmart

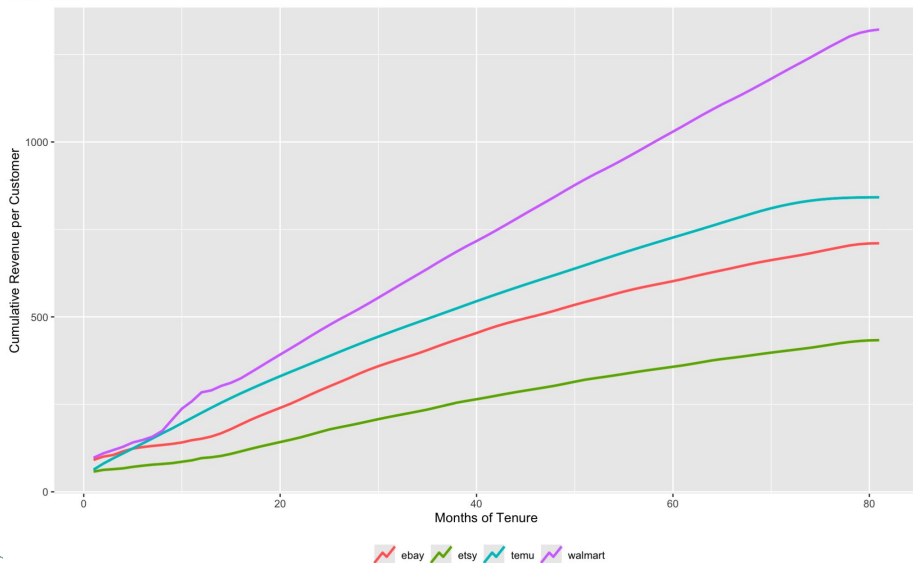


# AOV

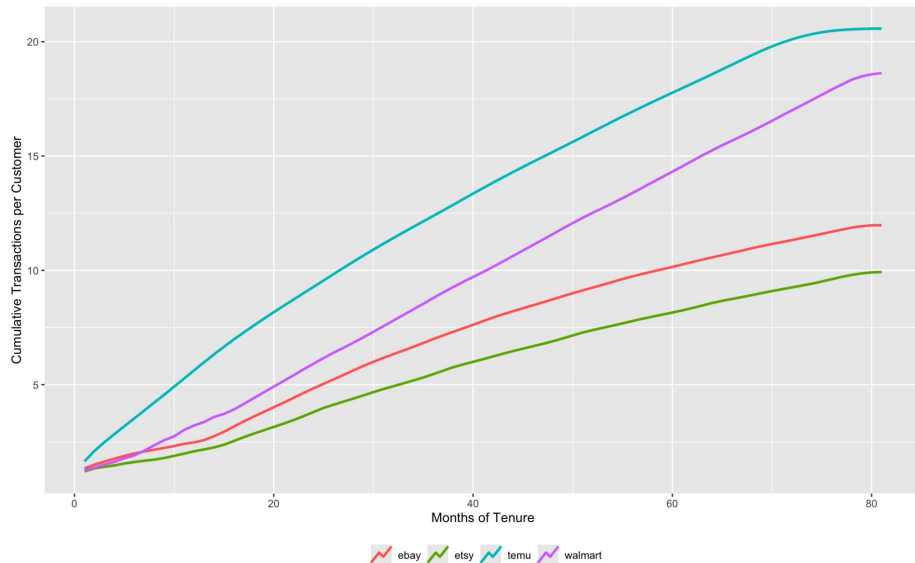


# Cumulative Revenue

Cumulative Revenue per Customer  
2023 Cohort



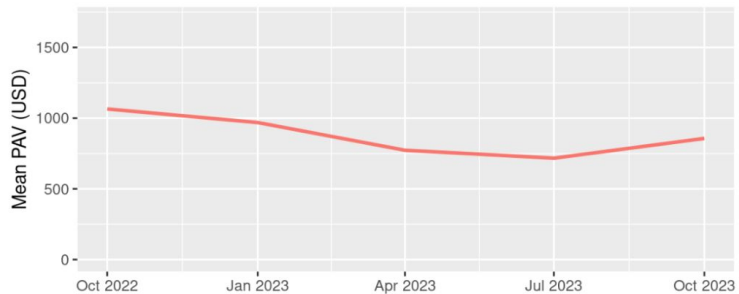
Cumulative Transactions per Customer  
2023 Cohort





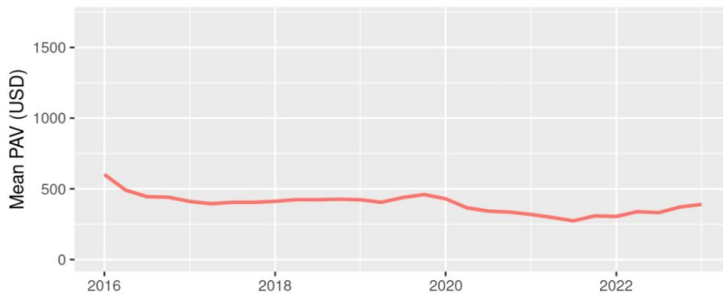
# Appendix

Post Acquisition Value (PAV)



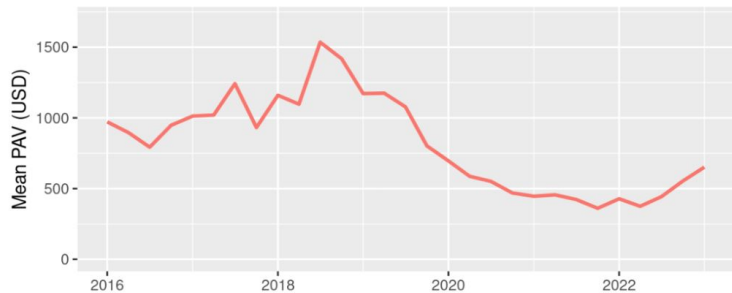
temu

Post Acquisition Value (PAV)



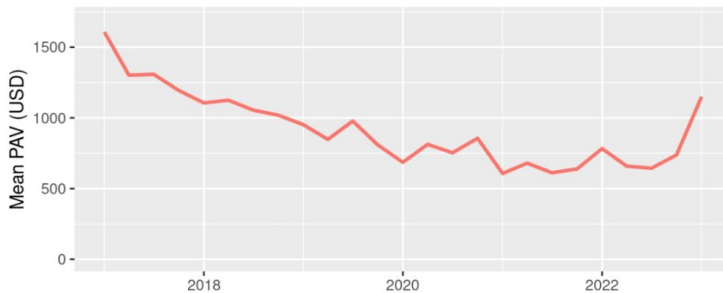
etsy

Post Acquisition Value (PAV)



ebay

Post Acquisition Value (PAV)



walmart