| Management Summary | Metadata & Data Cleaning | Ownership | Usage | Comparison | Customer Grouping | Group Analysis |
|-----------------------|-----------------------------|-----------|-------|------------|-------------------|-------------------|
| | | | | | | |

Management Summary

| | <u>Insights</u> | Potential Gain From Additional Analysis | Additional Effort | Success Probability | Possible Impact |
|--------------|--|--|----------------------|------------------------|--------------------|
| | Identified 4 distinct customer groups: Group 1: High PAU ↑, Low PBU ↓ Group 2: High PAU ↑, High PBU ↑ Group 3: Low PAU ↓, High PBU ↑ Group 4: Low PAU ↓, Low PBU ↓ | Identify customer personas Understand usage and demand | High | Medium | Very High |
| <u>lılı.</u> | Found possible pricing impact on usage | Increase Usage or Revenues | Medium | Medium | Medium |
| (1) | Some customers dropped product despite high usage | Reduce Churn | Low | Medium | Medium |

1

Management Summary Cleaning Ownership Usage Comparison Customer Grouping Group Analysis

Metadata & Data Cleaning

Conventions

PAO: Current Ownership of Product A License PAU: Product A Usage in Trailing 12 Months

PBO: Current Ownership of Product B License **PBU:** Product B Usage in Trailing 12 Months

Data Cleaning

Initial Customers in Dataset:

117

Customers without any license (N/N):

>

Removed, since they are no longer customers and don't belong in the dataset.

Customers with usage for a product without license:

8

Kept: It could be a data error, but more likely they had ownership of this product sometime in the last 12 months. Customers in Clean Dataset:

115

Time Frame & Data Source

Time Horizon: All Data is from trailing 12 months.

Last Data Update: 27. March 2020 (Applies to all Data in Presentation).

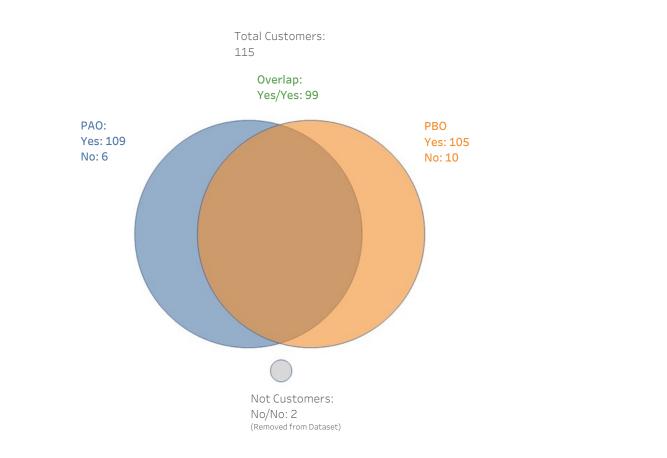
Data Source for all Slides in Presentation: Product Management Report: Data Viz - Final Project Data File, July 2019.

Product Usage is measured according to the company's proprietary consumption measure.

^{*}Removed Customers: 124, 126

Management Metadata & Data Cleaning Usage Comparison Customer Grouping Group Analysis

Ownership



Management Metadata & Data Ownership Usage Comparison Customer Grouping Group Analysis
Summary Cleaning

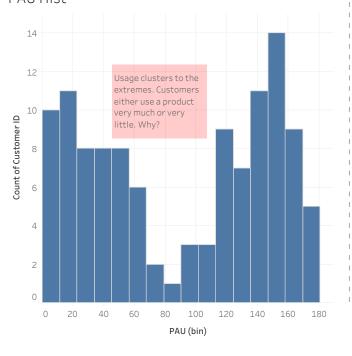
Usage

Product A

| PAO | # of PAO | Max. PAU Me | dian PAU | Min. PAU | Total PAU |
|-----|----------|-------------|----------|----------|-----------|
| Υ | 109 | 175 | 112 | 0 | 10,200 |
| N | 6 | 117 | 7 | 0 | 171 |

Same max. usage for both products. Is this the max. possible? Is it possible to increase this?

PAU Hist

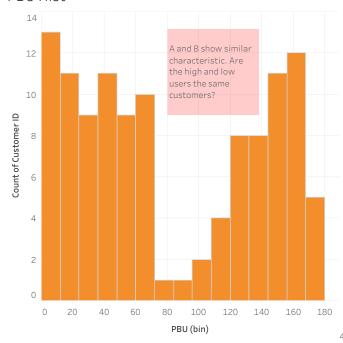


Product B

| PBO | # of PBO | Max. PBU | Median PBU | Min. PBU | Total PBU |
|-----|----------|----------|------------|----------|-----------|
| Υ | 105 | 175 | 69 | 0 | 9,092 |
| N | 10 | 160 | 1 | 0 | 384 |

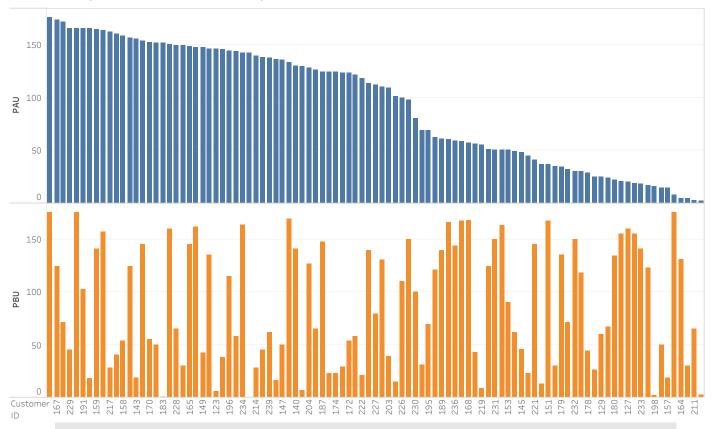
Why is there usage without ownership? Explore further.

PBU Hist



| Metadata & Data Cleaning | Ownership | Usage | Comparison | Customer Grouping | Group Analysis | Usage Drop |
|-----------------------------|-----------|-------|------------|-------------------|----------------|------------|
| | | | | | | |

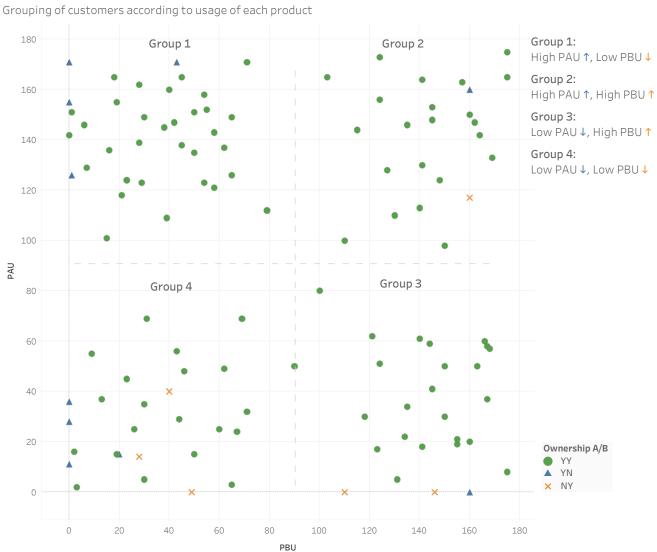
Use comparison ordered by PAU



There seems to be no clear relationship between high and low usage of both products

| Ownership | Usage | Comparison | Customer Grouping | Group Analysis | Usage Drop | No Ownership Usage |
|-----------|-------|------------|-------------------|----------------|------------|--------------------|
| | | | | | | |



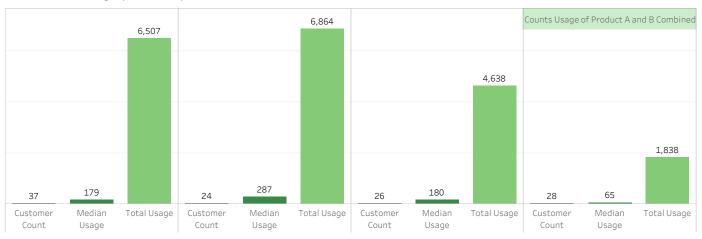


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Usage Customer Grouping Group Analysis Usage Drop No Ownership Usage Additional Analysis

Group Analysis

Combined Usage per Group



Group 1: High PAU ↑, Low PBU ↓

Group 2: High PAU ↑, High PBU ↑

Group 3: Low PAU ↓, High PBU ↑

Group 4: Low PAU ↓, Low PBU ↓

This is the biggest customer group. They contribute a good third to the total usage due to their high numer. Use this customer group as marketing rolemodels to increase sales of create value by using PA and PA. Possibly try to increase their use of PB to increase their overall usage.

Group 2 is the rarest, but most valuable customer group. They should be the prime target for marketing effort. Study their usage of both products. They PB combined. Therefore they could be rolemodels for Group 1 and Group 3.

These customers are the counterparts of Group 1, but appear less frequent. PB seems to be less popular, but clearly has considerable value even when used on its own. Use them as role models to target customers for PB.

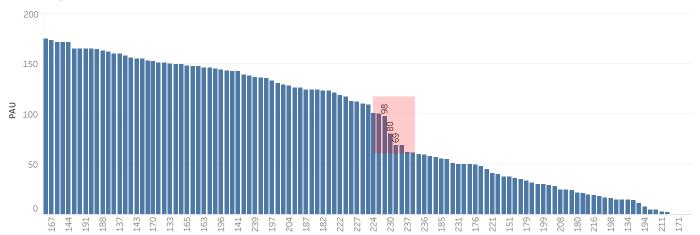
Their low usage of both products makes them unnatractive as customers. Try training them if possible, but avoid marketing to this group.

Identfy Group personas for targeted marketing. Study usage to increase interdependency benefits of products.

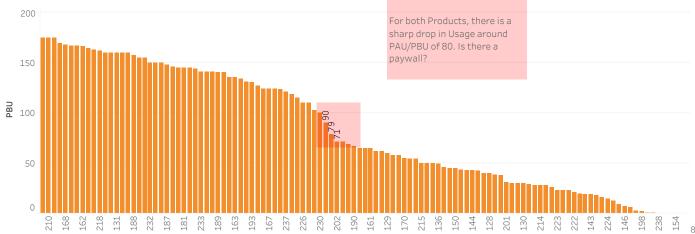
| Usage | Comparison | Customer Grouping | Group Analysis | Usage Drop | No Ownership Usage | Additional Analysis |
|-------|------------|-------------------|----------------|------------|--------------------|---------------------|
| | | | | | | |

Sudden Usage Drop

PAU Drop







| Usage | Comparison | Customer Grouping | Group Analysis | Usage Drop | No Ownership Usage | Additional Analysis |
|-------|------------|-------------------|----------------|------------|--------------------|---------------------|
| | | | | | | |

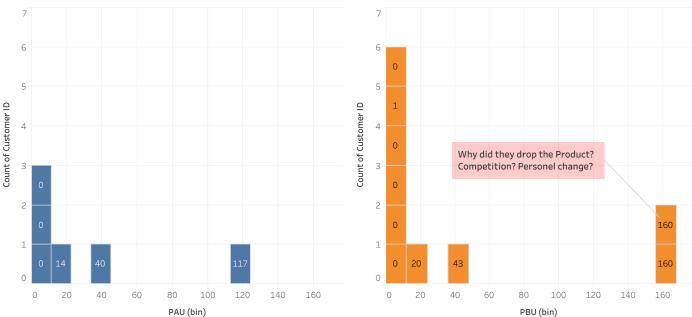
Customers with only one Product Ownership

After cleaning the Dataset, there are only 6 customers without a license for Product A, and 1o customers without a license for product B remaining.

Half of these never used this product, likely never had ownership. The other half has used the respective product within the last twelve months. Assuming that this is not a mistake in the dataset, they had ownership of the product, tried it, and decided not to use it further. Five never used the Product much. However, three used it extensively, but still decided to drop it, while continuing with the other product. Contacting them to find out why could give valuable insights.

Usage of Product A without Ownership

Usage of Product B without Ownership



| Usage | Comparison | Customer Grouping | Group Analysis | Usage Drop | No Ownership Usage | Additional Analysis |
|-------|------------|-------------------|----------------|------------|--------------------|---------------------|
| | | | | | | |

Further Questions

Further Questions

Additional Data Requests

Group Characteristics

Group Personas

Study the personal characteristics of the customers in each group. Are there any common patterns? Is it possible to identify personas for more targeted marketing efforts?

Group Product Usage

Why are certain customers only using one product? Have they no need for the other product, or are they using a competitors product? Is it possible to increase interdependency benefits from using both products together?

Personally identifiable information about customers

Detailed usage reports

Pricing

Why is there this sharp usage drop arround 80? Is there a paywall? Does the base fee include this amount of usage and above requieres additional payment? Is this dettering customers from using the product?

Pricing structure

<u>Lost Customers</u>

Why did these customers cancel ownership when they used it frequently before? Did they switch to a competitor?

Contact customers ID 125, ID 137, ID 131